

# Installation Guide For:

## GLASS RAILING



Call 1-800-335-5909 for Installation Support

**This Packet MUST Accompany  
Materials To Job Site**

**Extra Screws Included**





PURE  
VIEW

GLASS RAILING  
SIMPLIFIED

FULL GLASS



# Installation Instructions for Fortress Pure View Full Glass Railing Panels with Evolve External Brackets and Al<sup>13</sup> Posts

It is the responsibility of the installer to meet all code and safety requirements, and to obtain all required building permits. The deck and railing installer should determine and implement appropriate installation techniques for each installation situation. The Fortress Company or its distributors shall not be held liable for improper or unsafe installations.

Fortress Al<sup>13</sup> Posts must always be secured to the deck framing. Fortress Al<sup>13</sup> Posts should never be attached to only the deck boards.

## Note

When cutting Fortress railing, it is very important to complete the following at cut points.

- Remove all metal shavings from the cut area
- File any sharp edges left by cutting. Thoroughly wipe and remove any filings, grime or dirt from the railing.
- Apply two coats of Fortress zinc based touch-up paint to the cut area. If touch up is at rail ends, allow paint to dry before connecting bracket to post.
- Be sure to remove any metal shavings from the surface of deck, patio or balcony to prevent corrosion on the surface.

## Torx Safety Tips

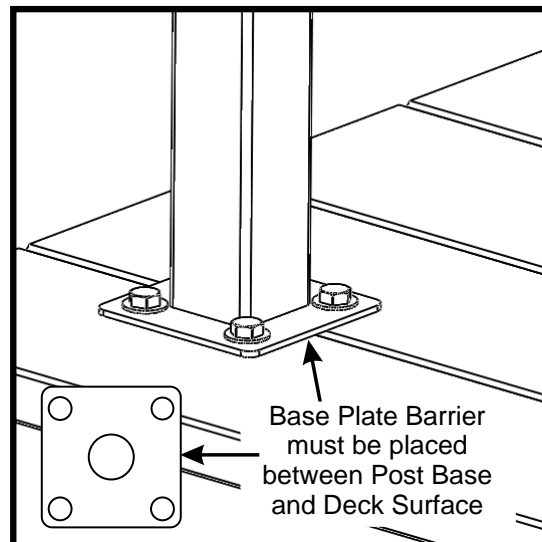
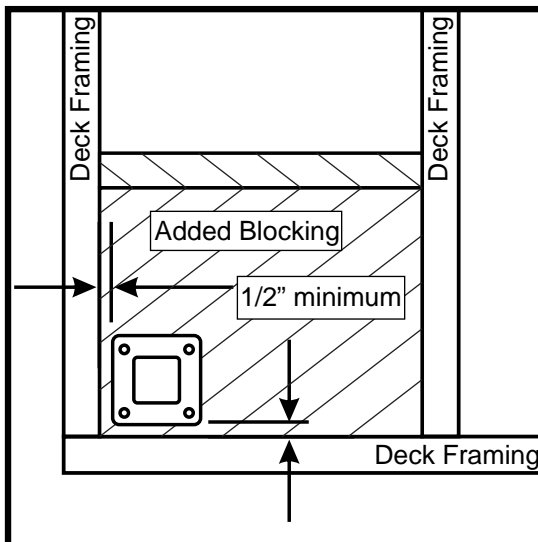
- Always pre-drill holes with a 3/16" drill bit.
- Always use the lowest speed setting on drill.
- To reduce chance of bit breakage, start tightening with drill on low torque setting and work up until screw is secured.

## Required Materials

Miter saw with fine-tooth blade, Drill, 3/16" Drill Bits, T-25 Driver Bit, Phillips Head Screw Driver, Drill Bit Extender, Tape Measure, Wrenches, Speed Square, Center Punch, 3-1/2" Support, and Hammer.

