

Technical Data Sheet

Cold Storage Solutions

Product Overview

Our cold storage insulation systems are engineered to ensure optimal thermal performance, airtight sealing, and long-term durability in temperature-controlled environments. Designed for cold rooms, frozen storage, and ripening chambers, our insulation solutions minimize energy loss, prevent condensation, and maintain strict temperature control across varying climate zones.

Using high-performance materials like PUF, PIR, and XPS, our systems comply with global hygiene and safety standards essential for the food, pharma, and logistics sectors.

Key Applications

- Cold Rooms & Freezers (0°C to -40°C)
 - Chillers & Ripening Chambers
 - Dairy & Meat Processing Units
 - Pharmaceutical Cold Chain
 - Food Storage & Distribution Facilities
 - Temperature-Sensitive Warehousing
 - Seafood & Perishable Goods Storage
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Technical Specifications

1. Insulated Panel Materials

- PUF Panels (Density: 40 ± 2 kg/m³, Thickness: 40–150 mm)
- PIR Panels for enhanced fire performance
- EPS Panels for budget-sensitive applications

- Pre-coated GI / SS / Aluminum finishes
- Foamed-in-place or modular panel construction

2. Thermal & Physical Properties

- Thermal Conductivity (K-value): 0.022–0.025 W/mK
- Operating Temperature Range: -50°C to +80°C
- Compressive Strength: ≥ 150 kPa
- Water Vapor Transmission: ≤ 0.05 perms
- Fire Rating: Class 1 / Class B (FM Approved options available)

3. Sealing & Accessories

- Tongue & groove joints with cam lock mechanism
- Food-grade silicone sealants for hygienic closures
- Vapour barriers with aluminum foil or kraft paper
- PVC / Stainless steel covings for corners and junctions
- Insulated doors (hinged/sliding) with magnetic gaskets

4. Floor Insulation System

- XPS Boards (50–100 mm)
- Load-bearing marine ply & aluminum chequered sheets
- Moisture barrier membranes for floor sealing

Product Formats Available

- Modular Cold Room Panels (Wall, Ceiling, Floor)
- Insulated Pipe Sections for glycol/CO₂ systems

- Hinged / Sliding / Automatic Cold Room Doors
 - Accessory kits: covings, flashings, pressure relief valves
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Compliance & Certifications

- ISO 9001:2015 Certified Manufacturing
 - HACCP & GMP Compliance for food-grade environments
 - CE Certified Panels & Doors
 - FM Global approved options (on request)
 - RoHS and REACH Compliant Components
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Benefits


- Superior temperature retention with low K-value insulation
 - Hygienic, washable, and corrosion-resistant finishes
 - Fast-track installation with modular interlocking panels
 - Condensation-free performance in humid environments
 - Long operational life with minimal maintenance
 - Custom solutions for any cold storage configuration
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Manufacturer

Bharath Modern Insulation Company

Specialists in Cold Storage, Thermal & Acoustic Solutions Since 1975

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