

One of the key differences of a Kelly Klosure building are its factory installed components that save labor and cost during installation. The following items are factory installed in the modular wall or roof panels at the Kelly Klosure factory ensuring quality without the need for additional installation time in the field.

Available factory installed components:

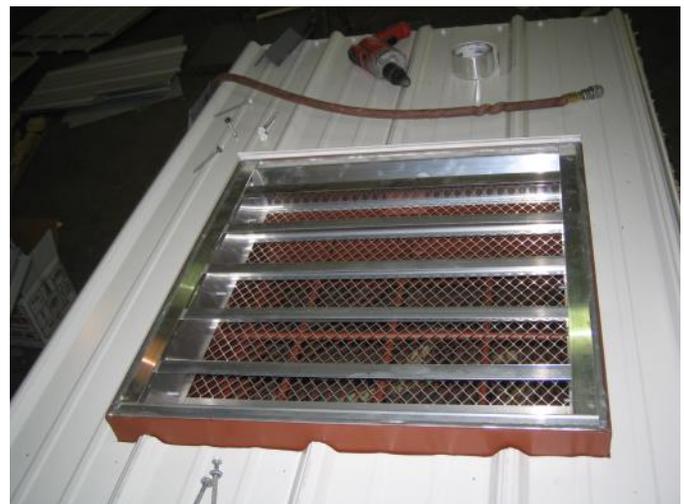
- Personnel Doors
- Windows
- Light Transmitting Roof Panels
- Louvers & Other Ventilation Openings
- Framed Openings for Wall-Mount and Thru-Wall HVAC units
- Framed Openings for Duct, Electrical or Pipe Penetrations
- Custom Notched or Framed Panels to Fit Existing Pipes or Other Obstructions
- Other Custom Features as Needed



Endwall Being Set with Factory Installed Personnel Door,
Louvers and Equipment Door Supports



Building with Factory Installed Windows



Wall Panel Being Factory Assembled with Greenheck Louver
and Welded Steel Security Bars

Kelly Klosure's factory installed single and double personnel doors save considerable time and expertise in the field compared to traditional buildings with field hung doors. Kelly buildings ship with the personnel door frame and leaf factory installed in the wall panel plum and true.

All that needs to be done in the field after the wall panel is set in place is to install the door closer and lockset!

Kelly Klosure offers two standard door sizes:

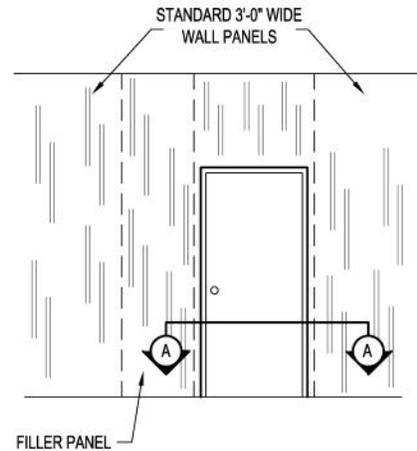
- 3' Wide x 7' High Single Door
- Factory mounted in a 3'-9" wide wall panel
- 5'-8" Wide x 7' High Double Door
- Factory mounted in a 6'-0" wide wall panel

Standard Door Specifications:

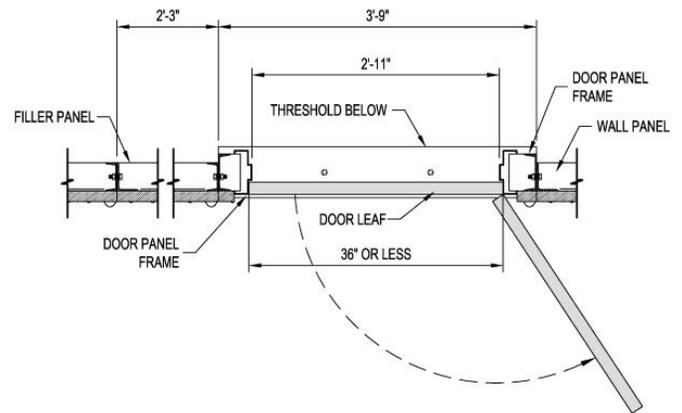
(Detailed specifications and options included in the following pages)

