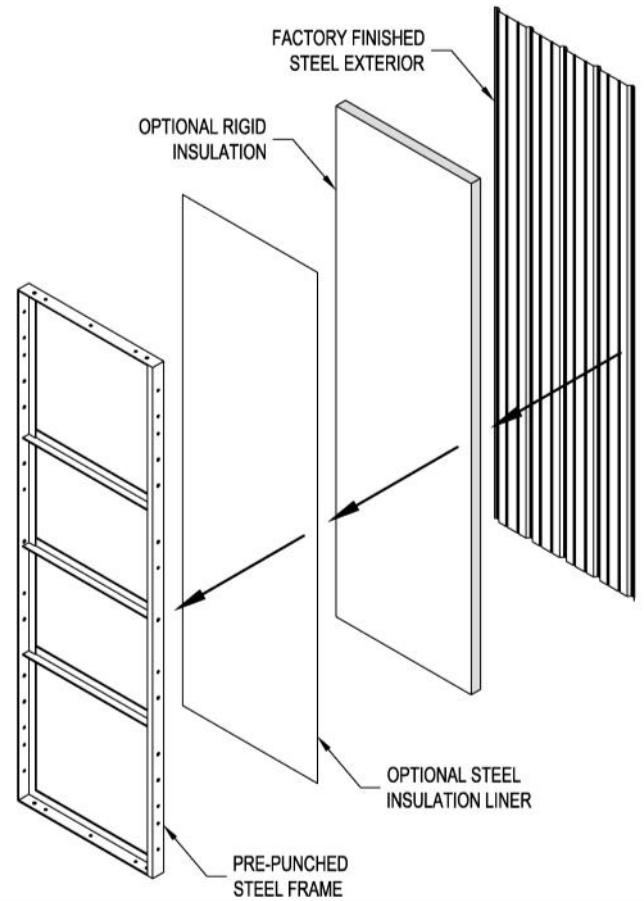


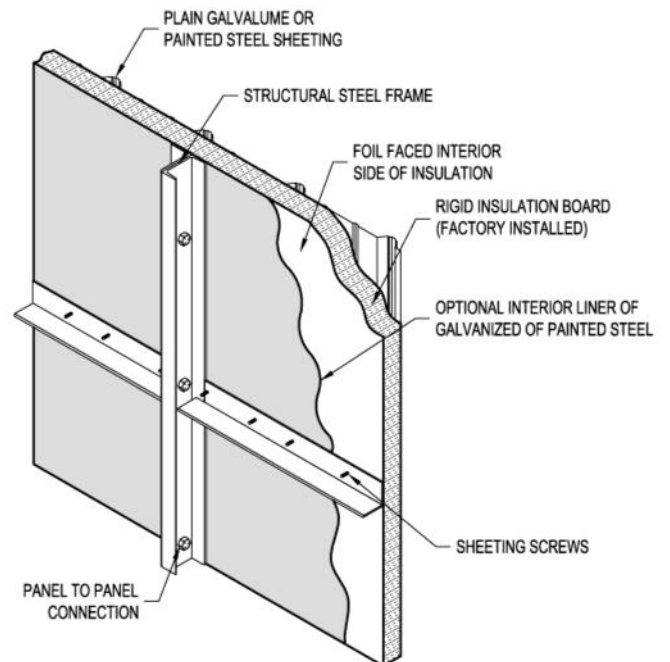
The Kelly Klosure pre-framed modular panel has 4 components that are factory finished to create an easy and versatile bolt-together system in the field.

- Steel Panel Frame
- Exterior Steel Sheeting
- Optional Rigid Insulation
- Optional Steel Insulation Liner

The following pages will detail the standard components and options for the Kelly modular panel.



The Kelly Klosure Pre-Framed Modular Panel



Panel Components



The basis of a Kelly Klosure building is its high quality steel frame. The modular panel frame is fabricated from high grade steel that is precision cut, punched and welded by highly skilled workers.

Panel Frame Features:

- Steel is high grade A529-50 (50 KSI) steel rather than the industry standard A36 (36 KSI)
- Hole punching is precisely done and routinely factory quality checked
- Welding is performed by certified welders
- Panel frames are ground after welding to remove any sharp edges for safety in the field



Kelly Klosure keeps over 600,000 pounds of steel in stock to be able to react quickly to customer's needs.



Panels are welded in precise jigs by certified welders to ensure dimensional quality and structural strength.



Steel members are factory punched with the highest accuracy to allow for easy bolt-together installation in the field.



