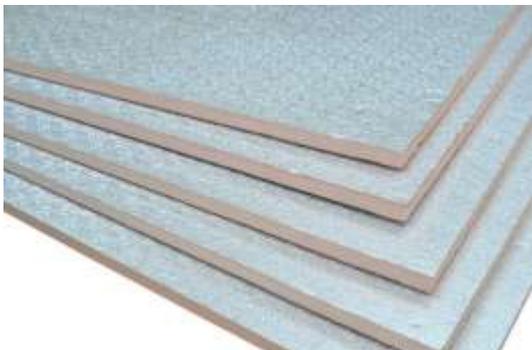


PRE-INSULATED DUCT PANEL – TYPE PHENOLIC



Phenolic foam is a material developed in the aviation industry to insulate the aeroplanes to protect the inside temperature against the extreme cold air on the outside.

Due to improved technology now it can be used for other insulation purposes as well. We were able to manufacture it into a panel which is suitable to manufacture HVAC ducting to allow a smooth

transition of air without losing its temperature.

It is easy to construct, it is lightweight, easy to transport, a long life material with a fine in/outside finish. The toxic free phenolic insulation and the aluminium backing will provide a smooth transport of air.

Advantages: lower heat conductivity, higher thermal efficiency, low density, light weight foam with CFC free materials, environment protective. low leakage. corrosion protected, water proof, fast installation and easy to make.

An air duct can be manufactured out of the panel in 6 steps:

- 1) Draw the design onto the panel
- 2) Cut out the design
- 3) Glue the edges that were cut out and bend
- 4) Tape the outside edge
- 5) Install flanges
- 6) Seal with sealant to ensure air tightness



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Please notice: The consultant is responsible for the actual installation and mounting of the product. The mentioned values with respect to temperatures are not appropriate to be used to determine physical properties. These properties are also dependent on humidity and the temperature of the air outside of the H.V.A.C system

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PRE-INSULATED DUCT PANEL – TYPE PHENOLIC

Technical characteristics:

Phenolic duct panel data	
Thickness	20 mm
Length	4000 mm
Width	1200 mm
Interior aluminium	80 µm
Exterior aluminium	80 µm
Fire classification	BS 476 part 6 and 7, B1
Density of core material	60 kg m ³
Water absorption	≤ 3.7%
Thermal conductivity	0.024-0.034W/(mK)
Heat resistance	-150 °C / +150°C
Wind resistance strength	≤ 1500 Pa
Compression strength	≥ 0.18 MPa
Bending strength	≥ 1.1 MPa
Leakage air volume (assembled ducting)	≤ 1.2%
Thermal resistance	0.86 m ² K/W
Smoke density	≤ 9 acc, BS 476 part 6, 7
Dimension stability	≤ 2% (70±2°C, 48h)
Oxygen index	≥ 45
Duration of fire resistance	≥ 1,5 h
Formaldehyde emission	≤ 0,5 Mg/L
Air flow max.	15 m/s

The standard panel is available in 20 mm thickness, 1.2 mtr x 2, 3 or 4 mtr length.

Standard aluminium is 80/80 µm, 60 and 200 µm is available as well, also the backing can be powder coated steel. For open ceilings we have a special “black” backing so the HVAC air ducting is out of sight against a dark background.

For additional information please contact us:

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