## "Full Service Cold Storage Panel Manufacturer Since 1953"











Walk-in Coolers, Freezers and Combination Models





### WHAT IS A WALK-IN?

#### Refrigerated Walk-In Coolers, Freezers or Combination Models

Walk-ins are **large**, **refrigerated storage spaces** that you can literally walk into, much like a small room. Designed to **maintain specific low temperatures**, making them perfect for storing perishable items like food, beverages, flowers and medicine.

Typically equipped with shelving to organize items and may include features like temperature controls, lighting, and secure doors.

"They are super-sized refrigerators on a more industrial scale!"

### DADE WALK-IN'S

Range from standard 8'x8' units to custom warehouses and are available with or without a floor. Interior and exterior wall and roof finish is 26-gauge acrylic coated stucco galvanized with 4" thick insulation\* shell and a standard door entry measuring 36" x 78" that can be customized. Available in various finishes, lighting, and digital controls.

## INSULATION

• Extruded Polystyrene (XPS, Gray foam) closed cell, at 55°F the R-Value is 28.8 for coolers & at 20°F the R Value is 32.4 for freezers.

www.dadecoolers.com

Expanded Polystyrene (EPS, White foam, Cooler Express)

#### 2 Pound Freezers:

At 40°F R Value = 19.04

At 75°F R Value = 16.8

I Pound Coolers:

At 40°F R Value = 16.8

At 75°F R Value = 15.44



## **APPLICATIONS**











## Why is Cold Storage Needed?

Serve as crucial spaces for industrial preservation and refrigeration across diverse industries.

## **Applications:**

- Biological
- Industrial
- Military
- Floral / Greenhouse
- Foodservice
- Aquatic products
- Animal Husbandry
- Medical / Pharmaceutical
- Logistics/Shipping
- Wineries

- Craft Breweries
- Hospitality
- Farming
- Restaurants
- Specialty Refrigerated Distribution
- Food Processing
- Entertainment/Bars
- Institutional
- Education









## WHAT MAKES DADE WALK-INS DIFFERENT?

- I. All Dade Engineering products undergo **thorough testing** at our advanced manufacturing facilities to ensure accuracy and reliability before products are pre-assembled and shipped.
- 2. Installation diagrams are conveniently attached to every cooler, and each panel is clearly labeled for **easy identification during setup.**
- 3. We utilize high-quality resources & insulation to create airtight sealed panels, ensuring optimal performance.
- 4. Our dedicated team is always ready to assist you throughout your customized project, providing support from initial site surveys, through obtaining necessary permits, to complying with relevant codes and inspections. From concept to completion. We do NOT charge for CAD drawings.
- 5. Safety EISA, UL, NSF approved and City of Houston, TX code compliant. Numerous installation safety test standards approvals.

## **DADE DIFFERENCE**





## **Design to Installation**

Dade Walk-ins, all-in-one models include the **refrigeration equipment**, **insulated walls**, **doors**, **and hardware**, making them a convenient and easy-to-install option. Our self-contained units are ideal for businesses with limited space but with perishable goods that require safe temperature-controlled storage. Dade can supply your Walk-in from design to installation.

- Walk-In sizes range from standard 8'x8' and 10'x10' units to custom warehouses
- Cooler temperature is 35° Fahrenheit and Freezers are -10° F
- Coolers are available with or without a floors, optional kickplate, windows & ramps
- Interior and exterior wall and roof finish is 26-gauge acrylic coated stucco galvanized
- Insulation Options:
  - 4" thick, Extruded Polystyrene (XPS) foam closed cell, R-25 for coolers & R-32 for freezers
  - 4" thick, Expanded Polystyrene (EPS) foam closed cell, R-17 for coolers & R-19 for freezers
- Door entry dimension is 36" x 78", many options are available such 48", 54" 60" and more!
- Finishes include but not limited to:
  - 26 Gauge Acrylume® Stucco Embossed Finish
  - 24 Gauge Smooth Stainless Steel
  - 26 Gauge Stucco Embossed White or Black Pre-Painted Galvanized Steel
- Standard fixtures for doors and panels



### CONSTRUCTION

#### **Interior Light Fixtures:**

Vapor proof light with glass bulb. Optional 4" LED or Fluorescent extreme temperature light available.

