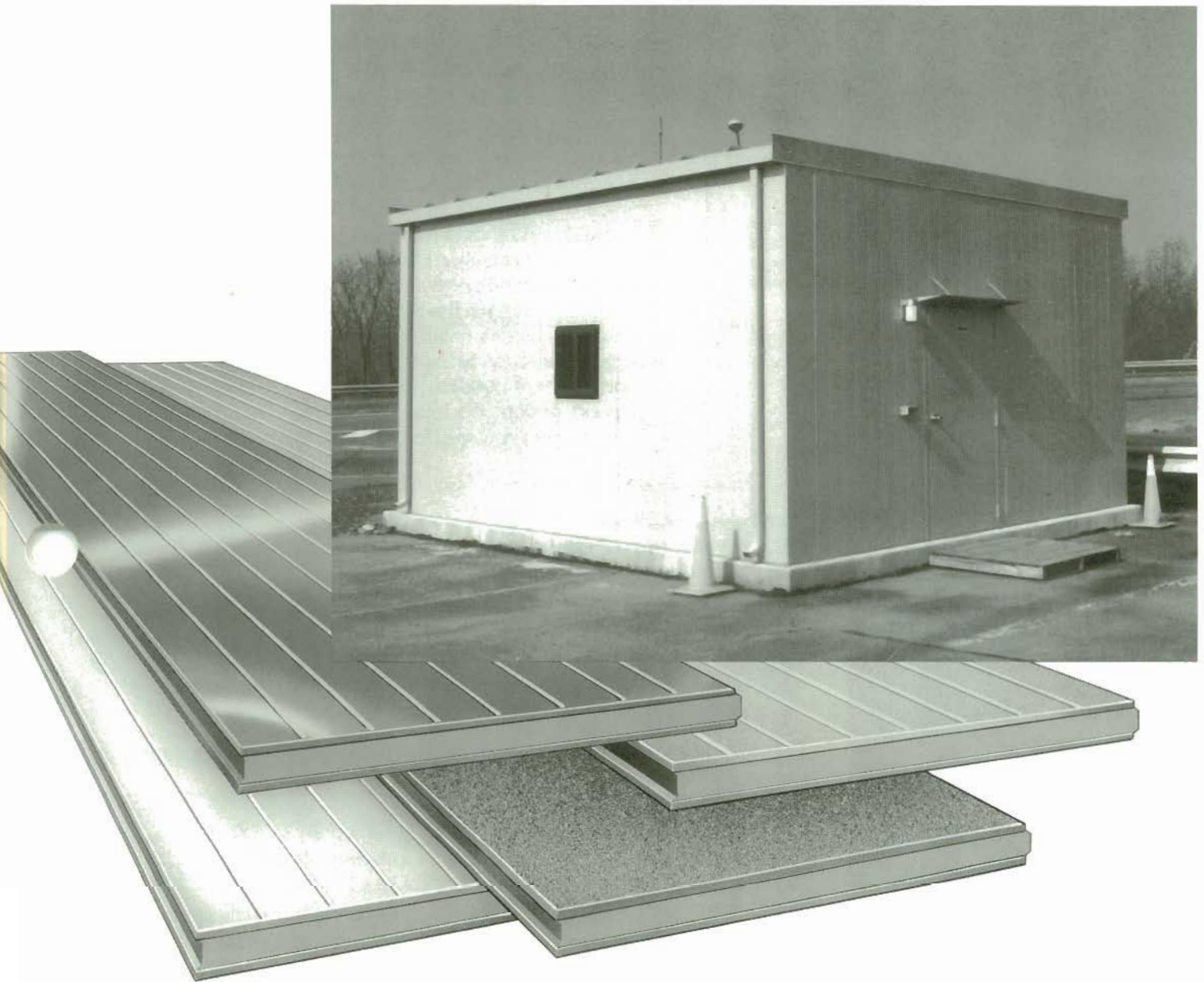


# Insulated Modular Structures



*Proven dependable.*



**Bally Engineered Structures, Inc.**

20 North Front Street, P.O. Box 98, Bally, PA 19503 (215) 845-2311 • 1475 Linda Way, Sparks, NV 89431 (702) 358-2321

## The Bally story

Customers expect technical leadership and peerless engineering from Bally. Founded more than half a century ago, the company has specialized in premium modular buildings. In 1962, Bally's introduction of foamed-in-place urethane panels vaulted it into a position of industry preeminence it has never relinquished.

Bally quality starts with the excellence of foamed-in-place urethane insulation, which can mean big reductions in energy bills. We create a rugged, factory-insulated panel that minimizes repair and upkeep. We employ a simple quick-assembly system that workers can master without special training--benefitting buyers with low labor expenses and fast start-ups. Our buildings can be expanded at will to keep pace with growth, or even dismantled for relocation if necessary.

A first-class product is only part of what Bally offers. Customers also receive top-notch engineering support--at the factory level, from knowledgeable service-oriented representatives, and from Bally's established team of expert design-and-build contractors.

This catalog represents a generous share of knowledge and technical skill from the world's most experienced maker of pre-engineered structures. Use it to help in planning the modular structure that's right for any specific set of requirements. And call on Bally for the best equipment to realize your design.

