Sonic Liner GF-SL

CMSDANSKIN ACOUSTICS

Technical Data Sheet

PRODUCT

CMS Danskin Acoustics GF-SL sonic liner is a glass fibre material faced with a tough dimensionally stable woven glass cloth that prevents fibre migration. The fibre mat and facing are rot proof, odourless, non hygroscopic, and do not sustain vermin/fugi/mould.

FEATURES and BENEFITS

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

APPLICATIONS

CMS Danskin Acoustics 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 reaction to fire requirement is specified or where non erosion is essential.

PHYSICAL INFORMATION

Standard roll width	1200mm
Standard roll length	5m
Thickness	26mm, 51mm, 76mm

TECHNICAL INFORMATION

Maximum air velocity	30m/s
Service temperature	< 230°C
Reaction to Fire (EN13501-1)	26mm B-s1,d0 51mm B-s1,d0 76mm A2-s1,d0

Thickness (mm)	Density (kg/m^3)	Thermal Conductivity (W/mK)	Thermal Resistance (m^{2}K/W)0
26	26	0.037	0.680
51	26	0.037	1.35
76	20	0.037	2.03

Glass cloth facing

Standard roll width	200 gms/m^2
Colour	Black or White

ACOUSTIC PERFORMANCE

As a quick selection guide, for general applications the length of duct to be lined is normally about 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.

Sound Absorption Coefficients (BS 3638)

Thickness (mm)	Frequency (Hz)						
	125	250	500	1k	2k	4k	NRC
26	0.10	0.35	0.65	1.00	1.00	1.00	0.75
51	0.30	0.90	1.00	1.00	0.86	0.85	0.98
76	0.45	0.90	1.00	1.00	0.95	0.90	0.96

NRC is the average over the 250 to 2000Hz range

Sound Attenuation (25mm lined straight 1m ductwork)

Thickness (mm)	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

CMS Danskin Acoustics GF-SL sonic liner is easily and quickly installed. First, ensure that the ductwork or panel surface is dry, clean and free from oil and grease (this can be achieved using a solvent cleaner).

Following normal best practice methods, the insulation is to be cut to fit with longitudinal joints being butted together and sealed, and transverse joints being overlapped and sealed downstream by trimming 50mm of the insulation away from the glass cloth facing.

Prior to positioning, 40FC or Spraytack type adhesive should be applied to the ductwork or surface. Where appropriate. additional fixing by mechanical fasteners should be employed at no more than 450mm centres and to commence no more than 75mm from any joints or corners.

All longitudinal joints are to be sealed. For transverse joints, the overlap of facing cloth should be downstream of the airflow and should be secured under a metal strip. Any exposed insulation edges are to be sealed with adhesive and where possible secured behind return flanges of the casing.

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Issue 4 - 03/2023 JW