

# Where Insulation Meets Aesthetics

**IN**PANEL<sup>®</sup>

PIR BOARDS

DESIGN COMFORT INSULATION

## PIR THE WONDER PRODUCT

- It is used in the construction of HVAC ducting system, under-deck insulation, wall insulation, roof insulation, cold storages and false ceiling.
- It is environment friendly (CFC, HCFC Free, Zero ODP, Low GWP), closed cell rigid foam insulation core, 'sandwiched' between flexible facings like - FSK, Aluminium Foil or Kraft Paper. It has cellular structure consisting of more than 90% closed cells.

## FACINGS

- Rigid Pir foam thermal insulation boards are laminated / faced with flexible FSK, Aluminium Foil or Kraft Paper.

## STANDARD DIMENSIONS

Thickness (mm)	Width (mm)	Length (mm)
15 to 75	1200	1200 to 4000

## TECHNICAL DATA

Chemical Composition	Rigid pir foam (Polymer) based on special grade Methylene Di-Phenyl Di-Isocyanate (MDI) & Polyol chemical systems.
Fire Properties	Fire propagation: Class 0, according to BS 476 part 6 & part 7 Surface spread of flame: Class 1, according to BS 476 part 7 Smoke development index: Class A, according to ASTM E-84
Temperature Range	-40°C to 150°C
Overall Foam Density	45 (±10%) Kg/m <sup>3</sup>
Initial Thermal Conductivity	0.023 W/m.K (at 10 deg. Mean Temp.) (Max)
Compressive Strength	115 KN/m <sup>2</sup> (Min)
Water Absorption (By Volume)	0.5% (Max)
Water Vapour Transmission (Permeability)	8.5 ng/Pasm (Max)
Closed Cell Content	90% (Min)
Horizontal Burning	25 mm (Max)
Dimensional Stability	2% (at 100°C) (Max)

REMARKS: MATERIAL FOUND SATISFACTORY AS PER IS: 12436, PIR-1.

## ENVIRONMENTAL AND BIOLOGICAL COMPLIANCE

Environmental & Green Building Compliance	CFC & HCFC free, Zero ODP, Low GWP, Asbestos & Odour Free, corrosion and chemical resistant
Biological Compliance	Fungal & bacterial resistant, Anti Rodent

## THERMAL RESISTANCE (R-VALUE)

Thickness (mm)	R-Value (m².K/W)	R-Value (hr*ft²*°F/Btu)
15	0.65	3.70
20	0.86	4.93
25	1.08	6.17
30	1.3	7.40
35	1.52	8.64
40	1.73	9.87
45	1.95	11.10
50	2.17	12.34
75	3.26	18.50

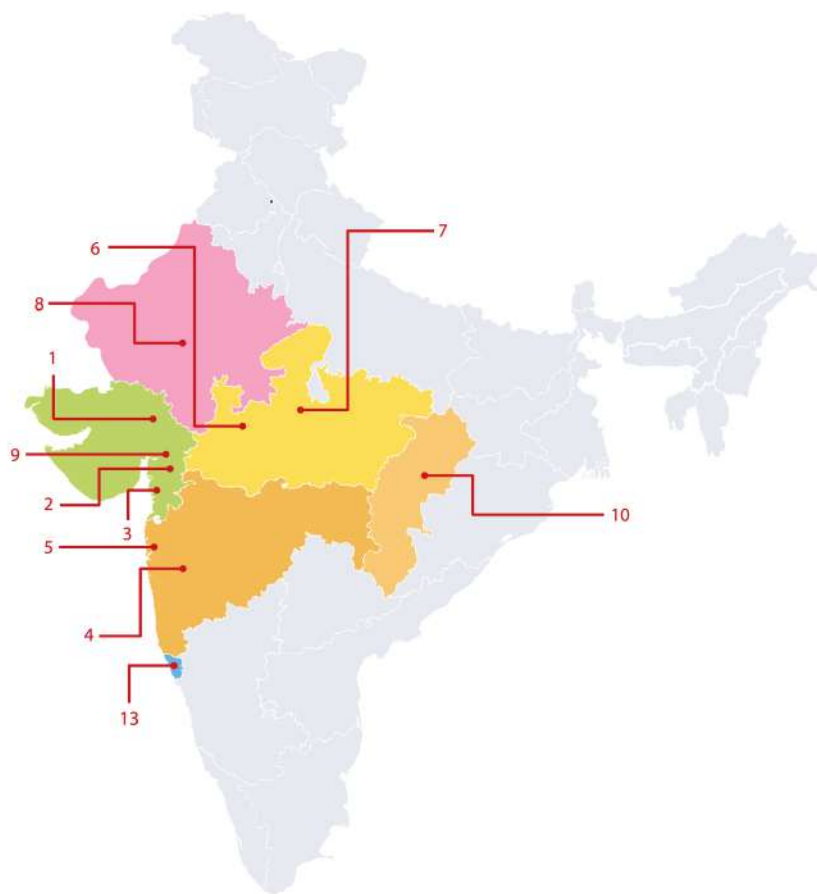
## APPLICATIONS

- Under Deck Insulation
- HVAC Ducting System
- False Ceiling
- Residential
- Commercial
- Hospital
- Hotels
- Cold Storage
- Clean Rooms
- Industries
- Food Processing
- Shopping Malls
- Auditorium
- Theatres



## FEATURES

- Green Building Requirements Compliant
- Fire Resistance – Class '0'
- Lower Smoke Index
- CFC And HCFC Free
- Lower U-Value
- Higher R-Value
- Lower K-Value
- Zero ODP
- Low GWP
- Cleanable & Hygienic
- Low Water Vapour Transmission
- Anti Rodent
- No Fungus Growth
- Uniform Density
- Closed Cell Structure
- Excellent Thermal And Dimensional Stability
- No Corrosion
- Light Weight
- Space Saving
- Low Handling Cost
- Low Structural Support Requirement
- Fine Aesthetic
- High Compressive Strength
- Low Installation Time Required
- Lower Thermal Conductivity Of PIR Insulation
- High Energy Cost Savings



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