

INSULATION

Duct Wrap Thermal Insulation Blanket



DUCT WRAP is specifically designed as a thermal insulation blanket manufactured from highly resistant, organic glass fibre bonded with a resin. It is faced with an aluminium foil/skrim – reinforced kraft laminate providing a resistant surface finish and an excellent vapour barrier. A 120 mm overlapping flange is provided on one side for a neater appearance and adequate seal. DUCT WRAP is available in standard thicknesses of 25 mm, 40 mm and 50 mm and rolls of 10 m lengths.



Application Duct

Wrap is designed for application to rectangular and round heating, ventilation and air conditioning duct systems where the operating temperature is less than 120°C in commercial, industrial and residential buildings.

Benefits

Energy conservation, lower operating costs, ease of installation, greater comfort, noise reduction, condensation control, fire safe and longevity

Code	Label	Size
4000009	25mm FRK	10 x 1.2m
4000015	40mm FRK	10 x 1.2m
4000020	50mm FRK	5 x 1.2m

Description	Thickness (mm)	Volumetric Mass kg/m ³	Thermal Conductivity W/m°C	Temp Limits	Fire Rating
External Duct Wrap (FRK)					
Duct Wrap 25	25	18	0.040(@35°C)	120°C	Class 1
Duct Wrap 40	40	16	0.040(@35°C)	120°C	Class 1
Duct Wrap 50	50	16	0.040(@35°C)	120°C	Class 1
Internal Acoustic Linings					
Sonic Liner 15	15	32	0.0035(@20°C)	120°C	Class 1
Sonic Liner 25	25	24	0.0378(@20°C)	120°C	Class 1
Batt and Rolls					
MP 16 (Eroglite 16)	25 - 75	16	0.040(@24°C)	250°C	Class 1
IM 24 (Eroglite 24)	25 - 75	24	0.0378(@24°C)	250°C	Class 1
IM475 (Eroglite 475)	25 - 75	47.5	0.033(@24°C)	450°C	Class 1
IM 64 (Eroglite 64)	25 - 75	64	0.0323(@24°C)	450°C	Class 1
IM 96 (Eroglite 96)	25 - 75	96	0.035(@24°C)	250°C	Class 1

Example of how to calculate the noise attenuation of internal ducting:

What will the noise attenuation of a 1m duct with a section of OAO x OAOm in a frequency band of 260Hz, insulated with sonic liner, be?

$$\frac{\Delta \text{dB}}{L} = 1,05 \times \alpha^{1,4 \times P/S}$$

Assembled

$$\alpha = 0,51$$

$$\alpha^{1,4} = 0,39$$

$$\frac{P}{S} = \frac{(0,40 + 0,40) \times 2}{0,40 \times 0,40} = \frac{1,60 \text{ m}}{0,16 \text{ m}^2} = 10$$

$$\frac{\Delta \text{dB}}{L} = 1,05 \times 0,39 \times 10$$

$$= 4,10 \text{ dB per metre.}$$