## Low-cost housing for high-cost equipment

Life-cycle costing shows why Bally structures are customers' best buys. Bally products are durable and energy-efficient--and they require a minimum of service. Bally quality endures over a long useful life. Here's what sets Bally apart:

- Foamed-in-place urethane insulation. In our standard panels, it's four inches thick, yielding an outstanding R value--inch for inch, more than twice as effective as fiberglass or other conventional insulating materials.
- Fast, easy assembly. Light panel weight, in tandem with the Bally Speed-Lok system, makes the structures easy to assemble, even in the most remote locations. And it's equally simple to enlarge or relocate a Bally structure.
- Adaptable to many uses. The panels are easily transported where needed, and they'll perform equally well indoors or outdoors, maintaining the reliable controlled environment required to protect today's high-tech equipment.

All these features make Bally equipment versatile, dependable and, above all, cost effective. That's why buying Bally is buying truly reliable, low-cost housing for high-cost equipment.

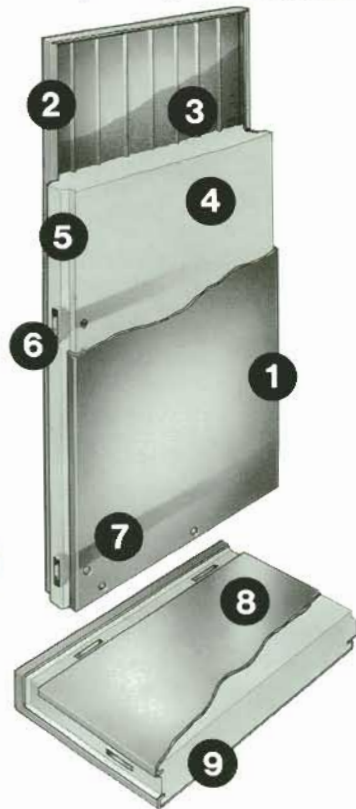
## Where Bally Modular Structures are used

Modular structures from Bally provide top performance in a wide variety of applications, including:

- Telecommunications shelters
- Utility buildings
- Hot-slide structures
- Earth-station housings
- Test chambers
- Environmental rooms
- Storage buildings
- Cellular site structures
- Substation buildings
- Temporary buildings
- In-plant offices
- Farm buildings
- Sensitive materials storage areas
- Data storage chambers
- Noise abatement structures
- Industrial buildings
- Clean rooms
- Personnel shelters

## The Bally pre-engineered panel

In manufacturing Bally 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 them provides dimensional stability through a wide range of temperatures.



Standard Bally panel, 4" thick (facing inside).

1. Inside skins are available in white polyester or sand-tan polyester over galvanized, embossed aluminum, embossed galvanized or stainless steel.
2. Exterior skins are available in all of the above finishes plus a variety of Sandex and Kynar painted finishes over galvanized steel. Chocolate brown and additional custom colors are also available.
3. Bally wash primer for best foam adhesion.
4. Prime urethane insulation, foamed-in-place (poured, not frothed).
5. Tongues and grooves on panel edges are accurately molded urethane.
6. Cam-action Speed-Lok joining mechanism.
7. Heavy-gauge steel straps connect locking arms with locking pins on opposite edges of each panel.
8. Interior metal floor panel skin. Heavy-gauge galvanized steel, or stainless steel.
9. Exterior metal floor panel skin. Usually supplied in same finish as vertical panels. Edges are capped with matching metal when stainless steel or white or sand tan polyester over galvanized steel are specified for verticals.

## 7 basic panels



Side panel--  
11-1/2", 23", 34-1/2", 46" wide x various lengths



Door panel--  
various styles and sizes



Corner panel--  
12" x 12" x various heights



End ceiling panel-- 23-1/2" wide x various lengths



Center ceiling panel-- 11-1/2", 23", 34-1/2", 46" wide x various lengths



End floor panel--23-1/2" wide x various lengths



Center floor panel--11-1/2", 23", 34-1/2", 46" wide x various lengths

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", 19'8" thru 27'8" in one foot increments.
door panels	—	various sizes available (See specs P. 10)	6'10", 7'10"- for taller buildings, panels of the 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", 19'8" 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"	—
floor and ceiling multi-span panels	vary**	11-1/2", 23", 34-1/2" or 46"- for large building applications.	—

\*17-1/4" wide panels available for special uses. Contact Bally, Pa. plant for details.

\*\*Maximum length for 4" & 5" thick floor and ceiling panels is 17'4" (Indoors only).

Smallest building size is 3'11" w x 5'10" l; size increases in 11-1/2" increments to any size building. For height, see "wall panels" above.

# How The Pieces Fit:

## Aluminum Roof-

Prefab sectional type available for buildings of any length and up to 34'7" in width. Membrane type also available. Larger buildings use standard roofing materials supplied by others.

## Ceiling Panels-

Made in widths of 11-1/2", 23", 34-1/2", and 46" and in lengths up to 11'7" outdoors and 17'4" indoors. Optional 5" thick reinforced ceiling panels make possible lengths of 17'4" outdoors without structural steel.

## Extra large buildings-

Bally structures can be assembled in any size...single-tier vertical buildings up to 27'8" high; multi-tier verticals as high as desired. Vestibules and other building additions can also be assembled of Bally panels.

## Doors-

A wide variety of hinged, double-hung hinged, sliding, and overhead doors are available in many different sizes. Hinged doors have 2" or 4" thick urethane insulated cores and are available in many finishes, with single- or double-glass windows. All doors are insulated and steel framed.

## Floor Panels-

Available for those installations requiring a well-insulated floor when the common concrete slab is not used. Panels are made in various widths and lengths similar to ceiling panels.