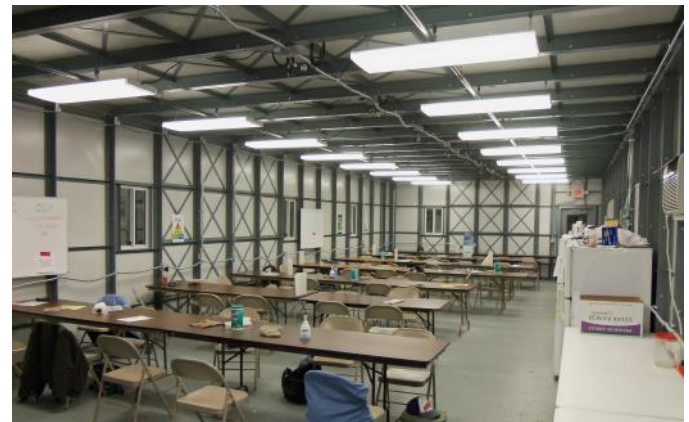
The steel panel frame is factory coated to prevent corrosion during shipping, installation and building use. After the panel frames are welded, they are ground to remove sharp edges, washed with an environmentally safe iron phosphate wash and pretreatment then coated.

**Panel Frame Coating Options:**

- Standard: Red or Gray Primer  
 PPG Aquacron 447 is a water-reducible, low-emitting, alkyd primer. This finish is designed to be an economical one coat finish that will prevent corrosion during shipping, installation and normal indoor exposure. It has a high gloss finish and excellent corrosion protection and durability. It is not an exterior grade coating and will not hold up in highly moist or corrosive environments.
- Optional: Enamel  
 PPG Aquacron MV880 is a water-reducible, low-emitting, alkyd enamel top coat. It has a high sheen and is durable against wear and abrasion. However, it is not designed to be used in outdoor or highly corrosive or moist applications. It is available in standard medium gray, or custom colors.
- Optional: Hot-Dip Galvanized  
 Kelly Klosure has access to a hot-dip galvanizing facility with capacity for 60' long material. Even the largest of Kelly Klosure structures can be hot-dip galvanized for superior long-term corrosion resistance in the harshest of environments. This is Kelly's highest offering in terms of long lasting frame coatings and is recommended for projects looking for a maintenance free finish on structural steel in moist, coastal or harsh environments.
- Other options such as powder coating and epoxy painting may be available upon request.



The Standard Red Primer Being Applied



Building with Gray Enamel Painted Framing



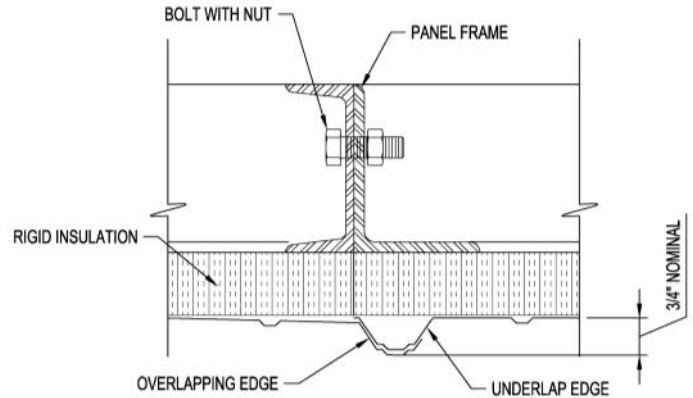
A Building's Interior with Hot-Dip Galvanized  
 Frames in the Gulf Coast Region

The exterior steel sheeting on a Kelly building is fully supported around the perimeter of the panel and at intervals of approximately 3'-0" down the length of each panel. Kelly buildings rely more on the strength of the panel frame and less on the exterior sheeting providing a stronger wall and roof surface resistant to snow and storm damage.

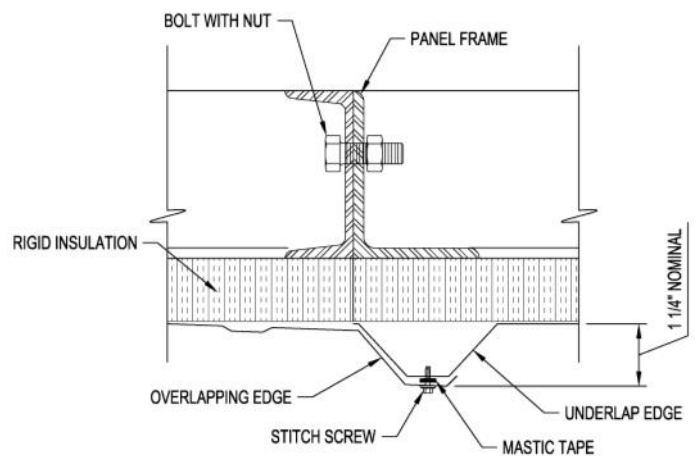
Conventional steel buildings do not support the overlap joints and use support spacing of 4'-0" or more relying more on the strength of the sheeting to span between supports set further apart.