- 16 Ga Galvanized Steel Door Frame
- Factory welded into wall panel
- 18 Ga. Galvanized Steel Door Leaf
- Honeycomb core with lockset prep
- Factory Applied Paint Finish
- Primer and High Gloss Enamel
- Formed Steel Threshold
- Keeps door panel plumb and true during shipping and installation
- (3) Ball Bearing Hinges & Door Base Sweep
- Commercial door closer & stainless steel lockset included (field installed to prevent damage)

The above door sizes and features are Kelly's standard. The following pages further detail the standard options as well as a wide range of door and hardware upgrades for a variety of uses. In addition to the large array of options shown, almost any commercial door and hardware need can be accommodated.

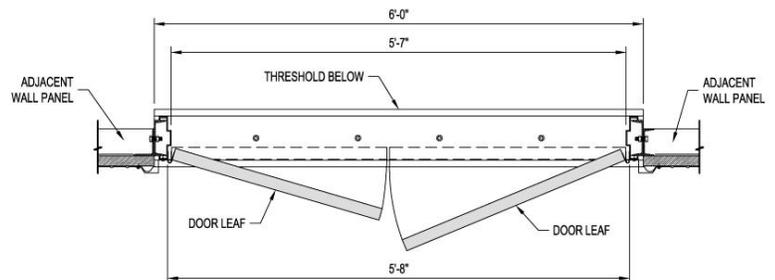


Door Panel Elevation



Section A-A

Cross-Section of 3'-0" Personnel Door Panel



Cross-Section of 5'-8" Double Personnel Door

Standard Upgrades for Personnel Doors and Double Doors**In lieu of Standard Entry Locks:**

Heavy Duty Entry Lock:	Schlage D-Series or Best 83K
Heavy Duty Lever Lock:	Schlage D-Series or Best 90K
Panic Hardware-3070 Doors:	Von Duprin Series 22 Exit Only (Light Duty) Von Duprin Series 22 w/ Lever Outside Entry and Schlage Lock Cylinder (Light Duty) Von Duprin Series 99 Exit Only (Heavy Duty) Von Duprin Series 99 w/ Lever Outside Entry and Schlage Lock Cylinder (Heavy Duty)
Panic Hardware- 5870 & 6070 Double Doors	Von Duprin Series 22 Vertical Rod Exit Only (Light Duty) Von Duprin Series 22 Vertical Rod , Lever Outside Entry and Schlage Lock Cylinder (Light Duty)
Single Active Leaf Only	Von Duprin Series 99 Mortise Exit Only (Heavy Duty) Von Duprin Series 99 Mortise w/ Lever Outside Entry and Schlage Lock Cylinder (Heavy Duty)
Panic Hardware- 5870 & 6070 Double Doors Double Active Leafs	Dual Von Duprin Series 22 or 99 Vertical Rod Type Panic Hardware w/ Lever Outside Entry and Schlage Lock Cylinder (Heavy Duty, Installed on Both Leafs for a Double Active Door)

Lock Cylinders: Unless specified, panic hardware is supplied with a Schlage lock cylinder.
Best Lock cylinders or other brands and types can be supplied on all panic hardware if required.
Note: Best Lock cylinders are supplied WITHOUT the actual lock core. Core is by others.

