



General Walk-in Specifications

Walk-In Cold Storage Rooms

Imperial Manufacturing cam lock, modular, high density frame, urethane foamed in place sandwich panels.

1. General Specifications

- a. Prefabricated modular construction, designed and constructed for exact size, easy field installation and future disassembly, enlargement, or relocation. Nominal sizes are not acceptable.
- b. High Density Urethane, precision perimeter framed 3 ½" thick panels.
- c. Panels shall be NSF listed with NSF identity on each panel.

2. Panel Construction

- a. Panels shall be constructed with interior and exterior metal skins precisely formed to ensure proper size.
- b. Panels shall be framed at the perimeter with structural, high density urethane, tongue and groove rails.
- c. Panel skins shall be mechanically fastened to the perimeter framing and bonded to the urethane foam insulation to form a structural panel system.
- d. Panel core shall be UL listed, Class 1 fire rated, polyurethane foam, using non CFC propellant.
- e. Standard panel sections shall be interchangeable 47" widths. Special panels sized to meet custom requirements.
- f. Corners and T panels shall be constructed with minimum 3/8" radius in accordance with NSF standard #7.

3. Finish

- a. The interior and exterior of the panels shall be 26 gauge stucco galvanized steel with factory baked white enamel finish. Unexposed exterior surfaces can be 26 gauge galvanized steel.

4. Section Fasteners and Connectors

- a. All wall, ceiling, and floor section joints shall be fastened together with steel cam action locks, spaced no farther apart than 48".
- b. Each device shall consist of a precisely located cam lock and steel pin.
- c. All locks shall be actuated from inside the enclosure with a standard hex type allen wrench.
- d. All access holes are to be finished with white snap in cover caps.

5. Section Gasket

- a. All panel sections shall have two rows of closed cell gasket adhered to the metal on the top, bottom, and cam lock side of the panel, creating a self sealing, air tight joint.
- b. Gasket shall be NSF approved neoprene extruded gasket.

6. Insulation

- a. CFC free Class 1 fire rated polyurethane foam core. UL-723, < = 25 flame spread and smoke developed < = 450, in accordance with ASTM E84.
- b. Urethane, as specified, shall be foamed in place and cured to a solid rigid state between metal panel skins at an average density of two pounds per cubic foot.
- c. K factor shall be .14.
- d. Insulation shall have 97% closed cell structure and confirm to international standards for ozone depletion contribution.

7. Closures and Trim

- a. Include matching trim strips and removable closure panels between walk in walls and ceilings and building walls and ceilings as necessary.

8. Floors

- a. Coolers and freezers to have full floors.
- b. Floors to be 3 ½" high density urethane framed, with foamed in place foam core of the same specifications as walls and ceilings.
- c. Exterior floor finish shall be 26 gauge galvanized steel.
- d. Interior floor finish shall be .090 smooth aluminum, over ½" plywood underlayment. Entire assembly to be foamed in place.
- e. Interior floor to have ¼" radius from floor to wall joint to conform to NSF 7 standards. Corners of radius shall not be cut but rather formed in continuous radius corner.
- f. Floor to be designed to support 500 lbs/sq. ft.

9. Swing Doors

- a. Cooler and freezer doors to be 36"x 78", flush construction with extruded PVC frame and jamb assembly with magnetic gaskets.
- b. Freezer door to include frame and threshold heaters.
- c. Door finish to match panel finishes inside and out – 26 gauge stucco white galvanized steel.
- d. Insulation to be same as panel specification.
- e. Provide 36" high, .10" aluminum diamond tread kick plates on the inside and outside of doors.
- f. Provide Kason 1095 door snubber for each door.
- g. Provide three spring assist Kason 1248 chrome hinges per door. Hinge direction per plans.
- h. Provide Kason 1229C locking handle with inside safety release for each door.
- i. Each door frame to include toggle switch with pilot light and 2" flush mount thermometer.
- j. Freezer door frame to include heated air vent.

10. Sliding Doors

- a. Per detailed submittal drawings.

11. Additional Details

- a. Provide 1 vapor proof light fixture per 50 sq. ft. floor area.
- b. For Beer Coolers only provide .090" aluminum diamond tread floor surface and 36" high .10" aluminum diamond tread wainscoting on interior walls and on exposed front of cooler (wall that door is in).
- c. Include interior ramps as required.
- d. All electrical conduit shall be concealed (foamed in place) including but not limited to conduit for pilot light and switch, door and threshold heaters, heated air vents and heated view windows.

12. Refrigeration

- a. Refrigeration equipment to be sized per ASHRAE standards.
- b. Coolers to be designed for 35°F operating temp, 10 degree TD.
- c. Beer coolers to be designed for 32°F operating temp, 10 degrees TD.
- d. Freezers to be designed for -10°F operating temp, 10 degrees TD.
- e. Coolers to include air defrost timer.
- f. R-22, 460-3, condensing units for coolers and beer coolers.
- g. R-404a, 460-3, condensing units for freezers.
- h. 115v air defrost unit coolers for coolers.
- i. 208-1 electric defrost unit coolers for beer coolers and freezers.
- j. Include TXV's.
- k. Include one liquid solenoid, sight glass, drier, thermostat, and flooded head pressure control per system.

13. Warranty

- a. Panels to include 15 year delamination warranty.
- b. Parts to include 1 year replacement warranty.
- c. Door plugs to include 5 year delamination warranty.
- d. Refrigeration warranty per equipment manufacturer.
- e. Extended 4 year compressor warrant.
- f. Walk ins to be installed by factory authorized installer. Refrigeration to be installed by licensed refrigeration contractor incorporating ASRAE standards and practices.