



Architectural Specifications - KoldFront

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 are for use indoors only.

- Walk-in, when supplied with refrigeration, shall be provided an ArcticFox LDA (Local Dashboard & Alarms) for WiFi remote monitoring as Standard.
- System with Walk-In will be provided with 1st year free access to ArcticFox Smart Access for Dashboard and remote alarming via e-mail or text message alerts. (may be used with or without Smart Access)

Panel Fabrication

Standard wall, ceiling, and floor panels shall be nominal 2' and 4' in width and shall be interchangeable with like panels. Corner panels shall be 90-1/4° angles with actual 12' exterior horizontal measurements. Available heights with floor or 4" vinyl screeds: 7' 6-1/4" or 8' 6-1/4".. 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 4" high Temp-Guard vinyl screeds. Screeds must be covered 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 with a flame spread of 25 or less and smoke developed of 450 or less as well as having a 97% closed cell structure and the following thermal resistance:

For coolers (reported at 55 F mean temperature)

4" thick: R-29

For freezers (reported at 20 F mean temperature)

4" thick: R-32

4" floor: R-29 (floors are measure 4" at the cap/rail and 3-5/8" everywhere else due to cove)

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 26 gauge stucco-embossed Galvalume steel.
- Exterior floor and ceiling shall be 26 gauge Galvalume steel on all walk-ins.
- Interior floor shall be .100" smooth aluminum

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 listed 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 (required in freezers). 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 LED type vapor-proof light with safety pilot light that stays on when light switch is turned off, light switch and conduit between switch box and outlet box. Concealed wiring shall be standard on each entrance door section.
- Each door shall be provided with interior and exterior kick plate of .063 Aluminum Diamond Tread
- A threshold with non-skid striping shall be provided with each door section. Heater wire shall continue beneath the threshold (required in freezers).
- 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

An 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 (in the small parts box).

Refrigeration Equipment

Condensing units shall be Hermetic type. Refrigerant shall be EPA compliant. Condenser shall be air-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. All evaporators will be provided with Electronic Temperature Control System with ModBus capability for remote monitoring. Coolers will have Electronic Temperature Control with built-in time clock for air-defrost control. Freezer evaporators shall have an 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 the following system:

- "PC" Pre-Charged (Remote Condensing Unit with refrigerant charge suitable for 50' line run) with evaporator assembly.

Refrigeration Accessories

Low Ambient Kit

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

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 supplied by contractor and shall be in accordance with local codes.