Phenolic Preinsulated Duct System

PHENOLIC FOAM for HVAC and Building Insulation Industry
Phenolic insulation is acknowledged as one of the safest and versatile materials suitable for Heating, Ventilating and Air Conditioning (HVAC), Building and Construction, Factory Engineered Composite Panels, Process Plants and Petrochemical Pipe Insulation applications. Fire and building safety protection codes have reached new stringent levels and PHENOLIC foam meets most of these standards.

Density of Product: 55-60 kg/M³
Size of Product: 20+/- 1 mm X 1200mm X 4000mm

Phenolic Foam will meet new stringent Dubai Municipality and Dubai Civil Defense requirements for Ducting Boards and other Building Insulation applications.

APPLICATION:

- HVAC AIR DUCT DISTRIBUTION SYSTEM
- PIPE INSULATION SYSTEM
- WALL & ROOF INSULATION SYSTEM

OVERVIEW

COMPLIANCE WITH NEW UAE FIRE AND LIFE SAFETY CODES
Phenolic foam is a thermoset material, therefore will not run melt or drip when it comes into contact with fire. The fire performance of phenolic foam is exceptional. It combines zero or very low flame spread with negligible smoke emission and low level of toxic gas emission.

1. FSI – 10 / SDI – 5 for phenolic foam with both sides aluminium facing.
2. FSI – 0/ SDI – 10 for phenolic foam with both sides PPGI facing.

as per E84-18a Standard Test Method for Surface burning Characteristics of building materials

### Fire Resistance

#### Safety

Phenolic foam is highly resistant to moisture penetration due to low water vapor permeance and high level closed cell contents. Water vapor transmission and primary test: 0.00 m/w ASTM E 96 / 96m - 2016

### Thermal Performance

Staying cool is the key for any indoor environment. Phenolic foam allows higher thermal efficiency to be achieved with lower insulation thicknesses. It meets current and future building codes for energy savings and CO2 emissions. The thermal conductivity or Lambda (λ) values range from 0.025 - 0.028 W/(m.K) @ 35°C & 60% RH

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### Structural Strength

Due to its light weight characteristic combined with excellent compressive / structural strength, phenolic foam is highly recommended for use in HVAC and building insulation sectors.

### Easy to Design and Fabricate

The panels can be fabricated manually or cut by CNC machines with a dedicated software to suite HVAC duct networks and other applications.

### UV Resistance

The phenolic boards are coated with an epoxy primer on the aluminum foil facing, which guarantees a UV protection to the panel boards.

### Environmental Friendly

Phenolic foam is 100% CFC and HCFC free and has a Zero Ozone depletion rate. It complies with international standards and guidelines on environmental concerns and is eligible as a green building product. Phenolic foam can help significantly reduce the CO2 emissions from new and existing buildings and make a significant contribution to the reducing regional and national CO2 emissions.
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