



## SPECIFICATION GUIDE

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### Trade Approvals

- **Underwriters Laboratories (UL):** Bally Refrigerated Boxes, Inc. 4", 5", and 6" panels generated a flame spread of 25 or lower and smoke generation of 450 or lower when tested in accordance with ASTM E-84.
- **Factory Mutual (FM):** Bally Refrigerated Boxes, Inc. 4", 5", and 6" panels meet that approval of FM standards as a Class 1 building type. FM approval depends on skin type and height of panel. Consult factory for specific qualifications for FM approval.
- **National Sanitation Foundation (NSF):** Bally Refrigerated Boxes, Inc. panels are NSF certified.
- **Energy Independence and Security Act of 2007 (EISA):** Bally Refrigerated Boxes, Inc. products manufactured after January 1, 2009, meet or exceed the act standards.
- **Miami Dade NOA# 17-0830.08**
- **City of Houston Approval #297**

### Insulation

- Bally Refrigerated Boxes, Inc. uses HFC expanding agents to create a greater than 90% closed cell structure.
- Non-ozone depleting urethane shall be foamed-in-place (poured, not frothed) and, when completely heat cured, shall bind tenaciously to the metal skins to form an insulated panel. Panels and doors must meet or exceed minimum R-Values for cooler (R-25) and Freezer (R-32) when tested per ASTM C518 per Federal Regulation 431.304.

### Panels

- Panels shall consist of interior and exterior metals skins precisely formed with steel and dies and roll-form equipment and thoroughly checked with gauges for accuracy. The metal skins shall be placed into heated molds and liquid urethane injected between them. For extra rigidity, the exteriors of all vertical panels above 118" except corners and door panels shall have vertical grooves spaced on 5-3/4" centers.
- Standard Panels shall contain 100% urethane insulation and have no internal wood or structural members to form tongue & groove profiles. Metal Skins shall have double 90° return bends for superior adhesion to urethane.
- To insure tight joints, panel edges must have foamed-in-place tongues and grooves with a flexible vinyl gasket on the interior and exterior of all tongue edges. Gaskets shall be NSF certified and resistant to damage from oil, fats, water and detergents.
- To assure perfect alignment and maximum strength, corner panels shall employ a right-angle configuration with exterior horizontal dimensions of 12" on each side.
- Vertical panels (except corner panels) shall be supplied in a single length up to 27'8" high (16' high for installations with aluminum or stainless steel finish).
- For outdoor applications, single-height panels greater than 19' (16' for aluminum) or multi-tiered vertical panels must be secured to horizontal girts mounted between building columns.
- Panels are available in 4", 5", or 6" thicknesses.

### Joining Panels

- Panels shall be equipped with Bally Speed-Lok diaphragmatic joining devices.
- Each Speed-Lok shall consist of a cam action, hooked locking arm placed in one panel, and a steel rod positioned in the adjoining panel, so that when the arm is rotated, the hook engages the rod and draws the panels tightly together with cam action. Arms and rods shall be housed in individual steel pockets. Pockets on one side of the panel shall be connected to pockets on the other side in width, by the use of 2" wide metal straps set into and completely surrounded by the insulation.
- The distance between Speed-Loks shall not exceed 46".
- When panels are joined together, these straps shall form lock-to-lock connections for extra strength.

## Finishes

### Exterior Finishes

- Stucco-embossed Galvalume steel
- Stucco-embossed Aluminum
- Stucco-embossed White galvanized steel
- Stucco-embossed Stainless steel
- Stucco-embossed Sand-tan galvanized steel
- Stucco-embossed White Aluminum
- Smooth White galvanized steel
- Smooth Stainless steel (20 ga or 22 ga)
- Smooth White aluminum
- Galvanized steel (Exterior ceilings in high wind areas)

### Interior Finishes

- Stucco-embossed Galvalume steel
- Smooth White Galvanized steel
- Smooth Stainless steel (20 ga or 22 ga)
- Stucco-embossed Stainless steel
- Stucco-embossed Aluminum
- Stucco-embossed White aluminum
- Stucco-embossed White Galvanized steel
- Smooth White Aluminum
- Galvanized steel (for floors covered with quarry tile)

Custom finishes are available upon request.

