

# **Architectural Specifications**

## General

Walk-in coolers or freezers provided under this portion of the specifications shall be prefabricated, of modular design and construction. They shall be designed to allow convenient and accurate field assembly and future enlargement by the addition of panels.

## Panel Fabrication

Standard wall, ceiling and floor panels shall be nominal 2' and 4' in width and shall be interchangeable with like panels. Standard heights of walk-ins shall be. Corner panels shall be 90-1/4 angles with actual 12' exterior horizontal measurements. Nominal 1' and 3' panels shall be used if required to meet job site conditions. Available heights with floor or 4" vinyl screeds: 7' 6" 8' 6", 9' 6", 10' 6", 11' 6", 12' 6". Available heights without floor, with 1 1/2" vinyl screeds: 7' 4", 8' 4", 9' 4", 10' 4", 11' 4", 12' 4". Panels shall consist of foamed - in - place urethane insulation, sandwiched between interior and exterior metal "skin" which has been die-formed and gauged for uniformity in size. Edges of panels shall be foamed - in - place tongue and groove with locking facilities foamed - in - place at time of fabrications.

#### Floor Construction (select one)

- Floor Panels: Panels shall be fabricated similar to other panels, designed to readily withstand uniformly distributed loads of 700 lbs. per square foot. Floor (will/will not) be recessed. Floor (will/will not) be covered by the tile and grout, or concrete wearing floor.
- Floorless: Provide 1-1/2" high or 4" high Temp-Guard vinyl screeds. Screeds must be coved on both sides and sit flat on the floor. Screeds shall be nailed or lag fasteners shall be allowed. Wall panels lock to screeds on 2'0" centers.

#### Insulation

Each panel shall be filled with rigid "Foamed-In-Place" urethane having a thermal conductivity (K factor) of .133 BTU/hr./ft squared per degrees Fahrenheit/inch and an overall coefficient of heat transfer (U factor) of not more than .03. "R" factor shall be 31 or greater. Insulation shall have a 97% closed cell structure. Overall thickness shall be 4".

#### **Metal Finishes**

Panel skins, standard models, standard and optional metal finishes are as follows (Specify one or a combination of the following):

- Exterior and Interior walls shall be one of the following:
  - 1. .26 gauge stucco-embossed Galvalume steel.
  - 2. 032 stucco-embossed aluminum.
  - 3. 22 gauge Type 304 stainless steel, #3 finish.
  - 4. 20 gauge Type 304 stainless steel, #3 finish.
  - 5. 26 gauge stucco-embossed Galvalume pre-painted white.
  - 6. Other metal finishes and paint colors available. Consult factory.
  - Exterior floor and ceiling shall be 26 gauge Galvalume steel on all walk-ins, unless otherwise called for.
  - Interior floor shall be one of the following:
    - 1. .100"smooth aluminum
    - 2. 16 gauge stainless steel
    - 3. .100 tread plate aluminum
    - 4. 16 gauge galvanized steel (tile and grout applications)

#### Panel locking assemblies

Assembly of walk-in shall be accomplished by Posi-Locs. Posi-Locs shall be foamed-in-place and activated by a hex wrench provided by the manufacturer. Access ports to locking devices shall be covered by snap caps. Access ports shall be on interior to allow assembly of walk-in from the inside.

#### Section gaskets

NSF listen gaskets shall be foamed-in-place to the male side of all panels, on both interior and exterior. Gaskets shall be impervious to stains, greases, oils, mildew, etc.



#### Entrance door and door panel

Each walk-in shall be fitted with one standard 34" x 78" swing-type entrance door. The door shall be flush type, finished in and out to match the wall in which located. Doors and door section shall be listed by Underwriters Laboratories and equipped with the following:

- Door shall be equipped with magnetic gasket, Posi-Seal door closure and latch. Hardware has provisions for locking and a safety release which prevents entrapment of personnel within the box
- Door shall be self-closing with two strap-type, cam-lift hinges.
- Door jamb shall be made of Fiberglass Reinforced Plastic. An isolated, low wattage heater strip covered by magnetically attracting stainless steel shall be fitted onto this jamb (freezer only). This strip shall provide perfect sealing of magnetic gasket and prevent frost and condensation build-up.
- Each entrance door section shall be provided with an incandescent type vapor-proof light, pilot light switch and conduit between switch box and outlet box. Concealed wiring shall be standard on each entrance door section.
- A threshold with non-skid striping shall be provided with each door section. Heater wire shall continue beneath the threshold (freezer).
- A 2" dial thermometer shall be included with each door section to indicate inside temperature.

## Partitions

Fabrication and finish of partition walls shall be the same as the walk-in walls and shall lock into wall, ceiling, and/or floor panels, with Posi-Loc assemblies. Tongue and groove foam fabrication shall provide the thermal break between cooler and freezer compartments. Wall "T" panels shall be 23" x 12" symmetrical tee. Heater wires not required.

## NSF

All walk-ins shall be fabricated to comply with National Sanitation Foundation No. 7. The NSF label shall be affixed to the interior door pan. All interior corners, including floor shall be coved.

## Air Vent

A Tri-Action air vent shall be provided to equalize pressure between the interior and exterior, caused by sudden temperature changes due to door openings and evaporator defrosting. The vent shall be heated to prevent moisture and/or frost accumulation (required for freezers).

# Installation Instructions

A complete set of installation instructions shall be included with the walk-in. These instructions shall cover the erection and assembly of the walk-in, and the installation of refrigeration systems. A floor plan print shall be included.

## **Refrigeration Equipment**

Condensing units shall be fully hermetic or semi-hermetic type. Refrigerant shall be R-22 or R-404A unless otherwise specified. Condenser shall be air-cooled or optional water-cooled. Condensing units shall be factory assembled and UL or ETL listed. Evaporators shall be forced air type. Air discharge shall be parallel to the walk-in ceiling. Fan motors, guards multi-fin and tube-type coil, shall be housed in heavy gauge aluminum. Unit shall have drain pan with suitable drain pipe fitting. Freezer evaporators shall have and automatic electric defrost system including heater, time clock, fan delay control, and heated drain pan. Defrost shall be time initiated and temperature terminated with built-in fail-safe control. All evaporators shall be UL listed. All systems include pump down cycle to provide additional protection against unwanted refrigerant flow.

These basic components shall be supplied by Kolpak as one of the following systems:

- "CS" Self-Contained Top Mounted
- "SS" Self-Contained Side Mounted
- "PCL" Pre-Charged Lines (Remote)
- "PR" Pre-assembled Remote See Refrigeration Systems for details on above systems.

## **Refrigeration Accessories**

## Low Ambient Kit

For air-cooled condensing units installed outdoors (to -20°F) where sub-zero ambient temperatures prevail for sustained periods - include crankcase heater, head pressure control, and rainproof housing. For below -20°F ambient temperatures, consult factory.



#### Drain Lines

Installing contractor shall provide suitable drain lines from all evaporators. Drains shall be trapped outside the walk-in. Freezer drains shall be copper tubing and shall be heated and insulated to prevent freeze-up. All plumbing to be in accordance with local codes. Drain line heater kits available from Kolpak in 6', 2' or 18' lengths.

# Condensate Evaporator

Required if job site does not have a floor drain near the walk-in. An electric condensate evaporator shall be provided for wall mounting on exterior of the walk-in. 115-60-1 AC continuous service voltage required.

## Insulated Evaporator

Top-mounted coil system can be used to provide more useable storage space. Coil is positioned above interior of ceiling.