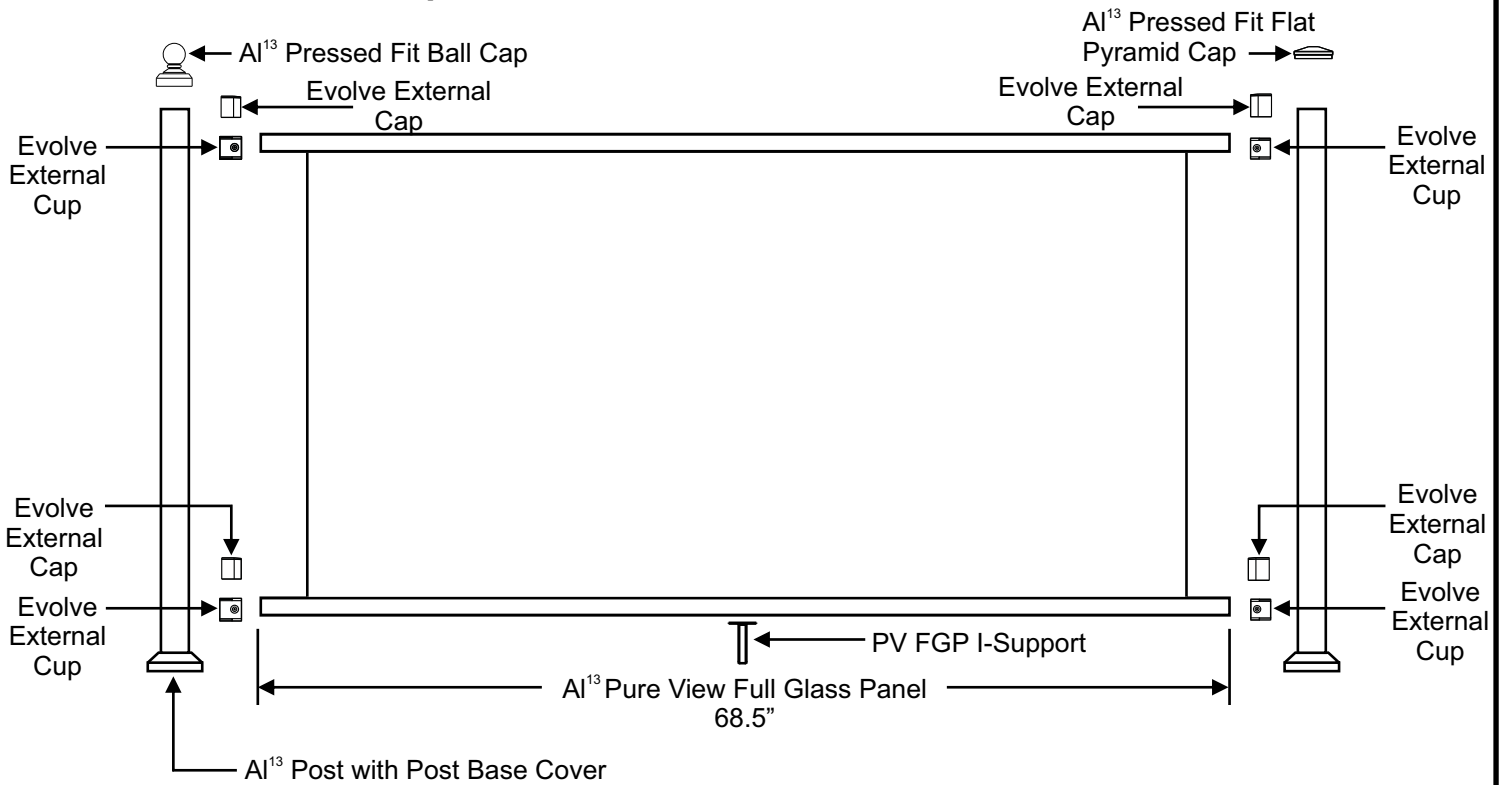
## Mount Al<sup>13</sup> Posts\*

- Wood Blocking tied to deck frame must be installed and constructed with treated dimensional lumber with a minimum thickness of 1-1/2".
- Al<sup>13</sup> 3" Post Spacing must not exceed 72" for 6' Panels.
- Position the edge of post base plate a minimum of 1/2" from the inside edge of rim joist.
- Place included Base Plate Barrier between post base and deck surface.
- Mount posts at appropriate points based on panel length.
- Attach Al<sup>13</sup> posts with 3/8" X 3-1/2" Hex Head galvanized bolts.



\*Reference Fortress Al<sup>13</sup> Post mounting instructions

## Pure View Installation Options



## Pure View Panel and Al<sup>13</sup> Post Configurations

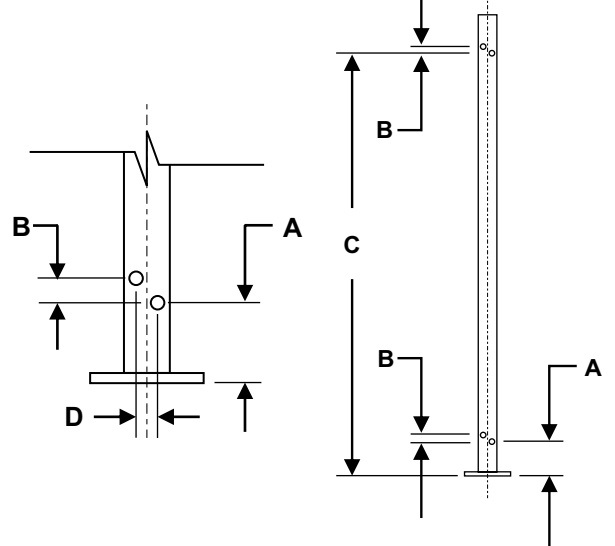
Rail Panel Height	Rail Panel Only	
	Installed Panel Height*	Required Post
34"	37-1/2"	39-1/2"
40"	43-1/2"	45-1/2"

\*Heights include a 3-1/2" space between deck surface and bottom edge of bottom rail.

## Evolve External Bracket Hole Locations for Pure View Panel Installations

Pre-Drilling with a 3/16" drill bit is required.

Rail Panel Height	Pre-Drill Dimensions			
	A*	B	C	D
34"	3-13/16"	1/2"	36-11/16"	13/16"
40"	3-13/16"	1/2"	42-11/16"	13/16"



\*Dimension A positions bottom edge of rail 3-1/2" above deck surface.

\*Dimension A is measured from the bottom surface of post base.

Remove all metal shavings from deck, post base cover, post, and panel before bracket is screwed to post to prevent corrosion.

