



## **EXTRUDED POLYSTYRENE SPECIFICATIONS**

### **GENERAL**

Walk-ins shall be constructed of prefab, precision-formed, modular panels designed for accurate, rapid field assembly. Walk-ins shall be test assembled at the factory.

### **DRAWINGS AND INSTRUCTIONS**

Each walk-in shall have a set of installation instructions and lay-out drawing. All panels shall have panel identification corresponding with the lay-out drawing to facilitate rapid and accurate field erection.

### **PANEL CONSTRUCTION**

Each panel shall consist of inner and outer metal skins, a 4" insulation core, and be equipped with cam-action locking devices. The locking devices shall be operable from inside the walk-in and a hex-shaped wrench shall be supplied. Press-fit plug buttons shall be provided to seal wrench holes after assembly is complete. Construction shall be as approved by the National Sanitation Foundation International and shall bear the NSF® Seal of Approval.

All panels shall be connected to one another by placing the tongue of the insulation core of one panel into the groove of the core insulation of the adjacent panel. The resultant tongue and groove joint shall be sealed at both sides by double barreled NSF® approved gaskets. In order to avoid future swelling and mold formation, no wood shall be permitted in the manufacture of the tongue and groove panel profile.

### **PARTITIONS**

When specified, walk-ins shall be divided into compartments by the use of panels that are constructed in accordance with the specifications for all panels.

### **FLOOR SCREEDS**

Floor screeds shall be provided for all floorless walk-ins. The screeds shall be vinyl, and have NSF® approved cove both inside and out.

### **PANEL FINISH**

Metal finish of the panels shall be as follows. (Specify finish desired, combinations may be used)

Interior or exterior walls, ceilings, and exterior floors

- 26 gauge stucco embossed galvalume
- 26 gauge bright stucco embossed galvanized steel
- 26 gauge white stucco embossed galvanized steel
- 26 gauge tan stucco embossed galvanized steel
- 24 gauge smooth stainless steel
- 24 gauge smooth white galvanized steel

Interior floors (When specified)

- 22 gauge smooth stainless steel
- 20 gauge smooth galvanized steel (used for use with quarry tile application)

### **INSULATION**

Panel insulation shall be Extruded Polystyrene, manufactured in an HFC and CFC free process, made from 60% recycled materials and 100% recyclable. Door insulation may be Polyurethane.

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### **Coolers**

Extruded Polystyrene: All wall and ceiling insulation shall be 4" thick, high quality, rigid extruded polystyrene, 1.6 lb density. K factor of not more than .139 and an R-factor of not less than 7.2 per inch, initial fresh R-28.8 minimum total wall R factor. Vapor transmission shall be less than 1 perm and foam core material must meet:

Owens Corning - UL Foam Core 5 flame spread rating with average smoke rating less than 175. (UL 723)

Dow - UL Foam Core 15 flame spread rating with average smoke rating less than 165. (UL 723)

### **Freezers**

All wall and ceiling insulation shall be 4" thick, high quality, rigid Extruded Polystyrene, 1.6 lb. density. K factor of not more than .125 and an R factor of no less than 8 per inch, initial fresh R-32 minimum total walls R factor. Vapor transmission shall be less than 1 perm and foam core material must meet UL 5 flame spread rating with average smoke rating less than 165. (UL 723)

### **PASSAGE DOORS**

(Standard door is 34"x76"; alternate sizes are available upon request).

### **Cooler Doors**

Door shall be flush mounted, positioned and hinged per drawings. Doors shall be provided with suitable sweep and magnetic gaskets. Door shall be provided with door closer, one pre-wired vapor proof light fixture, light switch with pilot light, dial thermometer, manual internal lock override, chrome plated can lift hinges, and chrome plated door latches with strike. Doors on outdoor walk-ins shall have weather protected light switch and door drip cap.

### **Freezer Doors**

Freezer doors shall be identical to coolers doors, but with the addition of UL approved heater wire on all four sides. Freezer doors

shall include a heated pressure relief port in the adjacent panel.

### **Door Options**

Customer shall specify requirements for 3 hinges, view windows, locking bars, internal ramps, external ramps, and diamond tread plate.

### **Optional Doors**

Optional sliding and overhead doors are available; customer to specify.

### **GLASS DOORS (When specified)**

Glass door openings shall be provided as necessary for the doors being installed. Sill height shall be per customer specification. Wood framing of the opening shall be required to assist with the installation of the glass doors.

### **RAIN ROOF PACKAGE (When specified)**

(For use on walk-ins installed outside)  
(Specify whether walk-in is free standing or which wall is butted)

A single-ply membrane roof shall be supplied to provide a water resistant covering of the ceiling panels. Membrane material shall be provided in one complete roll designed for the size of the walk-in. No welding of seams shall be required for installation.

### **SLOPED ROOF PACKAGE (When specified)**

(For use on walk-ins installed outside) (May be required at certain snow loads; consult U.S. Cooler)

In order to form a sloped roof profile, suitable quantities of sloped foam shall be provided. The foam shall be cut in a manner that upon installation, a ¼":1' slope is obtained. The membrane roof shall be increased in size appropriately, in order to provide the additional material required to properly cover the resultant profile.