## Finishes-

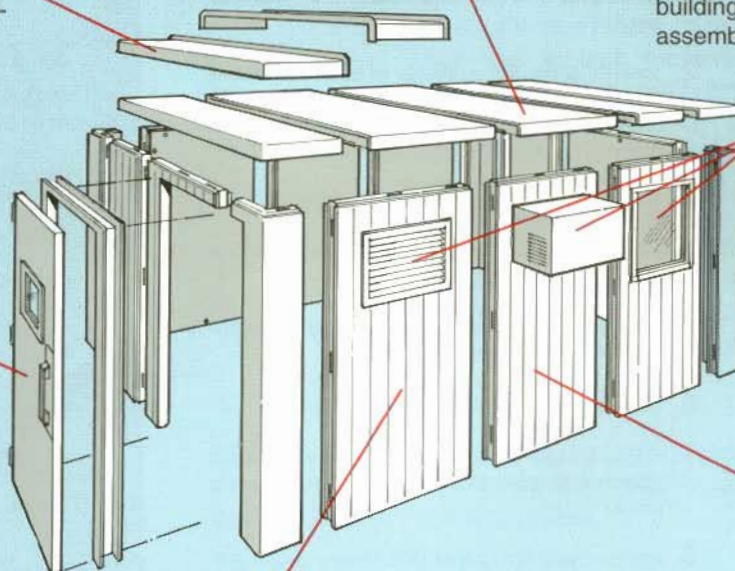
Available in a wide variety of colors and surfaces, including painted or unpainted metal and Sandex. See page three for a complete list.

## Accessories

For information on windows, louvers and other useful accessories, see page 8. Appropriate HVAC equipment may be provided by Bally or others.

## Wall Panels-

Made in widths of 11-1/2", 23", 34-1/2" and 46", and in various heights. They are fully interchangeable and can be used to form partitions. Panels are U.L. and F.M. listed. This exploded view illustrates the various panels used to assemble a 7'9" x 13'6" x 8'6" building.



## Versatile buildings

Bally's prefab insulated buildings are versatile. They can be erected in almost any size, shape and location.



Exterior-free standing



Interior-free standing or partial partition wall



Skid-mounted for easy handling

## 3 roof styles

Bally's lowest-cost and most popular roof construction is the flat style. Single- and double-sloped roofs are available.



Flat roof



Single slope



Double slope

## Approvals/listings

Bally backs its structures with approvals and listings from leading independent quality certification organizations. In addition, we hold specific approvals under diversified UBC tests, BOCA and Southern Building Code Congress approvals, and numerous state and municipal approvals.

### Underwriters Laboratories

No independent testing organization is more respected than Underwriters Laboratories. The tag below, showing U.L.-tested ratings for flame spread/smoke developed, appears on all Bally panels. It proves they are U.L. classified -- a vital assurance to every buyer. U.L. listings have also been granted to electrical systems in Bally structures.



**Bally Engineered Structures, Inc.**  
Bally, Pennsylvania 19503

**UNDERWRITERS LABORATORIES INC.**  
CLASSIFIED  
55M2  
BUILDING UNITS

**SURFACE BURNING CHARACTERISTICS**

	4" to 6" Thick Unpainted Aluminum Finished Panel*	3" to 6" Thick Unpainted Steel Finished Panel*	3" to 6" Thick Painted Steel Finished Panel*
Flame Spread	25	20	25
Smoke Developed	110-170	350	Over 500

\*Faced panels fire tested in accordance with the International Conference of Building Officials Research Committee Acceptance Criteria for Foam Plastics under Section 1717 (c) of the 1976 Uniform Building Code.

This manufacturer makes the following statement: "This indicated flame spread rating is not intended to reflect hazards presented by this or any other material under actual fire conditions."

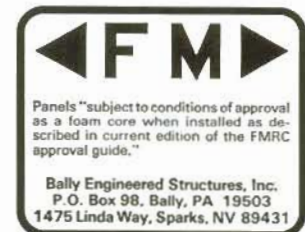
Classified in accordance with Title 26-1975 of State of California Foamed Plastics Flammability Requirements.

### Council of American Building Officials

The foam core of Bally panels has been recognized by the Council of American Building Officials\* as complying with major model building codes.

### Factory Mutual

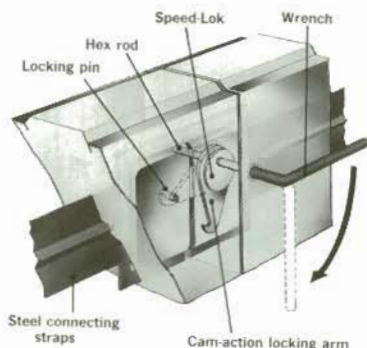
Bally panels have been approved as a Class I building material by the Factory Mutual Insurance System, Norwood, Mass. This approval means that Bally wall and ceiling panels meet F.M. standards for buildings without sprinklers.



*\*Incorporates the International Conference of Building Officials (ICBO); Building Officials and Code Administrators International, Inc. (BOCA); and the Southern Building Code Congress International, Inc.*

## Speed-Lok® joining mechanism

Bally's "lock to lock to lock" joining mechanism forms a continuous perimeter of steel. The system makes Bally structures fast and easy to assemble, enlarge or relocate.