## Dimensions for Walk-In Refrigerators and/or Freezers

- **Lengths:** 5'10", 6'3¾", 6'9½", 7'3¼", 7'9", 8'2¾", 8'8½", 9'2¼", 9'8", 10'1¾", 10'7½", 11'1¼", 11'7", 12'¾", 12'6½", 13'6", 13'11¾", 14'5½", 14'11¼", 15'5", 15'10¾", 16'4½", 16'10¼", 17'4", 17'10¼", 18'3½", 18'9¼", 19'3", 19'8¾", 20'2½", 20'8¼", 21'2", 21'7¾", 22'7½", 22'7¼", 23'1", 23'6¾", 24'½", 24'6¼", 25'0", 25'5¾", 25'11½", 26'5¼", 26'11", 27'4¾", 27'10½". Longer buildings are available in additional 11½" increments.
- **Widths:** 5'10", 6'3¾", 6'9½", 7'3¼", 7'9", 8'2¾", 8'8½", 9'2¼", 9'8", 10'1¾", 10'7½", 11'1¼", 11'7", 12'¾", 12'6½", 13'6", 13'11¾", 14'5½", 14'11¼", 15'5", 15'10¾", 16'4½", 16'10¼", 17'4", 17'10¼", 18'3½", 18'9¼", 19'3", 19'8¾", 20'2½", 20'8¼", 21'2", 21'7¾", 22'7½", 22'7¼", 23'1", 23'6¾", 24'½", 24'6¼", 25'0", 25'5¾", 25'11½", 26'5¼", 26'11", 27'4¾", 27'10½". Wider buildings are available in additional 11½" increments.
- **Heights:** (heights shown are with floor; subtract 4" for less-floor units):  
7'6", 8'6", 9'6", 10'6", 12', 13', 14', 15', 16', 17', 18', 19', 20'4", 21'4", 22'4", 23'4", 24'4", 25'4", 26'4", 27'4", 28'4".  
(Single length verticals) Taller buildings are available in additional 12" increments, with stacked vertical panels.

## Floors

- Bally furnishes floor panels only. Preparation and Installation of Bally floor panels must be provided by others.
- Floor panel construction shall be similar to that of vertical panels, but with a heavier-gauge interior skin; thickness of floor panels may be different than that of vertical panels. The end floor panels (23.5" wide) will have extra cam locks (*than verticals*) to accommodate various panel configurations.
- Vertical panels shall lock to the floor panels using the Speed-Lok joining system.
- 4" thick floor panels have a 3/8" inside covered radius built in around the perimeter of skins and are NSF Certified. Coved trim is available for 5" and 6" floors also allowing them to be NSF Compliant.

### Floor Types

- **Normal-usage Floor:** Floor panels shall be placed on a concrete pad and leveled. Where inside floor and outside platform must be level, the concrete pad shall be made with a depression deep enough to receive the Bally floor panels.
- **Reinforced Floor:** ½" Plywood or ½" OSB with .100 Smooth Aluminum and/or 16 Ga. Stainless-Steel plus overlay of 3/16" Aluminum Diamond Tread. These panels are designed to support a **"uniformly distributed load"** of 2,500 lbs. per square foot.
- **Heavy Reinforced Floor:** 3" Steel C-stud combined with ½" Plywood or ½" OSB with 16 Ga. Stainless Steel or .100 Smooth Aluminum foamed in place (4" or 3-5/8" NSF panels) plus an overlay of 3/16" Aluminum Diamond Tread. Heavy traffic cooler (to limit thermal transmission) low volume keg coolers and other heavy use applications. These panels are designed to support a **"uniformly distributed load"** of 3,000 lbs. per square foot.
- **Built-in, Insulated Floor:** The floor shall be constructed on the job site. It shall consist of a depressed, reinforced concrete sub-slab. Slab urethane (thickness based on temperature requirements) or insulated Bally panels shall be built into this depressed slab, add a minimum of 4" reinforced concrete wearing floor to be installed on top. Wall panels shall be fastened to this floor, or locked to Bally floor panels prior to installation of concrete wearing surface. Adequate drainage and ventilation or other heat source must be provided beneath and around all construction. **Forklift use is permitted when tile surface is NOT used.**
- **Structured Floor Panels:** 4", 5" or 6" thick insulated floor panels contain non-conductive fiberglass structural imbeds, with an additional ¾" Plywood adhered to the floor skin, for maximum strength without freezing. ¼" or 3/16" Diamond Tread plate overlay adds additional strength. Panels are designed to support a **"rolling load"** of 4,000 lbs. per square

foot. Examples; pallet jacks, large equipment, heavy carts with small wheels and high volume large keg coolers. **Forklift use is NOT permitted.**

