

## Short Specification:

Walk-in cooler / freezer shall be AmeriKooler prefabricated, modular panel system designed for fast and easy field assembly; with 4" thick wall and ceiling panels (and floor panels if required) specified and fabricated in widths of 47", 23", 14" and 10-3/4". Custom panels can be fabricated in 1" increments. All panels and door to incorporate high performance Dow Chemical XPS insulation sandwiched between durable metal pans. Flush-mounted exterior door (specify size: 36", 30" or 26" X 76" high or 36" X 80" high) to have heavy-duty super cam-rise spring-assisted hinges, pull handle with key lock, inside safety release, smooth action automatic closer, and jam-mounted vapor-proof incandescent light and digital temperature display with pilot light. Freezer doors to have anti-condensate heater and heated pressure relief vent. Plus all the standard features that follow.

## Standard Panel Construction Features:

AmeriKooler panel lamination process is in compliance with ICC-ES code guidelines. All panels shall consist of:

- Durable, corrosion-resistant Acrylume® interior and exterior metal skins
- 4" of extruded Polystyrene foam insulation (XPS) bonded to the inner surface of both interior and exterior primed metal pans
- Finished panels are insulated without any low insulating perimeter framing
- All panels connect with tongue-into-the-groove of the XPS insulation of the adjacent panel
- NSF approved compression gaskets applied to tongue side of all panels (interior and exterior) to form airtight vapor-proof joints
- Assembly with corrosion resistant cam-action locking devices
- Access to locking devices via interior of panels
- A hex-wrench (provided) activates the cam-action locking devices
- PVC press-fit caps provided to seal 3/8" diameter hex-wrench ports, after assembly is completed.

## Floor Panel Construction Features:

- Floor panels (4" thickness) shall have 1/2" radius cove at interior perimeter, to facilitate cleaning
- Floor panels to have similar material and insulation construction as other panels
- Interior surface of floor panels shall be a heavy gauge smooth aluminum cladding
- Uniformly distributed stationary load rating of 600 Lbs. per square foot (standard)

- **Optional Floor Finish:** smooth or textured 22 gauge stainless steel.
- **Optional Reinforced Floors:** rated at 1200 Lbs., 1500 Lbs. or 2600 Lbs. per square foot of uniformly distributed stationary load. Refer to *Floor Selection Guide* for more details.
- **For Floorless Installation** - to be provided with:
  - Perimeter extruded PVC floor screeds, with 1/2" radius
  - Screeds designed to sit flat on a leveled floor
  - Attachment by means of concrete screws, at a maximum of 18" intervals.

## Insulation Properties & Performance:

Dow's Certified Extruded Polystyrene Foam (XPS):

- Closed-cell, high performance insulation
- Dow's precise control of parameters such as consistent density, cell size and cell orientation contributes to maintaining its other physical properties:
  - Hydrophobic, void-free structure that minimizes potential for water absorption
  - Non-deteriorating
  - Tested thermal conductivity (K factor) is 0.13 BTU/hr./sq. ft., per degrees/Fahrenheit/inch (ASTM C518)
  - Maintains a consistent R-value over time
- The resulting R-value or efficiency rating:
  - For coolers at a mean temperature of 55°F, is **R-29** for 4" thick panels (EISA Compliant)
  - For freezers at a mean temperature of 20°F, is **R-32** for 4" thick panels (EISA Compliant)
- 100% recyclable, with zero ozone-depletion, no HCFCs or CFCs
- Operating temperature up to -20°F
- XPS insulation shall have a Class I Fire Hazard Classification, with:
  - A flame spread rating of 15 (UL723)
  - Average smoke rating less than 165 (UL723)
  - Self-ignition Temperature of 896°F (480°C) (ASTM D1929)
  - Flash Ignition Temperature of 734°F (390°C) (ASTM D1929)
- Insulation Test Standards:
  - Water Absorption (ASTM C272)
  - Water Performance (ASTM E96)
  - Water Affinity, Hydrophobic
  - Compressive Strength (ASTM D1621).

## Panel Finishes:

Interior and exterior finishes on walls, ceiling and the exterior of floors shall be: *Continued...*



- 26 gauge corrosion resistant stucco acrylic coated Galvalume® (55% Aluminum –Zink alloy)
  - **Optional Finish:** 26 gauge stucco white pre-painted galvanized steel cladding
  - **Optional Finish:** 24 gauge smooth stainless steel

## Flush Door Sizes:

Each walk-in shall be equipped with one standard door:

- 36" X 76" clear opening
- 30" X 76" clear opening
- 26" X 76" clear opening
- 36" X 80" clear opening

## Door Construction & Features:

Entrance door shall be hinged-type, flush-mounted, with:

- Extruded Polystyrene Foam (XPS) insulation, as specified for panels
- Two (2) heavy-duty, super cam-rise action of 5/8", built-in spring-assisted hinges (provide  $\pm 1/4$ " adjustment for sag)
- Deadbolt locking handle with keyed lock and padlocking provision
- An inside safety glow-in-the-dark release to prevent entrapment
- A door closer with solid steel chrome housing for positive and smooth door closure
- Standard hardware finish shall be brushed chrome
- **Optional:** Polished-chrome hardware
- A thermoplastic gasket with magnetic core provided at the top and sides of the door
- A flexible double wiper gasket provided along the bottom of door
- Door jamb and door perimeter fabricated with a non-conductive heavy-duty PVC extrusion that provides a thermal barrier
- Door jamb shall be provided with a heavy gauge stainless steel sill plate
- An incandescent vapor-proof light fixture mounted on the center-top of the jamb
- A digital LED temperature display, with pilot light switch in °F and °C
- **Electrical Rating:** available 120 Volt or 240 Volt.

**Freezer Doors (ONLY)** shall be provided with:

- Anti-condensate heater wire with temperature regulating thermostat
- Magnetic stainless steel channel to insure a positive frost-free seal

- A heated pressure relief vent mounted and wired on the jamb
- Reinforced aluminum U-channel electrical chase
- A flexible double wiper gasket installed on the exterior of the door when door opens to the ambient temperature

All mounting and pre-wiring shall be factory-complete, with material and performance guidelines approved by Underwriters Laboratories (UL).

## Code Approvals & Industry Listings:

- National Sanitation Foundation (NSF)
- Underwriters Laboratory (UL)
- City of Houston
- City of New York-MEA
- State of Oregon
- Energy Independence and Security of Act 2007 (EISA)

## Panel Limited Warranty:

- 50 year thermal warranty on insulation
  - 15 year original panel warranty on walls and ceilings
  - 5 year original panel warranty on doors and floors
  - 1 year original parts warranty
  - 1 year original panel labor warranty
- See published warranty for complete details.

## Refrigeration Package:

Refrigeration systems shall be from our preferred supplier: Heatcraft Refrigeration Products, LLC, their Bohn brand. Refrigeration package will be sized to walk-in dimensions, application, product type and maximum capacity.

New 1/2 to 6 HP condensing unit with HyperCore™ micro-channel technology is an energy-efficient and environmentally friendly system that qualifies as an E+ Solution product.

**Refrigeration Package** includes: pre-assembled condensing units and evaporators.

**Refrigeration Warranty** - AmeriKooler warrants all parts of refrigeration system for a period of (1) year from date of original shipment and a 30 day start-up labor warranty from date of installation, not to exceed 60 days from date of shipment; available in the United States of America.

An **Optional** four (4) year extended compressor warranty may be purchased within the boundaries of the United States of America.

*Note: Specifications are subject to change without notice due to our continuous product improvements.*