In lieu of Standard Hinges:

Hinges: Qty = 3 FBB191 NRP US32D
Heavy Duty Bearing, Stainless Steel with Non-Removable Pin

In lieu of Standard Closer:

Closer: American Eagle 7101BC or

Weather Stripping: Reese 815-C Aluminum w/ rubber bulb seal

Door Leaf: Upgrade to Polystyrene Insulated Core (R 2.0 per ASTM C1363)

Miami-Dade Hurricane Rated or UFC 4-010-01 Anti-Terrorism Doors are the same Standard Doors Except:

Door Frame: Upgrade to 14 Ga. A60 Galvannealed Steel
Door Leaf: Upgrade to 16 Ga. A60 Galvannealed Steel w/ Honeycomb Core
Entry Lock: Heavy Duty Schlage ND53PD Lever Lock
Hinges: Qty. = 3 FBB191 NRP US32D per Leaf
Closer: American Eagle 7101BC

Kelly Klosure buildings are available with various types of factory installed windows. The windows are factory flashed and sealed to give a finished window opening without need for additional field work during building installation.

Standard Window Options:

- 2' Wide x 3' High Vinyl Horizontal Sliding Window
 - Insulated Glass, White Vinyl Frame
 - U-Value: 0.29 Solar Heat Gain: 0.22
 - Visible Light Transmittance: 0.51
- 2' Wide x 3' High Aluminum Sliding Window
 - Insulated Glass, White Painted Aluminum
 - U-Value: 0.38 Solar Heat Gain: 0.24
 - Visible Light Transmittance: 0.54

Upgraded Window Options:

- Custom Sized Fixed or Sliding Window Units in Vinyl or Aluminum Frame
- 2' Wide x 4' High **Hurricane Rated** Single Hung
 - State of Florida Approval
 - Dark Bronze Anodized Aluminum Frame
 - Double Pane - Tempered Glass / Polycarbonate
 - Building Wall Panel has Engineered Steel Framed Opening to Resist Hurricane Force Loads Against Window Unit
 - Window is field installed in a factory finished opening to prevent damage to window during shipping and installation.
- 2' Wide x 4' High **Anti-Terrorism Rated** Single Hung
 - Dark Bronze Anodized Aluminum Frame
 - Double Pane - Tempered Glass / Laminated Glass
 - UFC 4-010-01 Anti-Terrorism Rated
 - Building Wall Panel has Engineered Steel Framed Opening to Resist Blast Loads Against Window
 - Window is field installed in a factory finished opening to prevent damage to window during shipping and installation.



Building with 2' Wide x 3' High Sliding Vinyl Windows
Factory Installed in Two Wall Panels



Building with 2' Wide x 4' High
Single Hung Hurricane
Rated Windows

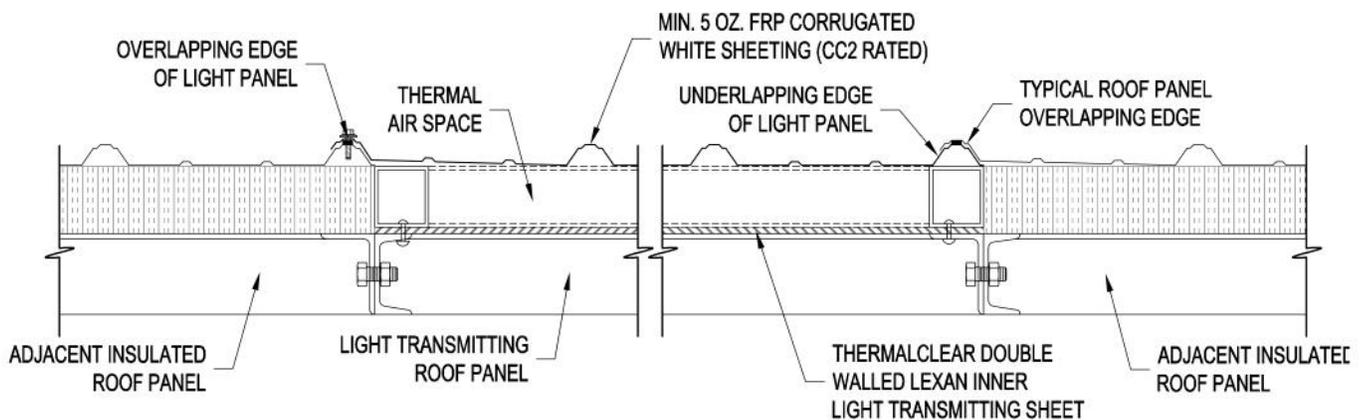


Factory installed Light Transmitting Panels provide natural light in buildings. Kelly Klosure uses a 5 oz. fiberglass panel on light transmitting panels making them code compliant for most applications.