#### Floor Panel Finishes

- 16 ga. Stainless steel
- .080 Rigidized Aluminum
- .100 Smooth Aluminum
- 16 ga. Galvanized Steel
- .125 Aluminum Diamond Tread
- .060 Rigidized Stainless Steel

#### Doors

- Number of doors, location and direction of swing shall be specified in the Walk-In layout.
- Doors are in-fitting and flush-mounted, and conform to the same standards as vertical panels.
- Magnetic core, thermoplastic gaskets installed on the top edge and both sides of the door shall keep the door in a closed position, forming a tight seal; a flexible, dual blade wiper gasket shall be installed at the bottom of the door.
- NSF Certified gaskets shall be replaceable and resistant to damage from oil, fats, water and detergent.
- A heavy U-channel structural steel frame around the perimeter of the door opening shall prevent racking or twisting; steel frame is to be reinforced for hardware attachment.
- Anti-condensate heater wire shall be concealed behind the metal edge of the doorjamb.

#### The door panel shall also include:

- Vapor-proof LED interior lamp; junction box for 120/60/1 AC service (15 amp maximum);
- 2"-dia. flush-face dial thermometer (field mounted on 60" wide doors); Provides dual temperature readings in a range from -60°F to 80°F.
- Door Canopy – rain shield for outdoor installations, to be caulked and mechanically attached to door.

#### Door Hardware

- For doors with 30", 34", 36", or 42" wide openings: two spring-loaded, cam-lift, self-closing hinges; cylinder latch with provision for padlocking and safety release mechanism; door closer.
- For doors with 48" or 60" wide openings: hinges are uplift type with blades not less than 9" long; latch shall include provision for padlocking and safety release mechanism. Bally recommends 4 hinges for all 60" wide doors.

#### Hardware Finishes

- For Walk-Ins finished with stainless steel – polished aluminum
- For Walk-Ins with finishes other than stainless steel – satin aluminum

#### Door Dimensions:

- **Standard Widths:** 30", 34", 36", 42", 48", 60"
- **Standard Heights:** 66", 70", 78", 84" - Doors can be cut to accommodate thickness of tile, if applicable.

#### Door Options

##### • Hinged Super Entrance Door:

Construction is identical to that of a standard door except that a third hinge is added and the door and portion of door panel is protected by diamond-plate kick panels covering the bottom 30" on interior and exterior.

##### Hinged Super Entrance Door Dimensions:

- **Widths:** 30", 34", 36", 42", 48", 60"
- **Heights:** 66", 70", 78", 84"

- **Observation Window in Entrance Door:** a 14" x 14" heated observation window shall be provided in the entrance door. It consists of three panes of glass with either heat reflective treated glass or Argon gas filled. 14"x24" windows shall be used on larger doors (48" to 60" wide). Window heat system shall be controlled by a thermostat to minimize energy consumption.
- **Deadbolt Handle Latch:** Security latch with sliding deadbolt and inside safety release.
- **Strip Curtain:** Sturdy, NSF Certified, clear-vinyl strip curtains shall permit easy passage while minimizing air infiltration. Made of USDA-approved, polyester reinforced, clear vinyl strips, eight inches wide with rounded edges.