Kelly buildings are available with two different types of factory applied exterior sheeting:

- Standard: 3/4" Imperial Rib
  - Kelly's standard exterior designed for easy installation and reusability
  - 80,000 PSI steel
  - No seal tape or stitch screws required
  - 29 gauge standard or 26 gauge
- Optional: 1 1/4" R-Panel Rib
  - Optional profile used in high wind and snow load applications or at customer's request.
  - 50,000 PSI minimum steel
  - Lap seal tape and stitch screws required
  - 26 gauge or 24 gauge



Panel to Panel Connection Detail  
Standard 3/4" Imperial Rib



Panel to Panel Connection Detail  
Optional 1 1/4" R-Panel

	<u>29 Gauge</u>	<u>26 Gauge</u>	<u>24 Gauge</u>
<b>3/4" Imperial Rib:</b>	PG / SMP	PG / SMP	N/A
<b>1-1/4" R-Panel:</b>	N/A	PG / SMP / Kynar	PG / SMP / Kynar

**PG:** Plain Galvalume Finish (25 Year Finish Warranty)

Galvalume is a zinc and aluminum coating that out performs straight galvanized material. This is the most economical finish for Kelly buildings.

**SMP:** Silicone Modified Polyester (40 / 30 Year Finish Warranty)

Galvalume coated base metal with epoxy modified primer and 30% silicone modified polyester top coat. This is the standard painted finish for System 2 buildings.

**Kynar:** Two-Coat Fluoropolymer Paint System (40 / 30 Year Finish Warranty)

Galvalume coated base metal with PolyVinylidene DiFluoride (PVDF) paint system. Kynar is an alternate painted finish that is used at the customer's request.

For climate controlled buildings, Kelly Klosure offers the highest performance rigid insulation as a factory installed option.

- **Factory Installed Rigid Polyisocyanurate**

Polyisocyanurate is Kelly's standard factory installed insulation. It is a high performance insulation with good burning characteristics compared to other rigid foams. It is approved for use as an exposed insulation in most applications.

Rigid thermal insulation board composed of a HCFC free polyisocyanurate foam core bonded to a glass fiber reinforced 1.5 mil aluminum foil face on the exposed side of the board.

Properties:

- Flame Spread (ASTM E84): 25 or less
- Smoke Developed (ASTM E84): 450 or less
- Service Temperature: -40 °F to +250 °F

Standard Thicknesses for Roof and Walls:

- 2" R-13 (U Value = 0.076)
- 3" R-20 (U Value = 0.05)

Optional Thicknesses for Roofs:

- 4" R-27 (U Value = 0.037)
- 5" R-34 (U Value = 0.029)

- **Factory Installed Mineral Wool**

Mineral wool is an optional factory installed insulation used in applications where 100% inflammability is more critical than thermal efficiency.

Semi-rigid thermal insulation manufactured from felted mineral wool bonded together with a high temperature binder.

Properties:

- ASTM E136: **Incombustible**
- Flame Spread (ASTM E84): 10
- Smoke Developed (ASTM E84): 10
- Service Temperature: -20 °F to +1200 °F

Standard Thickness:

- 2" R-9 (U Value = 0.107)



Panel with Polyisocyanurate Insulation



Panel with Mineral Wool Insulation



To protect the factory installed insulation, Kelly Klosure installs a flat steel insulation liner factory installed between the steel panel frame and the insulation.

- **Galvanized Steel Liner**

28 ga. steel with G-90 Galvanizing

Kelly's most economical factory installed insulation liner.

- **Painted Steel Liner**

29 ga. steel, Galvalume coated, silicone modified polyester paint finish

Kelly's upgraded interior liner can be coordinated with matching or accent colored painted steel frames to create an attractive interior finish without needing to install drywall.

Standard Color: Regal White



Painted Steel Liner

Regal white painted steel liner with panel frames painted to match.



Galvanized Steel Liner

Galvanized steel liner with red primer panel frames.



Painted Steel Liner

Regal white painted steel liner with panel frames painted with gray primer.