

TECHNICAL DETAILS
FIRE RETARDANT CLOSED CELL
CHEMICALLY CROSS-LINKED POLYETHYLENE

Product Name	INSUSHIELD		
Material Description	Fire Retardant Closed Cell Chemically Cross-Linked Polyethylene		
Material Form	Rolls, Sheets and Tubings		
Application	Thermal & Acoustic Insulation		
Areas of Application	A/C & Humidification ducts, Spandrel Insulation, Underdeck, Hot & Cold water pipelines & acoustic flooring		
Operating Temperature	-40°C to + 115°C		
Colour	Gray		
Nominal Density (Kg/m ³)	3012 Kg/m ³		
Thermal Conductivity (W/m ² K)	Mean Temperature (°C)	W/m ² k	K Cal/hr m ² c
	0	0.0315	0.0271
	23	0.0325	0.0279
	46	0.0383	0.0329
Water Absorption, % by weight after 28 days (As per BS 4370 PART-1	2.1		
Water Vapour Transmission Rate for Bare Foam in gm/m ² * mm of Hg.hr (As per BS 4370 PART-2)	4.05		
Tensile Strength (N/m ²)	27		
Tear Strength (N/m)	23		
Compression (Kg/cm ²)	10%Comp. - 0.144	15 %Comp. -	0.220
25%Comp. - 0.352			
Thermal Stability at 50 °C for 48 Hrs.	No visible changes observed		
U.V. Weather resistance at 60 °C for 100 Hrs. Exposure to Weatherometer	No visible changes observed		
Oxygen Index, % (As per ASTM D 2863)	24		
Fire Characteristics	Conforms to BS 476 Part 7 Class '1*' for surface spread of Flame and also UL 94 HBF grade		
Ozone Resistance for 48 Hrs at 50 °C at 50 pphm	No visible changes observed		
Fungus Resistance (As per ASTM G 21)	No visible growth observed. Rating • Zero		
Sound Transmission Class (9 mm SIL-XL-C Laminated	40 db		

|with 12 mm Gypsum Board) |

NOTES

1. Material available in thicknesses of 3 mm to 10mm in tingle layer with 1250mm width and over 10mm in 1220mm width
2. Material lamination with U.V Barrier film. Met Pet and Aluminium foil is available on request.
3. Material with adhesive backed peel off paper is available on request.