#### **Exterior/Interior Finishes:**

26-gauge ml stucco embossed galvalume. Optional 24-gauge smooth stainless steel, 26-gauge white or black, pre-painted galvanized steel.

#### Insulation:

Panel Core 20 Extruded Polystyrene Foam (XPS) or optional Expanded Polystyrene Foam (EPS).

#### Panels:

Light weight, easy to assemble, minimum of 3 positive quick locking fasteners per panel. Temperature range 160 - 50, factory installed vinyl panel gaskets.

#### Doors:

Lightweight, overlapping or in-fitting stock or custom sizes available.

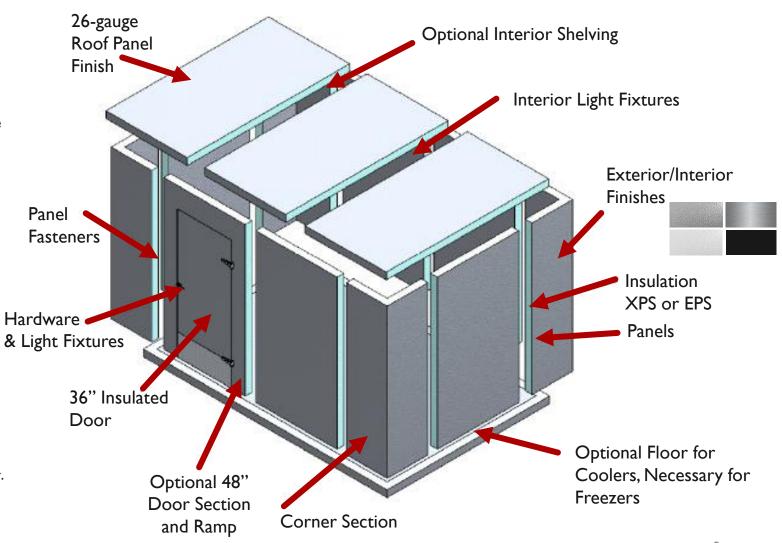
Galvalume or stainless steel, polystyrene insulated with closed cell neoprene gasket flush mounted switch with pilot light factory wired to vapor proof light on interion flushed mounted remote digital thermometer.

#### Hardware:

Chrome plated, interior safety release and factory wired heater cables on freezer doors.

#### **Panel Fasteners:**

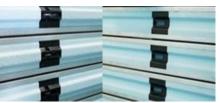
Tongue and groove side edges to ensure proper alignment and positive, airtight seal for optimized temperature control.





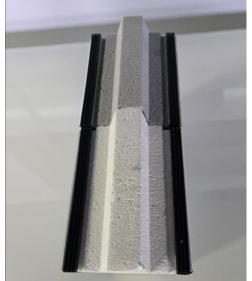
## **INSULATION**











## 2 Types of Polystyrene Foam Insulation, EPS and XPS

- Expanded Polystyrene, EPS is produced by expanding polystyrene beads with steam.
- Extruded Polystyrene, XPS is made by extruding molten polystyrene and then
- expanding it using blowing agents.

#### Benefits of EPS and XPS Insulation Compared to PU (Polyurethane)

- Moisture Resistant: XPS/EPS typically has a closed-cell structure, making it more resistant to moisture absorption
  compared to open-cell PU foam. This property is crucial for insulation materials, especially in environments where moisture
  ingress can compromise the insulation's effectiveness over time.
- **R-Value Retention:** XPS/EPS tends to maintain its **thermal resistance (R-value)** over time, whereas PU foam may experience a decrease in R-value due to aging and moisture absorption. XPS/EPS can provide consistent insulation performance throughout its lifespan.
- Strength and Durability: XPS/EPS is known for its high compressive strength, making it suitable for applications where the insulation may experience heavy mechanical loads or pressure, it's more resistant to deformation and can maintain its structural integrity better than PU foam under similar conditions.
- **Fire Resistance:** XPS/EPS has a **higher fire resistance** compared to PU foam. This property can be critical in buildings where fire safety regulations require insulation materials with specific fire ratings to enhance overall safety measures.
- Environmental Impact: XPS/EPS can be manufactured with a lower environmental impact compared to PU foam, especially if recycled content or eco-friendly production methods are used. This aspect is increasingly important in sustainable construction practices and green building certifications.
- Extruded Polystyrene (XPS, Gray foam)

55°F Coolers R Value = 28.8 20°F Freezers R Value = 32.4

Expanded Polystyrene (EPS, White foam, Cooler Express)

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## **FUNCTIONALITY**









# How Do Dade Walk-Ins Maintain Temperature?

Dade Walk-in Coolers and Freezers maintain their low temperatures using a combination of refrigeration technology, insulation, and temperature regulation systems.