## HCFC insulation means environmental protection

Changes to Bally's foam insulation mean that Bally now employs HCFCs in our panels. The HCFCs we now use reduce ozone depletion by a factor of ten as compared to CFCs previously in use. What's more, they're the only such panels to carry both UL and Factory Mutual Class I listings. (See above for details.)

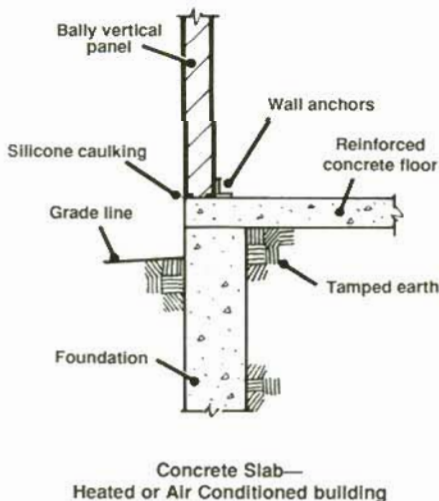
## Floors

Bally insulated buildings can be installed with various types of floors to fit the location or to best serve the individual user's needs.

The most popular floor is a 4"-thick reinforced concrete slab. Wall panels are secured to the slab with steel angle anchors.

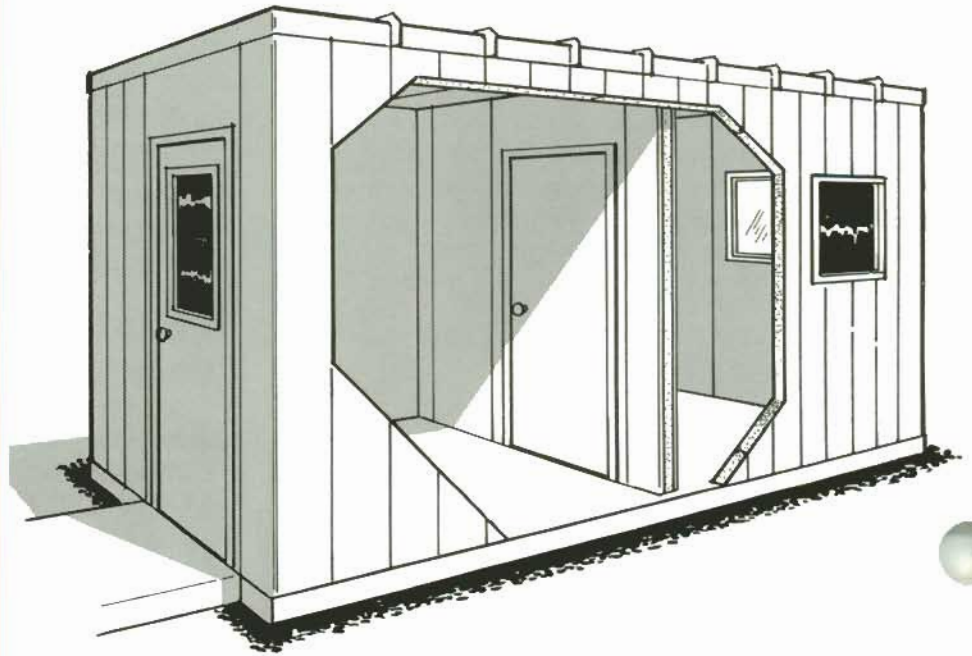
For small buildings, Bally insulated floor panels can be used but must lie flat on a concrete slab. The panels have a load-bearing capacity of 600 lbs. per sq. ft. For concentrated areas of heavier loading, Bally floor panels can be provided with internal reinforcement.

Skid-mounted modular structures incorporate built-in floors plus a heavy-duty skid frame slotted for easy handling by forklifts--ideal for buildings that need to be portable.



## Partitions

Modular structures with two or more compartments can be made by installing partition panels similar in construction to standard wall panels. Partitions are available with or without doors and are designed for fast, easy installation.



## Roofs for outdoor structures

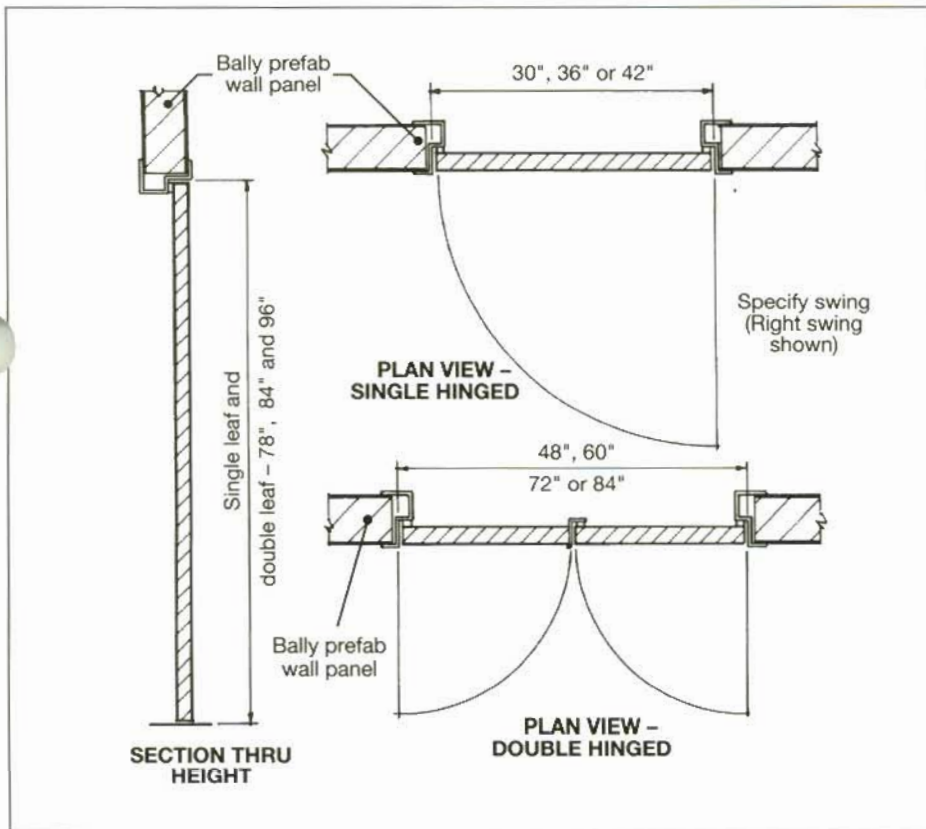
Outdoor structures require protection against rain and snow. Bally's metal sectional roofs do the job for buildings up to 34'7" wide, and in any length required. Also available are membrane-type roofs for buildings of virtually any size. When modular structures abut existing buildings, the butting flange of either roof type can be turned up to provide a watertight seal between the building and the modular structure. Roofs include all necessary fastening devices and gaskets.