## **FOAMED-IN-PLACE POLYURETHANE SPECIFICATIONS**

### **GENERAL**

Walk-ins shall be constructed of prefab, precision-formed, modular panels designed for accurate, rapid field assembly. Walk-ins shall be test assembled at the factory.

### **DRAWINGS AND INSTRUCTIONS**

Each walk-in shall have a set of installation instructions and lay-out drawing. All panels shall have panel identification corresponding with the lay-out drawing to facilitate rapid and accurate field erection.

### **PANEL CONSTRUCTION**

Each panel shall consist of inner and outer metal skins, a 4" insulation core, and be equipped with cam-action locking devices. The locking devices shall be operable from inside the walk-in and a hex-shaped wrench shall be supplied. Press-fit plug buttons shall be provided to seal wrench holes after assembly is complete. Construction shall be as approved by the National Sanitation Foundation International and shall bear the NSF® Seal of Approval.

All panels shall be connected to one another by placing the tongue of the insulation core of one panel into the groove of the core insulation of the adjacent panel. The resultant tongue and groove joint shall be sealed at both sides by double barreled NSF® approved gaskets. In order to avoid future swelling and mold formation, no wood shall be permitted in the manufacture of the tongue and groove panel profile.

### **PARTITIONS**

When specified, walk-ins shall be divided into compartments by the use of panels that are constructed in accordance with the specifications for all panels.

### **FLOOR SCREEDS**

Floor screeds shall be provided for all floorless walk-ins. The screeds shall be vinyl, and have NSF® approved cove both inside and out.

### **PANEL FINISH**

Metal finish of the panels shall be as follows. (Specify finish desired, combinations may be used)

Interior or exterior walls, ceilings, and exterior floors

- 26 gauge stucco embossed galvalume
- 26 gauge bright stucco embossed galvanized steel
- 26 gauge white stucco embossed galvanized steel
- 26 gauge tan stucco embossed galvanized steel
- 24 gauge smooth white galvanized steel
- 24 gauge smooth stainless steel

Interior floors (When specified)

- .100 Aluminum

### **INSULATION**

Panel insulation shall be foamed in-place polyurethane, manufactured with a HFC and CFC free process.

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### **Coolers**

Foamed in-place polyurethane: All wall and ceiling insulation shall be 4" thick, high quality, foamed in-place polyurethane, 2.2 lb density. K factor of not less than .141 and an R-factor of not less than 7.1 per inch, initial fresh R-28.4 minimum total wall R factor. Vapor transmission shall be less than 1 perm and foam core material must meet: UL Foam Core 25 flame spread rating with average smoke rating less than 450. (ASTM E-84)

### **Freezers**

All wall and ceiling insulation shall be 4" thick, high quality foamed in- place polyurethane, 2.2 lb. density. K factor of not more than .125 and an R factor of no less than 8 per inch, initial fresh R-32 minimum total walls R factor. Vapor transmission shall be less than 1 perm and foam core material must meet: UL Foam Core 25 flame spread rating with average smoke rating less than 450. (ASTM E-84)

### **PASSAGE DOORS**

(Standard door is 34"x76"; alternate sizes are available upon request).

### **Cooler Doors**

Door shall be flush mounted, positioned and hinged per drawings. Doors shall be provided with suitable sweep and magnetic gaskets. Door shall be provided with door closer, one pre-wired vapor proof light fixture, light switch with pilot light, dial thermometer, manual internal lock override, chrome plated can lift hinges, and chrome plated door latches with strike. Doors on outdoor walk-ins shall have weather protected light switch and door drip cap.

### **Freezer Doors**

Freezer doors shall be identical to coolers doors, but with the addition of UL approved heater wire on all four sides. Freezer doors shall include a heated pressure relief port in the adjacent panel.

### **Door Options**

Customer shall specify requirements for 3 hinges, view windows, locking bars, internal ramps, external ramps, and diamond tread plate.

### **Optional Doors**

Optional sliding and overhead doors are available; customer to specify.

### **GLASS DOORS (When specified)**

Glass door openings shall be provided as necessary for the doors being installed. Sill height shall be per customer specification. Wood framing of the opening shall be required to assist with the installation of the glass doors.

### **RAIN ROOF PACKAGE (When specified)**

(For use on walk-ins installed outside)  
(Specify whether walk-in is free standing or which wall is butted)

A single-ply membrane roof shall be supplied to provide a water resistant covering of the ceiling panels. Membrane material shall be provided in one complete roll designed for the size of the walk-in. No welding of seams shall be required for installation.

### **SLOPED ROOF PACKAGE (When specified)**

(For use on walk-ins installed outside) (May be required at certain snow loads; consult U.S. Cooler)

In order to form a sloped roof profile, suitable quantities of sloped foam shall be provided. The foam shall be cut in a manner that upon installation, a ¼":1' slope is obtained. The membrane roof shall be increased in size appropriately, in order to provide the additional material required to properly cover the resultant profile.