GENERAL DESIGN INFORMATION



Use this section of the Bally Working Data Catalog to find useful facts on Bally walk-in coolers, walk-in freezers and refrigerated buildings. You'll find details on urethane insulation, panel construction, the Speed-lok® joining system and other important aspects of our structures. Section 1 is focused on walk-ins. See Section 6 for information on refrigerated buildings exclusively.



Bally panels can be assembled to create superb insulated structures from warehouse to kitchen size.



NOTHING BEATS A BALLY.

BALLY IS THE MOST EXPERIENCED AND THE MOST INNOVATIVE MANUFACTURER OF REFRIGERATED STRUCTURES

Since we introduced refrigerated structures manufactured with foamed-inplace urethane insulation more than 30 years ago, Bally has been the leader in its industry. Name an advance in applicable technology and chances are Bally was responsible for it.

We were the first to use foamed-in-place urethane insulation in modular walkins and refrigerated building. The first to earn FM Class I and UL listings for insulated panels. The first to develop an integral locking system for our structures.

Today, we're faithful to that tradition. Bally pioneered panels that reduced ozone-depleting CFCs. In fact, our current HCFC panels cut ozone damage by 90 percent. Those panels have again received FM Class I and UL listings.

Through these many developments, we've continued to rely on the outstanding fundamentals of our product line, features like these that set us apart:

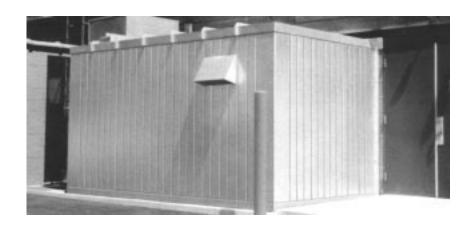
- Foamed-in place urethane. With the changes to its formulation, Bally urethane remains one of the best commercially available insulations on the market today. Need even more insulating protection? Then choose our 5" or 6" –thick panels.
- **Fast, easy assembly.** Our panels are properly formed and light in weight. Along with the Bally Speed-lok, those features make Bally walk-ins and refrigerated buildings exceptionally quick and easy to assemble.
- Adaptable to many uses. Bally urethane performs at temperatures ranging from -90°F (-67.7°C) to 212°F (100.0°C). The panels are easily transported where needed, and work equally well indoors and outdoors.
- Semi-hermetic and hermetic refrigeration systems. Bally Refrigeration Products provide a number of pre-assembled remote refrigeration units designed for your specific Bally installation. They are available in varied configurations, mounting styles, capacities, and voltages. Each part of a Bally system is chosen and built to be perfectly in balance with every other one – the correct size, power and capacity.

In this Working Data Catalog, you'll find information on other specialty products that further prove our engineering leadership – products like the Northwind[™] blast chillers. You'll discover more about what makes us unusually deft at fulfilling your most demanding requirements. You'll learn why Bally equipment of all kinds is versatile, dependable, and above all, cost effective.





WALK-IN INSTALLATION



Versatile Bally walk-ins serve a wide variety of applications.







Solid Fundamentals: The Pre-Engineered Panel

In making our panels, we take nothing for granted. We design and build our own heated molds, in which our panels are foamed-in-place precisely and accurately. The prime insulation built into those panels provides dimensional stability through a wide range of temperatures.

> Standard Bally Panel 4", 5" or 6" thick (Facing inside)

 Outside skins are available in white polyester over smooth galvanized, white polyester or sand-tan polyester over embossed galvanized, embossed aluminum, embossed Galvalume[®] or stainless steel. Optional finishes in a spectrum of custom colors are also available, as are Sandex sand-textured finishes.

- **2.** Bally wash primer for optimum foam adhesion.
- **3.** Foamed-in-place urethane insulation, (poured, not frothed).
- **4.** Tongues and grooves on panel edges are accurately molded urethane.
- **5.** Cam-action Speed-lok joining mechanism for snug joints.
- **6.** Heavy-gauge steel straps connect locking arms with locking pins on opposite edges of each panel.
- 7. Inside skins are available in white polyester over smooth or embossed galvanized, embossed aluminum, embossed Galvalume or stainless steel.
- **8.** Interior metal floor panel skin. Heavy-gauge galvanized steel or optional stainless steel.
- **9.** Exterior metal floor panel skin. Usually supplied in same finish as vertical panels. Edges capped with match metal when stainless steel or white over galvanized steel are specified for verticals.