Aluminum sectional roof

## 2" thick entrance doors

Bally's 2"-thick entrance doors are built rugged, for years of hard use. We ship them knocked down, with openings provided in panels for field installation. Single- and double-door configurations are available, with single- and double-glass windows. Steel door frames have 4" throats to accommodate Bally panels. Doors are 24-gauge prime-coated steel with seamless face panels; cores are 2"-thick urethane. Sliding doors and 4" insulated doors are also available from Bally in a variety of sizes, as are openings for doors other than those supplied by Bally.

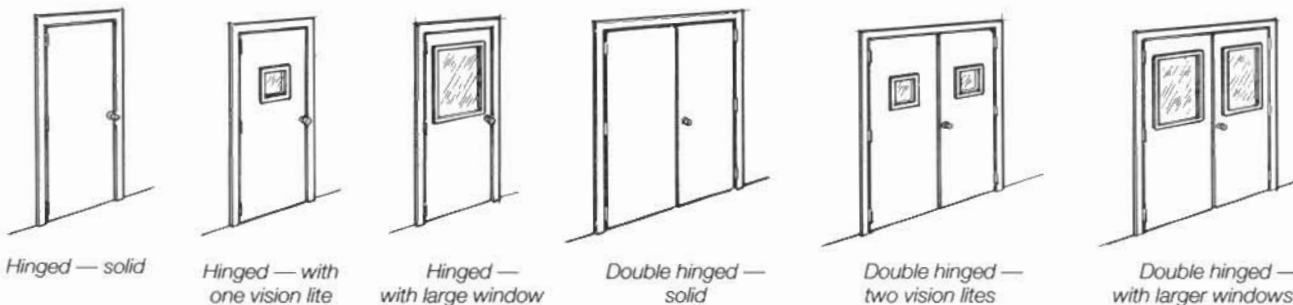


### 2"-Thick Doors

door width	door height	(S) single leaf (D) double leaf	comment
30"	78" or 84"	S	Door is pre-hung in a 46" wide vertical panel.
36"	78" or 84"	S	Door is pre-hung in a 46" wide vertical panel.
42"	78" or 84"	S	Opening is prepared by Bally. Door is hung at site.
48"	78", 84" or 96"	D	Opening is prepared by Bally. Door is hung at site.
60"	78", 84" or 96"	D	Opening is prepared by Bally. Door is hung at site.
72"	78", 84" or 96"	D	Opening is prepared by Bally. Door is hung at site.
84"	78", 84" or 96"	D	Opening is prepared by Bally. Door is hung at site.

Minimum height building for 78" high door is 7'2"  
 84" high door is 8'2"  
 96" high door is 9'2"

### 2" hinged entrance doors are available in the following models:



## Louvers

Fixed louvers with insect screens are available for use with 2"-thick doors or 4"-thick wall panels. Louvers are factory installed in location specified by user. They are available in patterned or smooth aluminum, galvanized steel, white or sand tan polyester. Standard sizes are 12" x 12", 18" x 24" and 24" x 24".

## Diagnostic and control packages

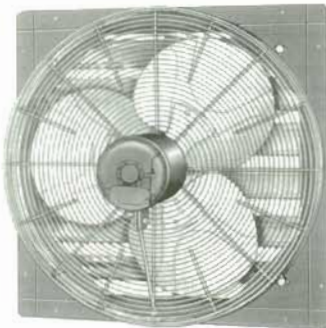
Bally's sophisticated electronic controllers make it possible to record data and regulate control parameters in our buildings with outstanding ease and accuracy. They provide remote or local control, with record-keeping access to chart recorders, PCs or virtually any data-gathering system.

## Waveguide entries

For a complete building package, we provide Microflect waveguide entries.