## Accessories

- **Pressure Relief Port** (required for all freezers)
- **Partition Walls:** Insulated, 4" thick metal clad panels shall be provided to form separate compartments within the Walk-In. A non-conductor strip must be built into all exterior panels at the joints where partitions butt to prevent transfer of heat from one compartment to another. Partition panels shall be locked to these panels.
- **Roof Options:** (One of the following types must be used for any outdoor installation):
  - Sectional prefab metal roof shall be used with structures installed outdoors on buildings of any length but not exceeding 34'7" in width. Roofs shall be made of stucco-embossed aluminum.
  - Single-piece, pre-sized membrane roof system; maximum dimensions: 34'7" x 34'7".
  - Bally reviews factors including existing building locations, snow loads, and wind factors to determine the correct roof/ceiling design for the specific installation.
- **Alarm Systems**
  - Modularm 75L C
  - National TM166
  - Weiss XWA
- **Double-swing Cart Door:** used in tandem with Bally hinged entrance doors to minimize the entry of heat when main doors must be kept open. May be installed on units operating at temperatures as low as -20°F. Available with optional bumpers.
- **Reach-in Doors:** Convenient for Product loading these doors can be designed where any regular 46" panel is used. Construction and hardware standards are equal to that of typical door panels.  
**Sizes:** 18½" x 30" or 30" x 30"  
 Single \_\_\_\_\_ Size \_\_\_\_\_  
 Double \_\_\_\_\_ Size \_\_\_\_\_
- **Glass Display Doors:** Provide maximum display. Available for cooler or freezer applications, low temperature doors have built-in heaters to eliminate condensation; can be installed with left-hand or right-hand swings and optional locks. Shelving also available.  
 Number \_\_\_\_\_ Size \_\_\_\_\_
- **Wire Shelving**
  - **Cantilevered:** Stainless steel top anchors held in place by zinc-plated steel sheet metal screws. Two stainless steel support brackets support shelves positioned over nylon projections and finished with closure caps. All shelves have raised wire edges to keep stored product in place.  
**Finishes:** chrome, epoxy, or stainless steel.

Number of Tiers: \_\_\_\_\_ Widths: 14", 21" Lengths: 30", 36", 42", 48", 54", 60" (other lengths available upon request)

- **Freestanding:** Allow for free air circulation, and easy assembly. Bolt levelers on the feet ensure level shelving.

**Finishes:** chrome, epoxy, stainless steel, and flat and louvered stainless steel

Number of Tiers: \_\_\_\_\_ Widths: 14", 21" Lengths: 36", 48", 60"

- **Lighting**

- 24" long LED
- 48" long fluorescent
- 48" long LED
- LED vapor proof
- High Bay LED Lights

## Refrigeration Systems

(For multi-compartment units, provide plan view with compartment temperatures.)

- **Condensing Units**

- Indoors or Outdoors
- Horsepower or BTU rating at a specified condition
- Voltage & Phase
- Compressor Types
  - Scroll
  - Hermetic
  - Semi-hermetic
- Various controls and option packages available

- **Evaporators**

- Preassembled remote
- EC motor standard
- SmartSpeed™ fan control standard

## Installation

- Installation Manuals shall be provided upon delivery of the Walk-In.
- Installation Manual will include instructions for the erection of the Walk-In, and any subsequent materials will be provided for optional Accessories, and Refrigeration Systems.

## Work & Materials

- Materials shall be in full accordance with local and/or state ordinances, and with any other prevailing rules and regulations.
- Bally Refrigerated Boxes, Inc. is not responsible for furnishing items required by the regulations, unless specified or shown on the drawings or contained in the specifications.

## Warranties

- Bally shall warrant that any part of the structure it supplies (except the refrigeration system and its related accessories) is free from defects in materials or workmanship under normal use and service.
- The insulated panel portion of the structure is warranted free from defects under normal use and service for a period of 10 years from date of installation (but in no event shall the warranty be in force for more than 10 years and 6 months from the date the product was first shipped by Bally).
- Panel surface condition is warranted free from defects under normal use and service for one year from installation, provided the panel is stored and installed according to Bally's instructions.
- Mechanical (including hardware, gasketing, Speed-Lok assemblies, weather roofs) and electrical components, except refrigeration systems (which are covered by a separate warranty) are warranted to be free from defects under normal use and service for one year from date of installation. (In no case shall this portion of the warranty be in force for more than one year and six months from the date the product was first shipped by Bally.)

- The warranty shall not include any labor charges for replacement or repair of defective parts or refrigeration. Full warranty information is to be provided with the Walk-In.