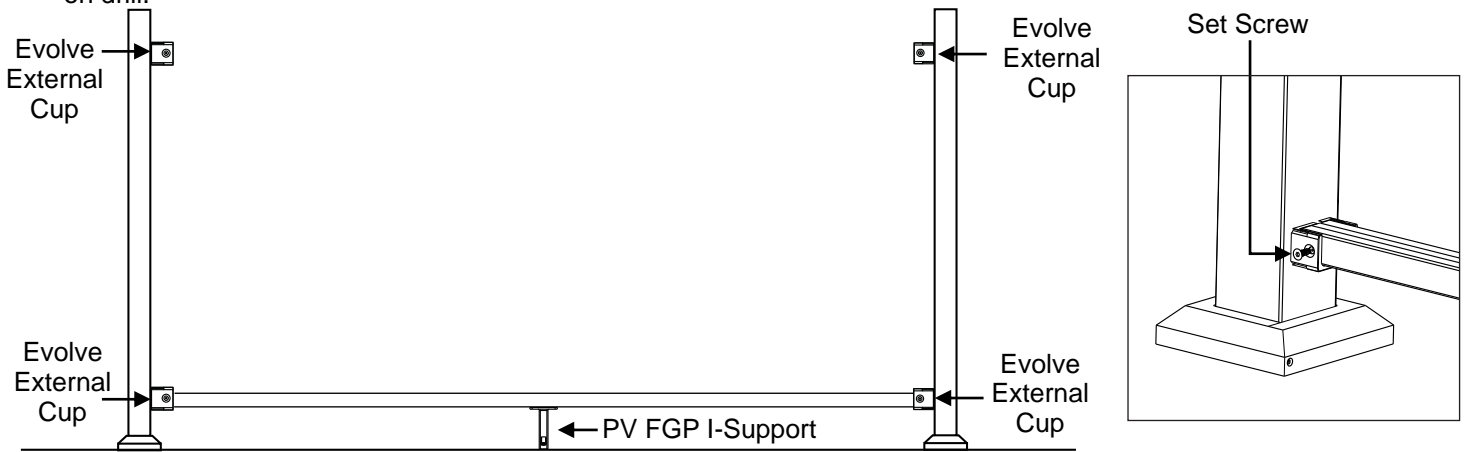
## Install Brackets to Posts

- Using pre-drill dimensions previously given, pre-drill holes on installed posts with a 3/16" drill bit.
- If using Al<sup>13</sup> Post Base Covers, install at this time by sliding over the top of the Al<sup>13</sup> Posts.
- Secure Evolve External Bracket Cups to posts with provided T-25 Drive Thread-Cutting Screws. Use low speed setting on drill.



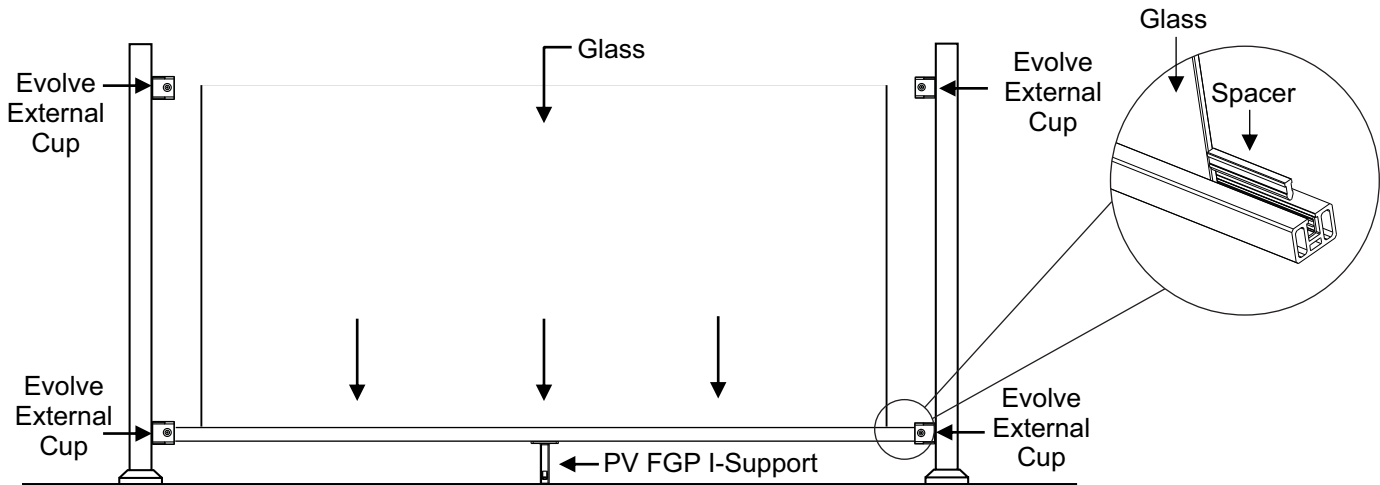
## Install Bottom Rail of Pure View Full Glass Panel

- If rails were cut to length, file cut edges and coat with 2 coats of Fortress zinc based touch-up paint.
- Install PureView Full Glass Panel I-support, center support on bottom surface of bottom rail. Pre-drill holes with a 3/16" drill bit, and secure with provided Phillips Drive Thread-Cutting Screws. Use low speed setting on drill. **Check fit of rail between posts before installing I-Support.**
- Drop bottom rail of Pure View Full Glass Assembly into the lower installed brackets.
- Secure rail to Evolve External Bracket Cups with provided T-25 Drive Thread-Cutting Screws. Use low speed setting on drill.



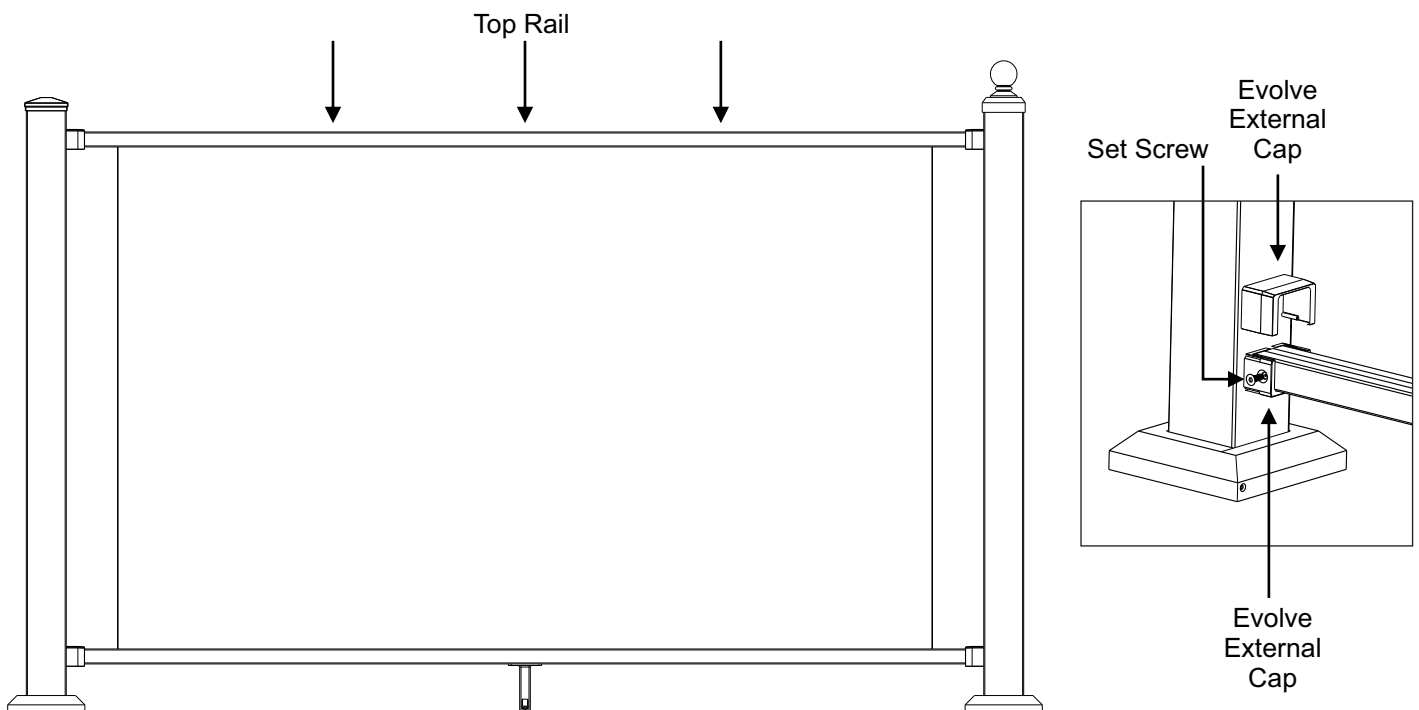
## Install Glass into Bottom Rail of Pure View Full Glass Panel