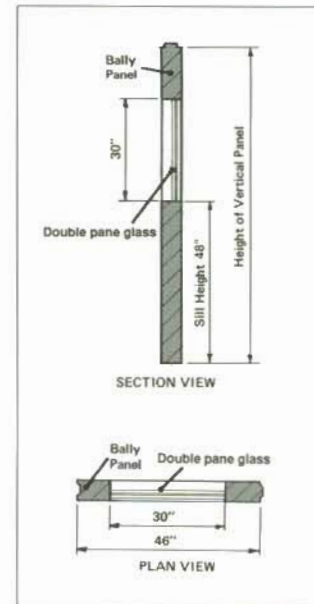
## Shutter-mounted exhaust fans

For applications requiring additional ventilation, Bally offers efficient, easy-to-install exhaust fan units with automatic shutters. Heavy-duty, OSHA-approved fan guards resist corrosion. Three-bladed fans are deep-pitched to provide maximum airflow.



## Windows

Standard fixed windows measure 30" x 30". Each is made as a complete unit and consists of two panes of 1/4" thick glass with sealed air spaces between. Windows are horizontally centered in 46" wide Bally panels. They can be placed at any height the user desires; indicate height when ordering. The metal trim is of the same finish as the remainder of the panel. The sill is sloped toward the exterior and contains drip edges.



## Air conditioning

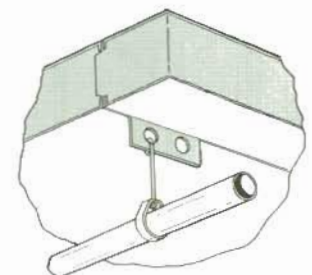
Select air conditioning units with heater backups in ratings of 8000, 12000, 36000 or 60000 Btu. Other units may be available on request.

## Exterior light fixtures

Bally offers the Hubbell exterior light fixture with our buildings. This heavy-duty, long-life fixture is equipped with an electric eye to switch off automatically during daylight hours.

## Electrical and plumbing supports

The design of Bally's modular buildings makes it easy to install plumbing and wiring and also easy to suspend overhead fixtures and drop ceilings. Electrical raceways (Wiremold or equal) can be surface mounted with "U" clips on all Bally panels. Water lines up to 3/4" in diameter can also be surface mounted on Bally panels. Overhead water lines should be suspended from Bally utility support brackets (shown at right) or joists. Overhead fixtures and drop ceiling grids also must be suspended from utility support brackets or joists.



# Bally modular structures architectural specifications

**1. SCOPE** — These specifications cover BALLY MODULAR STRUCTURES and related equipment and accessories, manufactured or supplied by Bally Engineered Structures, Inc.

**2. MANUFACTURERS' INSTALLATION INSTRUCTIONS** — Contractor shall furnish to owner instructions detailing assembly of the building, wiring diagrams, operating and maintenance instructions, and other data pertaining to proper upkeep and operation of the building. Installation, start-up and testing shall be carried out in accordance with the equipment manufacturers' published instructions.

**3. WARRANTY -- 10 YEARS** — The manufacturer shall warrant that Bally manufactured components are free from defects in material or workmanship under normal use and service. The warranty shall not apply to equipment which has been subjected to any accident, alteration, abuse, misuse or improper installation and shall not include any labor charges for replacement or repair of defective panels, parts or other equipment. Review all warranties for specific details pertaining to coverage.

**4. PERFORMANCE SPECIFICATIONS** — Because requirements vary with individual site locations and local construction regulations, review and approval of all such plans must be the responsibility of an engineer familiar with the circumstances of the individual installation.

All work and materials shall be in full accordance with local and/or state ordinances, and with any other prevailing rules and regulations regarding potentially hazardous equipment or locations. Bally Engineered Structures, Inc., is not responsible for furnishing items required by the regulations, but not specified or shown on the drawing or contained in the specifications.

**A.** The urethane foam core of the panels shall be certified by Underwriters' Laboratories as having flame spread of 25 or lower and smoke generation of 450 or lower when tested in accordance with UL Standard 723 (ASTM Standard E-84).

**B.** The foam core of the panels shall be tested in accordance with ASTM Standard D-1929 to determine the self-ignition temperature.

**C.** These panels shall be listed by Factory Mutual as having been tested in accordance with the Factory Mutual Full Scale Corner Test, Procedure 4880.

**D.** All buildings shall be designed for Seismic Zone IV with a roof live load of 30 psf, a roof dead load of 4 psf and a wind load of 90 mph. (Specify other design loads if required).

**E.** Panels shall be tested in accordance with ASTM Standards E-72, E-455 and E-564 for determination of the structural characteristics of the panel system.

**F.** The foam insulation shall be tested

in accordance with ASTM Standard C-177 to evaluate the insulation performance of the material.

**G.** Certification of the above performance specifications must be provided by the indicated independent testing laboratory or by any other independent agency recognized by the major model building code agencies: UBC, BOCA or the SBCC.

**H.** Foam insulation manufacturer shall be licensed by the State of California Board of Thermal Insulation.

**5. PRODUCT SPECIFICATIONS** — Buildings shall be manufactured by Bally Engineered Structures, Inc.

**A.** Panels shall consist of interior and exterior metal skins formed with steel dies and roll-forming equipment and checked with gauges for uniformity and accuracy. The metal skins shall be placed into steel molds and liquid urethane injected between them. For extra rigidity, the exteriors of all vertical panels, except corners, shall have vertical grooves spaced on 5-3/4" centers. Panels over 12 feet high will also have interior vertical grooves. Urethane shall be foamed-in-place (poured, not frothed) and, when completely heat-cured, shall bond to the metal skins to form a rigid 4", -5", or -6" thick insulated panel. The expanding agent shall employ no CFCs. The thermal conductivity factor ("K") shall not exceed 0.150 BTU per hour per square foot per degree Fahrenheit per inch. To insure tight joints, panel edges must have foamed-in-place tongues

and grooves with a flexible vinyl gasket also foamed-in-place on the interior and exterior of all tongue edges.