Type Of Panel	Lengths	Widths	Heights/Comments †
Center Ceiling Panels	Vary **	11-1/2", 23", 34-1/2" or 46"	—
End Ceiling Panels	Vary **	23-1/2"	—
Corner Panels	—	12" x 12" Outside width	6'10" thru 10'10", 11'4" thru 19'4", 19'9" thru 27'8" in one foot increments ††
Hinged Door Panels 4", 5" or 6"		46" Wide — 30" and 36" Opngs. 57-1/2" Wide — 36", 42", 48" and Opngs. 69" Wide — 36", 42", 48" or 60" Opngs.	6'10", 7'10"; for taller buildings, panels of an appropriate size are installed above the door panel
Wall Panels	—	11-1/2", 23", 34-1/2" or 46" *	6'10" thru 10'10", 11'4" thru 19'4", 19'9" thru 27'8" in one foot increments
Center Floor Panels	Vary **	11-1/2", 23", 34-1/2" or 46" *	—
End Floor Panels	Vary **	23-1/2"	—

* 17-1/4" wide panels available for special uses. Contact factory for details.

** Maximum length for 4" and 5" thick floor and ceiling panels is 11'6" for multi-span and 17'4" for single span (indoors). Smallest building size is 3'11"w x 5'10"l, size increases in 11-1/2" increment to any size building. For height, see "wall panels" above.

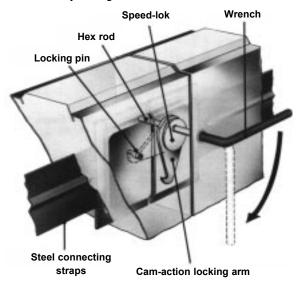
+ Heights shown are for vertical panels only, for overall height add thickness of appropriate floor and ceiling panels.

†† May be fabricated in two pieces



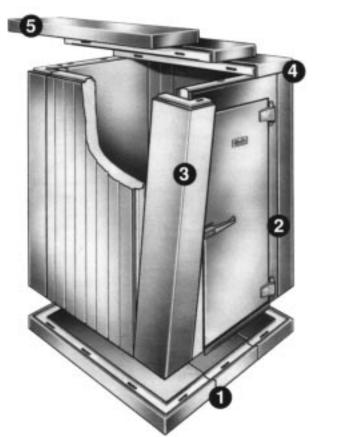
BALLY'S DIAPHRAGMATIC JOINING SYSTEM IS STRONG AND VERSATILE

The heart of a rugged, versatile walk-in is its joining system. Bally's diaphragmatic system – based on our superb Speed-lok – is proven effective in more than 150,000 installations worldwide. Bolstered by a steel strap foamed into the panels, Bally structures are unusually strong and versatile.



The Bally Speed-lok, consisting of only two simple assemblies, is operated by a single tool – a hex wrench.

- Locking pin. This steel rod is precisely positioned so that the locking arm engages it tightly.
- **2.** Locking arm is cam-mounted, with a hooked end. When a hex wrench is used to turn the arm, the eccentric movement of the cam first enables the hook to engage the pin and then draws the panels tightly together.



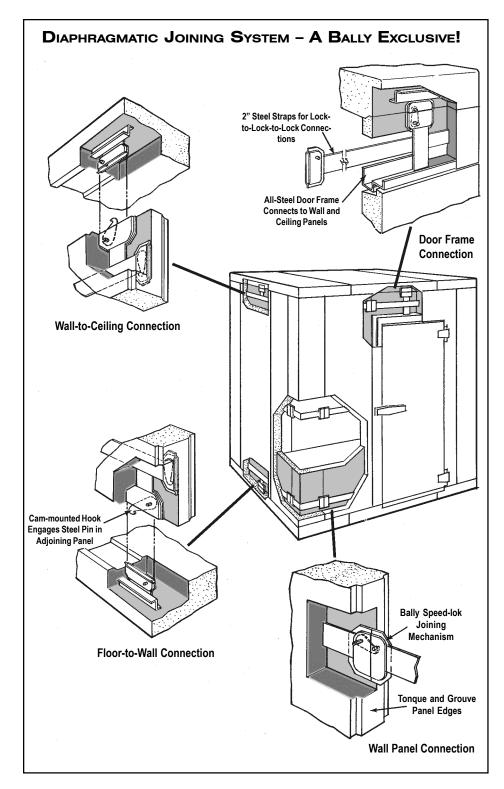
Five easy steps ... To assemble a Bally walk-in