- Carefully slip full glass sheet vertically into the center of the bottom rail.
- Insert spacers on either side of the glass in the bottom rail as shown. Spacer will be flush with the side of the glass.



## Install Top Rail onto Pure View Full Glass Panel and Install Bracket Caps

- Carefully slip top rail over the top of the glass into the upper Evolve External Bracket Cups.
- Pre-Drill holes and secure rail to Evolve External Bracket Cups at this time with provided T-25 Drive Thread-Cutting Screws. Use low speed setting on drill.
- Install Evolve External Bracket Caps by sliding cap over the top of the Evolve External Bracket Cup. Cap will snap into place.
- Install (optional) Al<sup>13</sup> Post Caps at this time by pressing onto top of post.







**PURE  
VIEW**

**GLASS RAILING  
SIMPLIFIED**

**GLASS BALUSTER - IRON**



## Installation Instructions for Fortress Pure View Railing with Collar Brackets (CB) Brackets and Iron Posts

It is the responsibility of the installer to meet all code and safety requirements, and to obtain all required building permits. The deck and railing installer should determine and implement appropriate installation techniques for each installation situation. The Fortress Company or its distributors shall not be held liable for improper or unsafe installations.

Fortress Iron Posts must always be secured to the deck framing. Fortress Iron Posts should never be attached to only the deck boards.

### Note

When cutting Fortress railing, it is very important to complete the following at cut points. Not following the below steps will result in rust at the cut areas:

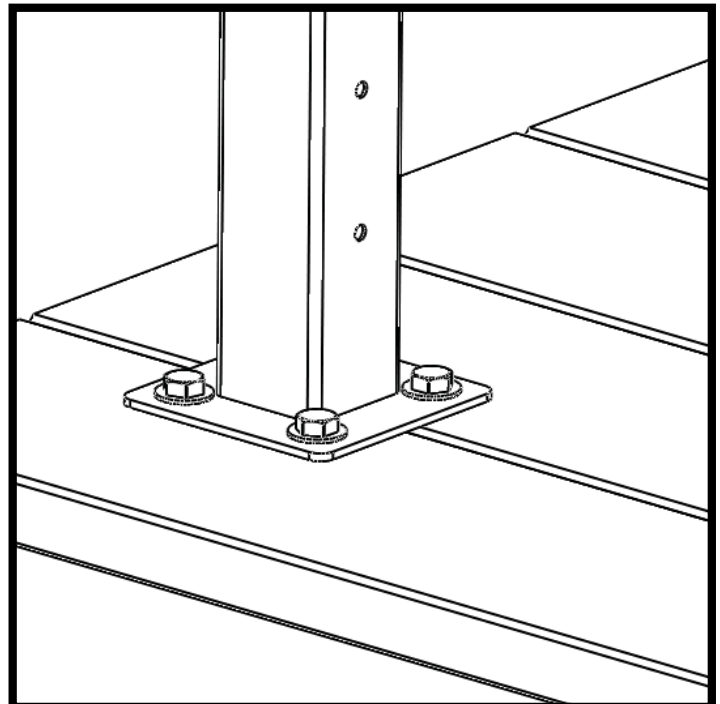
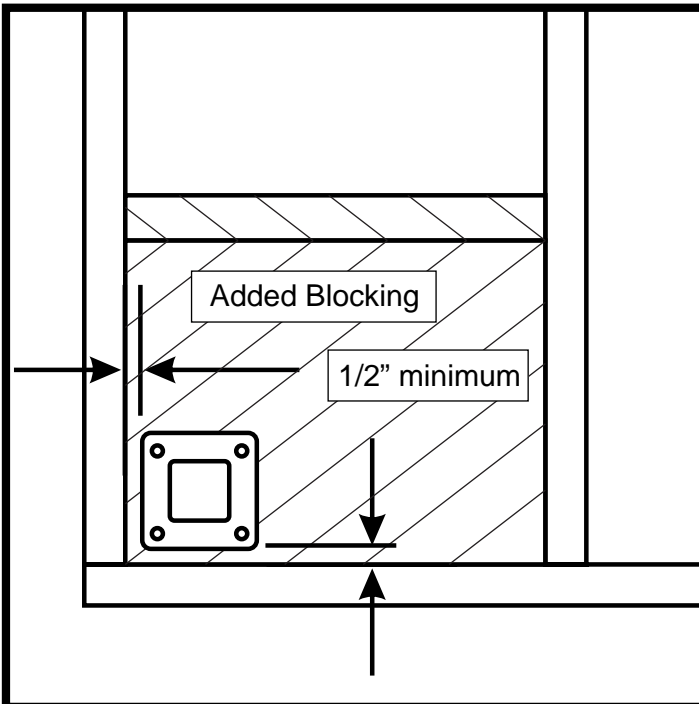
- Remove all metal shavings from the cut area
- File any sharp edges left by cutting. Thoroughly wipe and remove any filings, grime or dirt from the railing.
- Apply two coats of Fortress zinc based touch-up paint to the cut area. If touch up is at rail ends, allow paint to dry before connecting bracket to post.
- Be sure to remove any metal shavings from the surface of deck, patio or balcony to prevent rust on the surface.