- **Refrigeration System**: A walk-in cooler has a refrigeration unit that includes a compressor, condenser, evaporator, and refrigerant. The refrigerant absorbs heat from inside the cooler and releases it outside, effectively cooling the interior.
- **Insulation**: Thick, high-quality insulation in the walls, floor, and ceiling helps prevent heat from entering the cooler. This ensures that the cold air stays in and reduces the workload on the refrigeration system.
- **Temperature Control**: A thermostat or digital temperature control system constantly monitors the temperature inside the cooler. When the temperature rises above the set point, the refrigeration system kicks in to cool the air. Once the desired temperature is achieved, the system cycles off to save energy.
- **Sealed Doors**: The doors of walk-in coolers are equipped with tight seals to minimize air leakage. Many also have automatic closures to ensure the doors are not left open by accident.
- **Air Circulation**: The refrigeration unit ensures even air circulation throughout the cooler, preventing hotspots and keeping the temperature consistent across all shelves.



## **USA MANUFACTURER**













## From Concept to Completion

#### **Quality Control, Factory Inspected & Tested**

 All Dade Engineering products are manufactured in Miami, Florida and tested at our plant for accuracy by pre-assembly before shipping.

#### Installation

- Manuals are attached to every cooler and every panel is labeled with diagrams step by step.
- Cam lock devices are locked together to assist with assembly. Once panels are locked together, they provide an air-tight seal.

#### **NSF Certified Packaging - Shipping**

• A four-way pallet is the base for all panels. Foam is installed between panels and plastic wrapped. Cardboard is added to all corners.

#### QuickShip Program

• We ship direct from our factory in Miami, Florida, ask about our QuickShip program when estimating your project.

#### **Warranty**

Up to a 50-year foam insulation warranty.





## **MAINTENANCE**











## Why Routine Maintenance Matters

- Check and Maintain Door Seals Damaged or loose seals allow warm air to enter, forcing the system to work harder and reducing efficiency. Inspect seals regularly for cracks or gaps and replace them immediately if damaged.
- Keep Condenser Coils Clean Dust and debris on condenser coils can reduce cooling efficiency, especially in hotter climates. Clean coils every 3-6 months using a soft brush or vacuum to ensure optimal performance.
- Monitor Internal Temperatures Fluctuating internal temperatures can affect product quality. Use digital thermometers to ensure consistent cooling and promptly address any deviations.
- **Inspect the Refrigeration System -** Hot weather increases strain on the compressor and other system components. Schedule regular maintenance checks with a professional to identify and address potential issues before they escalate.
- Ensure Proper Ventilation Overheated mechanical components can lead to system failure. Ensure the cooler has adequate ventilation around the condenser unit and keep the surrounding area free of obstructions.
- Manage the Load Why It Matters: Overloading the cooler can block air circulation, making it harder to maintain the set temperature. Avoid overstocking and allow space for airflow inside the cooler.
- Calibrate Temperature Controls Why It Matters: Inaccurate temperature controls can lead to energy wastage and inconsistent cooling. Regularly calibrate the thermostat to maintain precise temperature settings.
- Address Drainage Issues Why It Matters: Clogged or leaking drain lines can cause water buildup and create hygiene concerns. Clean and inspect the drainage system frequently to ensure it's functioning properly.
- Train Staff on Proper Usage Improper handling, such as leaving doors open too long, increases energy consumption and reduces cooling efficiency. Provide staff with clear guidelines for operating and maintaining the walk-in cooler.

