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

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/CO_2 systems

- Hinged / Sliding / Automatic Cold Room Doors

- Accessory kits: covings, flashings, pressure relief valves

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

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

Manufacturer

Bharath Modern Insulation Company
Specialists in Cold Storage, Thermal & Acoustic Solutions Since 1975
✉ Email: jagadeesan.bharath@gmail.com
🌐 Web: https://www.bharathmoderninsulationcompany.com