

Technical Data Sheet

HR INSULATION BOARD

Extruded Polystyrene (XPS) Rigid
Insulation Board



Product Description

HR Insulation Board is a high-performance extruded polystyrene (XPS) rigid insulation board designed to provide excellent thermal insulation and moisture resistance in buildings. Its closed-cell structure ensures high compressive strength, low water absorption, and long-term durability, making it ideal for use in demanding construction applications.

Applications

- Roof insulation systems (RCC roofs, terraces)
- Basement walls and foundations
- Floor insulation under screed
- External and internal wall insulation
- Cold storage, industrial, and commercial buildings

Key Features & Benefits

- Excellent thermal insulation performance
- Closed-cell structure with very low water absorption
- High compressive strength for load-bearing applications
- Lightweight, easy to cut and install
- Resistant to rot, mold, and decay
- Long service life and dimensional stability



Technical Properties

Property	Typical Value	Test Method
Material	Extruded Polystyrene (XPS)	
Color	Blue / Pink (as supplied)	
Density	30–35 kg/m ³	
Thermal Conductivity (λ)	≤ 0.030 W/m·K	ASTM C518
Compressive Strength	≥ 300 kPa	ASTM D1621
Water Absorption	$\leq 0.5\%$ by volume	ASTM C272
Flexural Strength	≥ 450 kPa	ASTM C203
Operating Temperature	-50°C to +75°C	



Fire Classification

Class E (EN 13501-1)*

Method of Application

is clean, dry, and level

- Fix boards using compatible adhesive, mechanical fasteners, or loose-laid system
- Lay boards tightly with staggered joints
- Seal joints if required using suitable tape or sealant
- Apply protective screed, membrane, or finish as per system design

Storage & Handling

- Store in a dry, shaded area, away from direct sunlight
- Protect from open flame and solvents
- Handle carefully to avoid edge damage

Health & Safety

- Non-toxic and safe under normal handling conditions
- Use safety gloves during cutting
- Dispose of waste according to local regulations

Limitations

- Not suitable for direct exposure to open flame
- Protect from UV exposure during prolonged storage
- Must be covered with suitable protective layers in final construction

Disclaimer

The information provided in this Technical Data Sheet is based on laboratory testing and practical experience. Actual performance may vary depending on design, installation method, and site conditions. The manufacturer shall not be held responsible for improper use.