- **1.** Position floor panels. Use Speed-loks to connect them. A level building floor is necessary.
- Start assembling walls by joining a wall panel to a corner panel. Lock both panels to the floor. Each vertical panel contains at least four Speed-loks. Because locks are actuated from the inside, walkins can be installed close to existing walls.
- **3.** Finish assembling walls by locking together remaining vertical panels. Install the fourth corner panel last.
- **4.** Begin assembling the ceiling by locking the end ceiling to the side walls.
- **5.** Complete the ceiling assembly by locking the remaining ceiling panels together and, in turn, to side walls.

How The Diaphragmatic System Helps You

Because it's so easy to use, Bally's Speed-lok-based diaphragmatic joining system drastically cuts time and labor costs for most installations. Two inexperienced workers can assemble a 6' x 8' structure in three or four hours, a fraction of the time it would take to install a built-in unit of conventional construction – or other walk-in brands. And Bally structures are equally simple to enlarge or relocate.

To make a walk-in or refrigerated building larger, panels can be added to sides or ends of the building. Users can buy a building that fits current requirements, so no space is wasted. When growth demands a bigger building, the swift addition of extra panels completes the job. Should the need arise, a Bally structure can be disassembled and relocated with ease.





DEPEND ON BALLY'S FOAMED-IN-PLACE URETHANE INSULATION

In a time when the elimination of CFCs has severely curtailed the effectiveness of many insulations, Bally's poured-foamed urethane remains an outstanding choice.

The current formulation used in our panels relies on HCFCs, meeting international standards for CFC reduction as well as the U.S. Clean Air Act. Compared to the CFCs they replace, HCFCs reduce ozone depletion by a factor of ten. Yet they yield insulation with outstanding resistance to the transfer of heat – substantially more effective at resisting the transfer of heat than fiberglass, polystyrene or other common insulating materials.

You also get these important advantages when you choose Bally:

- Dimensional stability Bally urethane maintains its shape and size through a wide range of temperatures.
- Light weight Poured-foam urethane insulation makes Bally panels light in weight, so they're easy to handle.
- Energy efficiency The insulating superiority of Bally urethane saves money. You'll pay less to cool your Bally structure.

Approvals and Listings

Some manufacturers' statements of product safety are nothing but empty claims. Bally backs what it says with approvals and listings from leading independent quality certification organizations. Buyers can be sure that Bally products live up to the maker's clams and their own standards.

Underwriters Laboratories

No independent testing organization is more respected than Underwriters Laboratories. The tag at right, showing UL-testing listings for flame spread and



smoke developed, appears on every Bally panel. It proves that the panels are UL-classified – a vital assurance to every buyer.

UL listings have also been granted to electrical systems in Bally structures, including interior lights, door heaters and refrigeration systems.

Factory Mutual

Bally panels have been approved as a Class I building material by Factory Mutual Insurance System, Norwood Mass. This approval means that Bally wall and ceiling panels meet FM standards for walk-ins and refrigerated buildings without sprinklers.



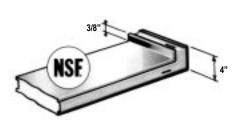
New York City

Stringent tests on their urethane insulation have earned Bally walk-ins and refrigerated buildings the Materials and Equipment Approval of the City of New York. Also, to conform to the standards imposed by the city's Advisory Board, Bally makes available special wiring systems and a low-voltage heater.

National Sanitation Foundation

Approval of the National Sanitation Foundation is grated to Bally installations incorporating floor panels with a 3/8" coved offset.

Bally holds many more state and municipal code approvals. For details, contact our corporate headquarters in Morehead City, North Carolina.



AVAILABLE COLORS AND FINISHES

Choose any of these standard metal finishes for your Bally structures. All provide good looks and excellent durability.

- Aluminum stucco-patterned
- Stainless steel
- Embossed Galvalume
- · White on stucco-patterned aluminum or embossed galvanized
- Sand tan on embossed galvanized
- White polyester on smooth galvanized or smooth aluminum

A spectrum of custom colors is also available (consult factory).

SANDEX FINISHES

- Russet
- Pebble Beach

PROFILE PANELS

These good-looking panels have a rugged ribbed exterior skin or white polyester on embossed galvanized.