### PARTS/COMPONENTS

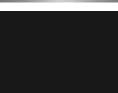


















## **Standard Parts & Components**

- LED light fixtures
- Latches
- Hinges
- Door closer
- Digital LED thermometer
- Heated pressure-relief vent
- Extruded Polystyrene Foam (XPS) Gray Foam (Request EPS)
- 26-gauge panel finish

#### **Accessories**

- Strip curtain and door options
- Diamond kick plate for both interior & exterior
- Exterior & interior ramp
- Insulated viewing windows (12"x12"/12" x 24")

#### **Finish Options**

- 26 Gauge Acrylume® Stucco Embossed Finish
- 24 Gauge Smooth Stainless Steel
- 26 Gauge Stucco Embossed White Pre-Painted Galvanized Steel
- Assorted colors Gray, White and Black

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### **FLOORS**









## Walk-in Freezer Floors are Necessary

#### **Concrete Surface**

It is recommended that insulation be installed under concrete floors to reduce condensation due to high humidity for your cooler.

For a freezer, insulation is required, however, local codes should always be researched and complied with.

#### **Wood Surface**

Under a wood surface, an insulated floor is necessary to avoid condensation that will rot out surface and cause any bacteria growth.

#### Ramp

When a ramp in needed for a walk-in, or in use the floors and doors must be re-enforced to allow for so many lbs per square foot.

#### **Dade Floor Construction**

22 ga Smooth Mill Floor Plate, 4" Extruded Polystyrene Foam (EISA 2007 Approved), NSF gasket with Cam-Locks hardware and built-in ramp.

NOTE: All Freezers require an insulated floor and quoted as such





## STATE OF THE ART DIGITAL CONTROLS











## How Can State of the Art Digital Controls Assist?

Dade coolers, freezers and storage rooms are meticulously constructed with state-of-the-art digital controls:

- Temperature reading controls
- Effective door alarms
- Reliable light monitors

These features work together to provide an optimal storage environment for your perishable goods, enhancing both safety and efficiency.

Your cold storage unit will meet your operating requirements and applicable codes.



# CUSTOMIZED & OUTDOOR PROJECTS











## **Customize your Walk-In Cooler and Freezer**

Dade can customize your walk-in cold storage need. You don't have to purchase the standard footprint or features, we can custom engineer specific building needs, safety requirements and code compliant regulations that you need to accommodate your square footage.

#### Customize options:

- Square Footage
- Electronics
- Doors
- Finishes
- Hardware

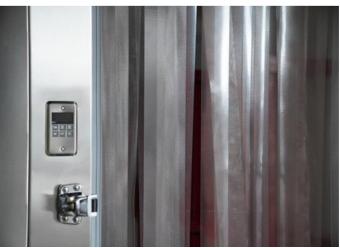
- Windows
- Shelving
- Floors and Ramps
- Lighting
- Outdoors

## **Outdoor Walk-in Coolers and Freezers**

Dade Walk-Ins are engineered for warm or cold environments. A rain proof roof membrane is installed on the interior surface of the cooler with flashing. We use anchoring hardware and a door rain cap to optimize a temperature-controlled environment.









## REPLACEMENT PARTS

Parts - Handles, Hinges, Latches & Gaskets, Kick Plate, Ramp

Look no further for all your essential replacement parts. Call Dade Engineering today for your high-quality cooler and freezer hinges, durable latches, and reliable gaskets, all readily available and prepared to ship directly to you.

You can even enhance your setup by adding a sturdy kick plate or ramp!

#### **Electronic Controls Specifications**

Dade Engineering proudly offers a comprehensive range of alarms, advanced sensors, user-friendly control panels, and any other electronic specifications you may require or need for replacement to effectively meet your cold storage needs.

We ensure that our products are designed with reliability and efficiency in mind, tailored specifically for your unique applications.

#### Replacement Cold Storage Walk-In Doors

Our premium replacement doors are expertly crafted using the same high-quality **extruded foam** that is utilized in the construction of our highly reliable panels for Walk-In Coolers and Freezers.

We also offer a variety of **galvanized steel finishes** to meet your specific **aesthetic and functional** needs. Don't hesitate to request a personalized quote below or call us today.



## DADE WARRANTIES

#### Walk-In XPS, Gray Foam (Extruded Polystyrene)

- 5-year original warranty on panel doors and floor parts
- 15-year original warranty panel walls & ceilings.
- 50-year warranty on insulation.

#### Walk-In EPS, White Foam, Cooler Express (Expanded Polystyrene)

- 5-year warranty on doors and floors.
- 10-year panel warranty.
- 50-year warranty on thermal insulation.



## "Full Service Cold Storage Panel Manufacturer Since 1953"









Connect with Dade









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Hours: Monday - Friday | 7am - 4pm

TOLL FREE: (800) 321-2112