### Required Materials

3/16" Drill, Drill Bits, T-25 Driver Bit, Drill Bit Extender, Tape Measure, Wrenches, Speed Square, Center Punch, 3-3/4" Support and Hammer.

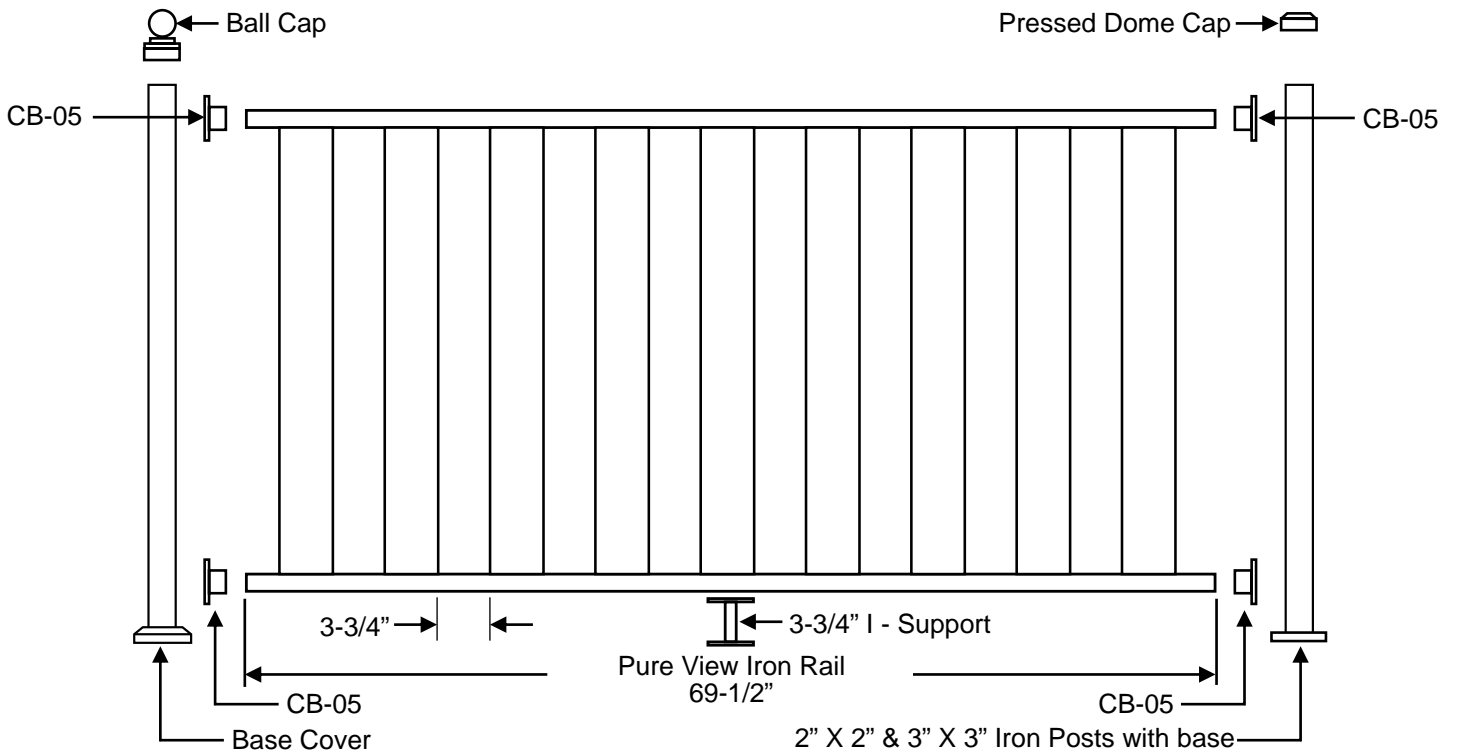
### Mount Iron Posts\*

- Wood Blocking tied to deck frame must be installed and constructed with treated dimensional lumber with a minimum thickness of 1/1/2".
- Position the edge of post base plate a minimum of 1/2" from the inside edge of rim joist.
- Mount posts at appropriate points based on panel length.
- Attach Iron posts with 3/8 X 3-1/2" Hex Head Galvanized Bolts.



\*Reference Fortress iron post mounting instructions

## Pure View Installation Options



## Pure View Panel and Iron Post Configurations

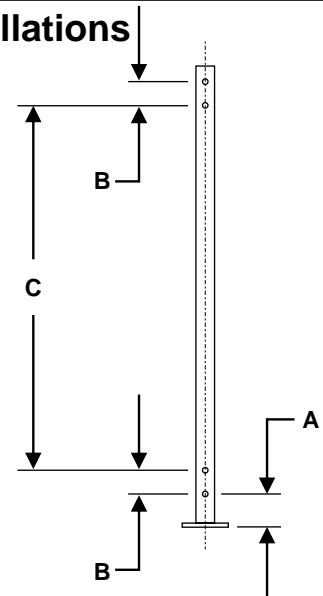
Pure View Baluster Height	Rail Panel Height	Rail Panel Only	
		Installed Panel Height*	Required Post
34"	34-5/16"	38-5/16"	39-1/2"
40"	40-1/8"	44-1/8"	45-1/2"

\*Heights includes a 3-3/4" space between deck surface and bottom edge of bottom rail.

## CB-05 Bracket Hole Locations for Pure View Rail Panel Installations

Pre-Drilling with a 3/16" drill bit is required.