Kelly's light transmitting panels for insulated buildings use a unique double glazed design shown in the section below that provides natural light while saving energy due to its higher insulating value.

Light Transmitting Panel Specifications:

- Standard Size: 3' x 8'
- Standard Location: Roof (available in walls)
- Exterior Skin:
 - 5 Oz. Fiberglass Reinforced Plastic Corrugated Panel
 - Type CC2 (ASTM D635)
 - 50% Light Transmittance
- Interior Skin (Double Glazed Panels):
 - 1/4" Twin-Wall Extruded Polycarbonate
 - Type CC1
- Single Glazed Panel U-Value: 0.49
- Double Glazed Panel U-Value: 0.25



Double Glazed Light Transmitting Panel Section
 for Insulated Buildings

Kelly Klosure buildings are available with a variety of standard ventilation options. Louvers, dampers and roof ventilator collars are all factory installed for easy field installation of exhaust fans and roof ventilators.

Standard Ventilation Options:

- 24" x 24" x 4" Thick Fixed Fin Louver
 - 22 Ga. Galvanized Steel
 - 1/2" Bird Screen
- 24" Gravity Shutter for Above Louver
 - Aluminum Fins, Galvanized Steel Frame
 - 2.28 Ft² Free Area
 - Factory Installed on Wall Louver
- 24" Motorized Shutter for Above Louver
 - Galvanized Steel
 - Motorized Open, Spring Return
 - 120 / 240 Volt Single Phase
 - 2.05 Ft² Free Area
- 20" Diameter Exhaust Fan for Above Louver
 - 3948 CFM @ 0.00" SP
 - 2444 CFM @ 0.25" SP
 - 7.01 Sonnes @ 5'-0"
 - Ball Bear Motor (1/4 HP, 3.5 Amps, 115/1/60)
 - Gravity Shutter
 - Field Installed on Factory Installed Wall Louver
- Wind Driven Roof Ventilator
 - 12" Throat Diameter
 - Galvanized Steel with Aluminum Bracing
 - Oilless Bronze Upper Bearing
 - Thrust Type Lower Ball Bearing
 - 631 CFM @ 4 MPH Wind
 - Field Installed on Factory Installed Collar in Roof

Upgraded and custom ventilation options from Greenheck are shown on the next page.



Wall Panel with Factory Installed Louver and Exhaust Fan



Building with Factory Installed Intake Louvers



Building with Wind Driven Roof Ventilators

In addition to the standard ventilation options shown on the previous page, upgraded options from Greenheck are available as well as a full range of custom components from Greenheck.

The upgraded ventilation options shown are Greenheck Brand components of extruded aluminum material in lieu of the plain galvanized standard options. These are used in more demanding applications.

Upgraded Greenheck Ventilation Options:

- 24" x 24" x 4" Thick ESD-435 Fixed Louver
 - 6063T6 Extruded Aluminum
 - High Performance 35 Deg. Drainable Blades
 - 1.82 Ft² Free Area
 - 3/4" Flattened Expanded Metal Bird Screen
 - Factory Installed in Wall Panel
 - Standard Finish: Mill Finish Aluminum
- 24" x 24" x 4" GCE-402 Fixed Louver / Gravity Damper
 - 6063T5 Extruded Aluminum Construction
 - Gravity Operated Damper w/ Vinyl Blade Seals
 - 1.29 Ft² Free Area
 - 3/4" Flattened Expanded Metal Bird Screen
 - Factory Installed in Wall Panel
 - Standard Finish: Mill Finish Aluminum
- 24" x 24" x 4" EAC-401 Louver & Damper
 - 6063T5 Extruded Aluminum Construction
 - Manual Quadrant or Electric Motor Actuator
 - 1.29 Ft² Free Area
 - 3/4" Flattened Expanded Metal Bird Screen
 - Factory Installed in Wall Panel
 - Standard Finish: Mill Finish Aluminum
- 1,500 CFM Sidewall Exhaust Fan Package
 - 24" x 24" x 4" ESD-435 Louver Factory Installed
 - SBE-1H24-4 Sidewall Belt Drive Exhaust Fan
 - WD-400 Damper
 - Fan & Damper Mounted in 43" Deep Galvanized Steel Wall Housing Field Attached to Wall Panel
 - 1,500 CFM @ 0.25" SP
 - 1/4 HP 115/60/1 5.8 Amps
 - 10 Sonnes @ 5'-0"
- Custom Ventilation Options Available upon Request
- Louvers can be painted or powder coated in a wide variety of colors to match or accent a Kelly building



Custom 2'W x 6'H Greenheck Louvers
Factory Mounted in Endwall Panels



24" x 24" Combination Louver / Damper Factory Installed in
Wall Panel

In addition to the standard option shown, the full line of Greenheck products are available through Kelly Klosure including Miami-Dade Hurricane rated louvers.

Kelly Klosure does as much at the factory as possible to make installation in the field easier. Buildings are available with factory installed framing and openings for HVAC of all types.

- **Factory Installed HVAC Openings**

- Wall-Mount HVAC Units
- Thru-Wall HVAC Units

Openings are sized for the specified HVAC unit and all necessary framing is installed to structurally support the unit.

- **HVAC Supply**

Kelly Klosure can supply various through-wall type HVAC units for smaller applications and is a dealer for Bard Manufacturing to supply wall-mount HVAC units for larger applications.

- **Factory Installed Framed Openings for Field Installed Equipment**

In many cases, a building's ventilation is being designed and supplied by a separate contractor. In these cases, Kelly Klosure can coordinate factory installed framed openings of the size and location needed for field installed equipment. This minimizes the need for field structural modifications and ensures that a building framing member does not interfere with an equipment penetration.



Building with Factory Installed Framing for
Bard Wall-Mount HVAC Unit



Interior View of Factory Installed Wall-Mount
HVAC Framing



Building with Factory Installed Framing for
Customer Supplied Ventilation & Exhaust

Kelly Klosure Buildings can be supplied with factory installed framing for field installed equipment doors such as overhead section and roll-up doors.

Because the equipment door opening interrupts the repetitive framing of a Kelly Klosure building, the surrounding wall panels are reinforced at the factory to carry the structural loads imposed by equipment doors.

The wall panels adjacent to equipment door openings, often called “jamb panels”, are factory reinforced with a larger steel channel that will act as the mounting surface for the door tracks. The panel above the door opening, often called the “header panel”, has the same larger channel installed as well as supports to attach the roll-up door hood if required.

The location of the door in the building, be it endwall or sidewall, can affect the building’s structure differently. Depending on the size of the building and how it is framed, one location may be more economical than another. An easy rule of thumb is that it is more economical to put equipment doors in the sidewall of smaller buildings and the endwall of larger buildings. However, a Kelly Klosure representative will work with the customer to determine the most cost effective way to lay out the building to meet the user’s needs.



A Factory Reinforced Equipment Door Opening in the Building’s Sidewall Being Lifted Into Place



A 15’Wide Equipment Door in a Building’s Endwall

Kelly Klosure Buildings can be Engineered to Support Large Custom Doors
 (A 38’Wide x 24’High Rolling Steel Door Shown)