**B.** All panels except corner panels shall be made in 23" and 46" widths, and shall be fully interchangeable for easy assembly. Panels 11-1/2" or 34-1/2" wide are to be furnished only when required to fit the allocated space. To assure correct alignment and maximum strength, corner panels shall be 90 degree angles with exterior horizontal dimensions of 12" on each side.

**C.** Panels shall be equipped with Bally "Speed-Lok" joining devices. The distance between locks shall not exceed 46". Each locking device shall consist of a cam-action, hooked locking arm of a replaceable type placed in one panel, and a steel rod precisely positioned in the adjoining panel, so that when the locking arm is rotated, the hook engages over the rod and draws the panels tightly together with cam action. When tested, the tensile strength of the Speed-lok connection shall not be less than 750 pounds. The locking arms and steel rods shall be housed in individual steel pockets set into the pockets. Pockets on one side of the panel shall be connected to pockets on the other side, in width, by the use of steel straps set into the insulation. When panels are joined together, these straps shall form "perimeters of steel," with lock-to-lock-to-lock connections for extra strength. An aligning device shall be provided in at least one "Speed-Lok" pocket for every vertical panel. Press-fit caps shall be provided to close wrench holes.

**D. EXTERIOR FINISH**

1. .026 embossed galvanized steel with sand tan polyester painted finish (24 ga.)
2. .026 galvanized steel with white polyester painted finish (24 ga.)
3. Profile finish .022 embossed galvanized steel with white polyester painted

finish.

4. Desert Brown Sandex (other colors available)
5. .026 bright galvanized steel (24 ga.)
6. .038 stucco embossed aluminum.
7. .030 stainless steel (22 ga.)
8. Other finishes available. Contact factory for additional information.

**E. INTERIOR FINISH** -- Same as above except 3,4. Bally floor panels are provided with .073 Galvanized (14 gauge) or .060 stainless steel (16 gauge).

**F. BUILT-IN INSULATED FLOORS -**

- The floor shall be constructed on the job site. It shall consist of a depressed, reinforced concrete sub slab. Wall panels shall be fastened to this floor. Adequate drainage and ventilation (or other heat source) must be provided beneath and around all construction.

**6. 2" THICK HINGED ENTRANCE DOORS**

**A.** Insulation shall consist of a full 2"-thick foam urethane insulation core. Heavy-gauge matching-metal jambs must be designed to fit prefab panels perfectly without the use of any interior framing. Jamb members shall attach to panels with sheet metal screws. The door shall be supplied with weather-stripping and a wiper gasket. Observation windows, 10" x 10" or 24" x 36", are available as factory-installed options and must be specified if required. Entrance openings are available in the following clear opening sizes: 36" x 78" and 36" x 84" for single doors; and 48" x 78", 48" x 84", 60" x 78", 60" x 84", 72" x 78", 72" x 84" and 84" x 84" for double doors.

**B.** Hardware for Doors -- Hardware shall be cylindrical lockset with satin stainless steel finish. Pin tumbler cylinder can be keyed differently, keyed alike or master keyed.

**C.** Door Hinges -- Each door shall have (3) tamperproof pinned butt hinges.

**D.** Weatherproof Shields -- All doors for outdoor structures shall be supplied with a metal shield above the door to divert rain and snow from the door opening.

**E.** Sillplates -- An extruded aluminum sillplate shall be provided on outdoor buildings which are furnished without floors.

**7. 4" THICK HINGED ENTRANCE DOOR PANELS**

**A.** Entrance openings listed in the following size schedule shall be provided in 46" (or 69") wide panels. The door is an infitting flush-mounted type. Construction of both panel and door shall be as stated in paragraph 5. Doors are available in the following clear opening sizes: 30" x 78", 30" x 84", 36" x 66", 36" x 78", 36" x 84", 42" x 78", 48" x 78", 48" x 84", 60" x 78", 60" x 84".

**B.** Hardware for standard hinged entrance doors. (Doors with 30", 36" and 42" wide openings.) All hardware shall be surface-mounted, satin-finish. **DOOR HINGES:** Each door shall have two hinges of the spring-loaded, self-closing type, with plated steel pins and Delrin cam-type bearings. **DOOR LATCH:** The latch shall be designed to open the door easily by breaking the magnetic force of the door gasket. The latch shall have a cylinder lock with provisions for padlocking. It shall also include an inside safety release handle to prevent anyone from being locked inside.

**C.** Hardware for hinged entrance door. (Doors with 48" and 60" openings.) -- All hardware to be surface mounted. **LATCH AND STRIKE ASSEMBLY:** The latch and strike assembly shall be satin-finish. The latch shall be made

to accommodate a padlock but must include an inside safety release mechanism to prevent anyone from being locked inside.

**HINGES:** The hinges shall match the latch in general finish and design. Blades shall be no less than 9" long and hinges shall be of the up-lift type with Delrin cams on 3/8" dia. pins. (60" wide doors are provided with three hinges.)