Rail Panel Height	Pre-Drill Dimensions		
	A*	B	C
34-5/16"	3-3/16"	2-3/8"	30-11/16"
40-1/8"	3-3/16"	2-3/8"	36-1/2"



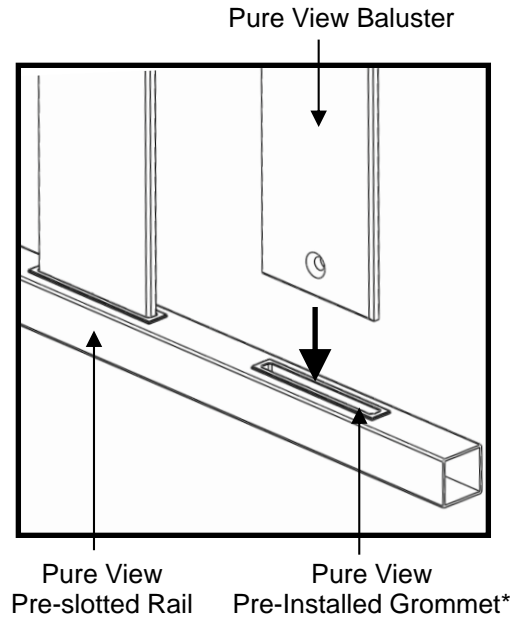
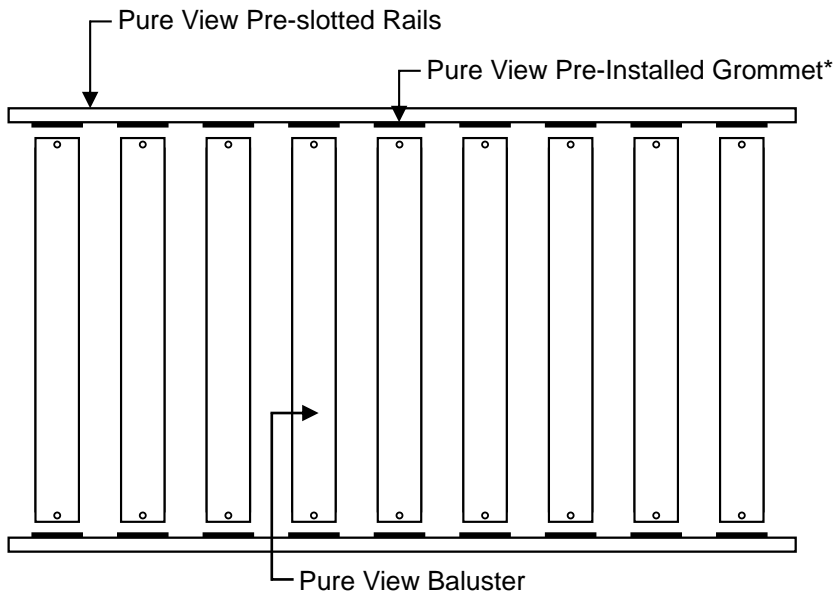
\*Dimension A positions bottom edge of rail 3-3/4" above deck surface.

\*Dimension A is measured from the Bottom surface of post base.

Remove all metal shavings from deck, post base cover, post, and panel before bracket is screwed to post to prevent rust stains.

## Pure View Baluster Pre-slotted Rail Assembly

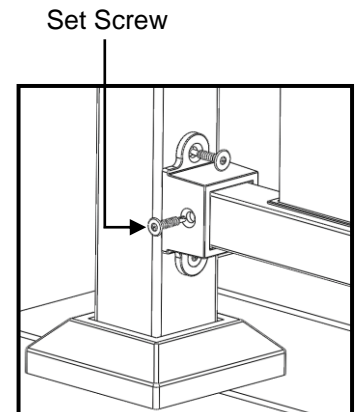
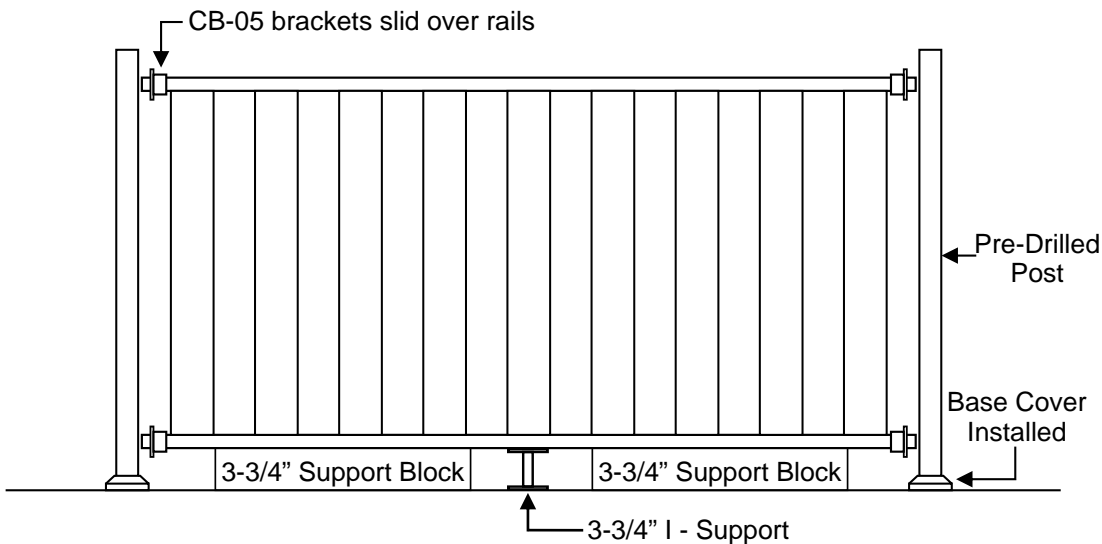
- If pre-slotted rails were cut to length, file cut edges and coat with 2 coats of Fortress zinc based touch-up paint.
- Check fit of pre-slotted rail between installed posts.
- Insert ends of Pure View Balusters into the Pure View Pre-slotted rail and Grommet Assemblies.



\*Pure View Standard Grommets come installed in pre-slotted rails.

