# FORTESHIELD



aluminium foam panel



RESISTANT







MATERIAL













FORTESHIELD aluminium foam panel is a newly-conceptualised metallic material foamed through the melting of aluminium ingot with various chemical components. The texture of the aluminium foam resembles that of a sponge, made up of multi-cell like structure.

# **Applications**

It has a broad range of applications in the following areas:

#### Noise barrier to eliminate/mitigate noise

Pipeline silencers, acoustic enclosures, acoustic chambers, manufacturing facilities, workshops, M&E rooms, construction sites, machinery rooms, expressways/highways etc.

#### Acoustic insulation to control reverberation time

Libraries, meeting rooms, theatres, studios, KTV, stadiums, train stations, F&B, retail, hospitality, etc.

## **Acoustic Properties**

- Laboratory tested according to the following standards to achieve Sound Insulation rating of STC 22.
  - ASTM E90 04
  - ASTM E413 04
- Laboratory tested according to the following standard to achieve Noise Reduction Coefficient, NRC 0.20.
  - ASTM C423-09a

## **Non-combustibility Properties**

- Laboratory tested according to and met the requirement of ISO 1182-2010.
- > Performance of aluminium foam is in accordance with definitions specified in the International Maritime Organisation, International Code for Application of Fire Test Procedures, 2010 FTP Code – Part 1 Test for Non-combustibility test.

### **Additional Performance**

- Chemical composition of at least 97% Aluminium
- Density between 0.2 to 0.4g/cm<sup>3</sup>
- Melting point of about 780°C

- Thermal conductivity of about 0.268W/m.K
- No Corrosion to Salt Spray Test

## References



















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