**8. MANUAL OVERHEAD SLIDING DOORS** — Doors shall be steel sectional overhead type. Sections shall be 2" thick, roll-formed from hot-dip galvanized steel. Finish shall be painted on the exterior, a coat of baked-on-polyester enamel over epoxy primer. Interior finish is baked-on-polyester enamel. Exterior lock shall be five-pin tumbler cylinder with night latch and steel bar engaging track. Interior locking is dead bolt with hole to receive padlock. Bottom of door is to have flexible U-type vinyl seal in aluminum retainer attached to section with 1/4" bolts.

**9. WINDOWS** — Windows shall be of the "fixed" type, available in each of the following sizes: 10" x 10" in doors, 24" x 36" fixed, 30" x 30" fixed, 24" x 24" horizontal slide and 24" x 36" horizontal slide. Each shall be made as a complete unit and shall consist of 2 panes of glass separated by a sealed air space. The metal trim shall be of the same finish as the remainder of the panel.

**10. PARTITIONS** — Insulated metal-clad partition panels shall be provided when compartments are to be separated.

**11. PREFAB SECTIONAL METAL ROOF** — (For buildings installed outdoors and not exceeding 34'7" in width - can be any length.) A prefab sectional roof shall be furnished for the

building to provide a waterproof covering for ceiling panels. It shall be made of .038 stucco-embossed aluminum.

**12. MEMBRANE ROOF** — The Bally membrane roof is a weft-inserted polyester fabric coated with a plasticized blend of PVC and acrylic resins. The thickness is 0.035 inches and the membrane is UL-listed and Factory Mutual approved as a Class I building material. The coating is stable, non-migrating, and is resistant to ultraviolet light, fungi, bacteria, and most caustic chemicals, petroleum products and acids.

**13. SUPPORTING STEEL** — Structural steel of sufficient size and strength shall be supplied to support ceiling panels and wall panels where necessary.

If the building is installed outdoors, snow load and wind load must be specified to determine steel sizes. (Where required, all sizes, types and weights of steel, as recommended by the manufacturer/supplier, shall be submitted by the architect to state or local building authorities for approval.)

**14. GUTTERS & DOWNSPOUTS** — Rain gutters and downspouts shall be provided to match exterior finish of building.

**15. LOUVERS** — Louvers are fixed type with insect screen, factory installed. Operable louvers are available at special request.

**16. ALTERNATE AND OPTIONAL EQUIPMENT**

**A. Bullet Resistant Panels** -- Steel plate shall be foamed in panels of varying bullet resistance which will absorb fire from firearms of the listed

types:

Class BR-1 Panels: Light small arms at 15 feet.

Class BR-2 Panels: Medium or high small arms at 15 feet; high rifle at 150 yards.

Class BR-3 Panels: Super small arms, high rifle or 12-gauge shotgun at 15 feet.

**B. .073 Galvanized Exterior Metal 14 gauge** -- Exterior skins can be furnished in 14-ga. steel. This design will absorb fire from calibers up to a .22 rifle.

**C. Mortise Lock - 4" Door** -- Lockset shall be Best model with Yale cylinder. Pull handle shall be provided on exterior for easy access.

**D. Mortise Lock - 2" Door** -- Shall be Best model. Includes latch bolt for key outside and knob either side.

**E. Air Conditioners/Heaters** -- Specify BTU requirements for heating or cooling loads.

**16. SPECIFY BY NAME** — To assure that specifications prepared from this guide will be complied with fully, we suggest that the following paragraph be included:

The modular structure shall be as manufactured by Bally Engineered Structures, Inc., Bally, Pa. To protect the client's interests, no substitutions will be accepted unless by specific approval.

# In Action

A gallery of Bally modular structures in use.



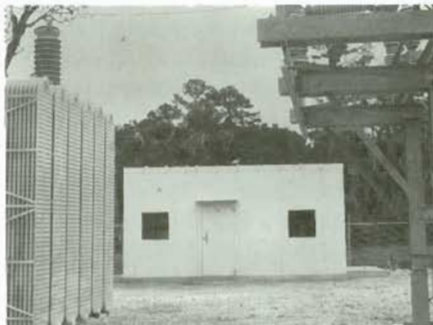
Borough of Pennsville, N.J.



New England Critical Care, Inc., Edison, N.J.



Bell of Pa., Upper Black Eddy, Pa.



Central Electric Co-op, Johns Island, S.C.



Confidential Communications, Newman Peak, Ariz.



New York Telephone, East Fishkill, N.Y.



New England Electric, Boston, Mass.

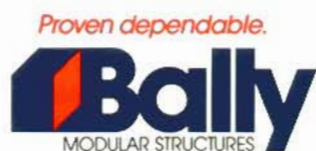


Hopewell Village Nat'l. Historic Site, St. Peter's, Pa.



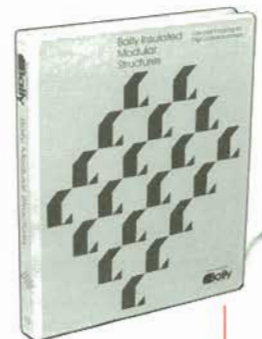
City of Columbus, Ohio

For quick action, dial this toll free number: **1-800-24-BALLY** FAX: (215) 845-6110



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Bally's Working Data Catalog, packed with useful information about our modular structures, is available at no charge to architects, consultants and engineers. Write on your letterhead to request a copy.



In line with our program of constantly striving for improvement in design, we reserve the right to change these specifications without notice.

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