## Pure View Panel Installation with CB-05

- If rails were cut to length, file cut edges and coat with 2 coats of Fortress zinc based touch-up paint.
- Check fit of rail between installed posts.
- If using a Base Cover install it now by sliding over the top of Iron Post.
- Slide a CB-05 bracket over the end of each rail. Make sure that all set screw holes face the desired direction.
- Install 3-3/4" I-Support at mid point of bottom rail.
- Place rail assembly on 3-3/4" support block between posts.
- Slide CB-05 brackets to post and secure with provided metal screws. Use low speed setting on drill.
- Secure rails with provided set screws at each CB-05 bracket.



# Installation Instructions for Fortress Pure View Railing Panels with Universal (UB) Brackets and Iron Posts

It is the responsibility of the installer to meet all code and safety requirements, and to obtain all required building permits. The deck and railing installer should determine and implement appropriate installation techniques for each installation situation. The Fortress Company or its distributors shall not be held liable for improper or unsafe installations.

Fortress Iron Posts must always be secured to the deck framing. Fortress Iron Posts should never be attached to only the deck boards.

## Note

When cutting Fortress railing, it is very important to complete the following at cut points. Not following the below steps will result in rust at the cut areas:

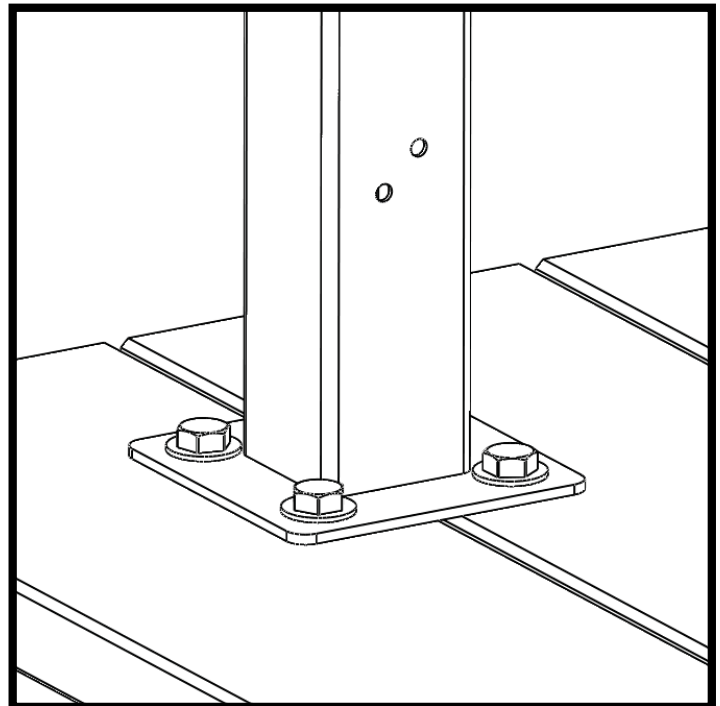
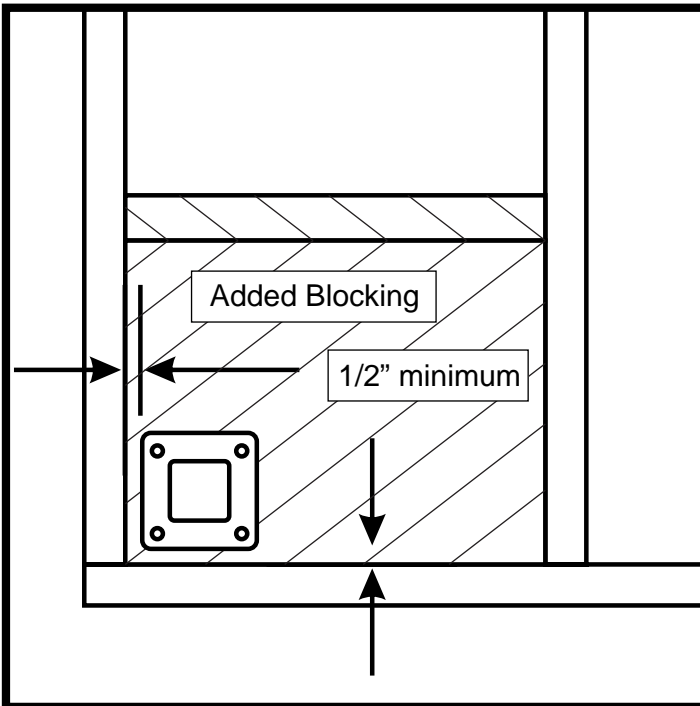
- Remove all metal shavings from the cut area
- File any sharp edges left by cutting. Thoroughly wipe and remove any filings, grime or dirt from the railing.
- Apply two coats of Fortress zinc based touch-up paint to the cut area. If touch up is at rail ends, allow paint to dry before connecting bracket to post.
- Be sure to remove any metal shavings from the surface of deck, patio or balcony to prevent rust on the surface.

## Required Materials

3/16" Drill, Drill Bits, T-25 Driver Bit, Drill Bit Extender, Tape Measure, Wrenches, Speed Square, Center Punch, 3-3/4" Support and Hammer.

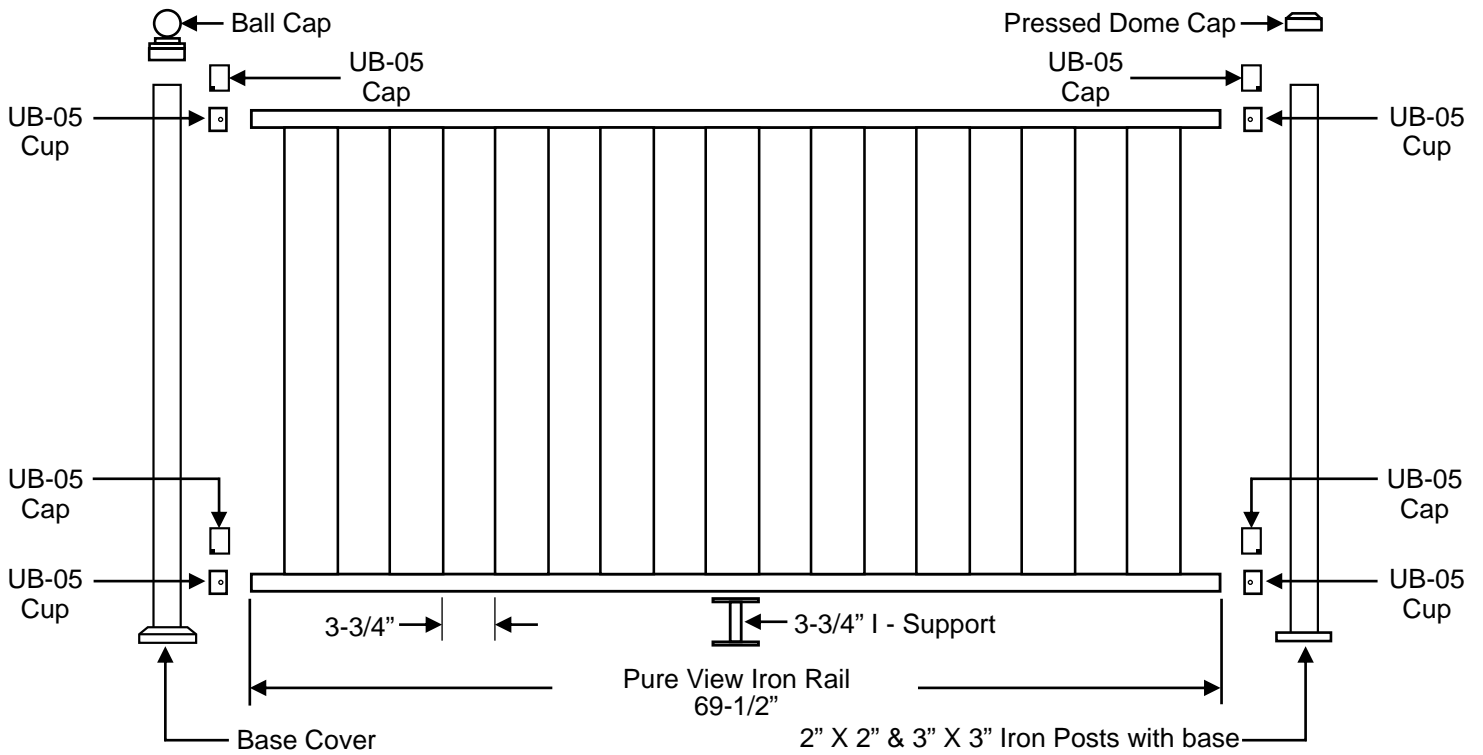
## Mount Iron Posts\*

- Wood Blocking tied to deck frame must be installed and constructed with treated dimensional lumber with a minimum thickness of 1/1/2".
- Position the edge of post base plate a minimum of 1/2" from the inside edge of rim joist.
- Mount posts at appropriate points based on panel length.
- Attach Iron posts with 3/8 X 3-1/2" Hex Head Galvanized Bolts.



\*Reference Fortress iron post mounting instructions

## Pure View Installation Options



## Pure View Panel and Iron Post Configurations

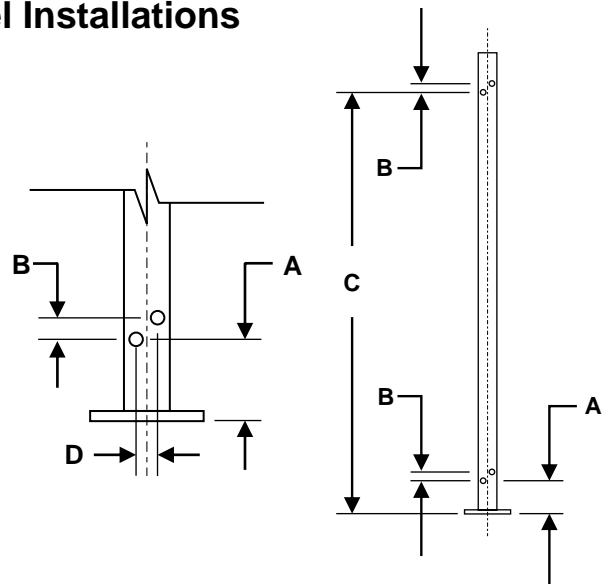
Rail Panel Height	Rail Panel Only	
	Installed Panel Height*	Required Post
26-5/16"	X	X
34-5/16"	38-1/16"	39-1/2"
40-1/8"	43-7/8"	45-1/2"

\*Heights includes a 3-3/4" space between deck surface and bottom edge of bottom rail.

## UB-05 Bracket Hole Locations for Pure View Panel Installations

Pre-Drilling with a 3/16" drill bit is required.

Rail Panel Height	Pre-Drill Dimensions			
	A*	B	C	D
26-5/16"	X	X	X	X
34-5/16"	3-11/16"	5/8"	37-1/8"	5/8"
40-1/8"	3-11/16"	5/8"	42-15/16"	5/8"



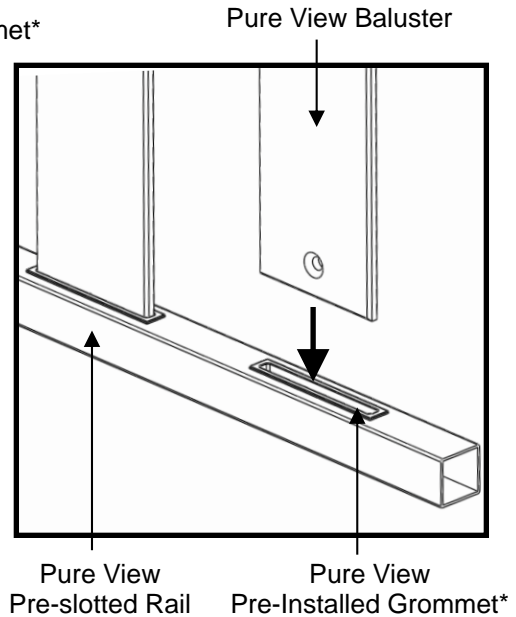
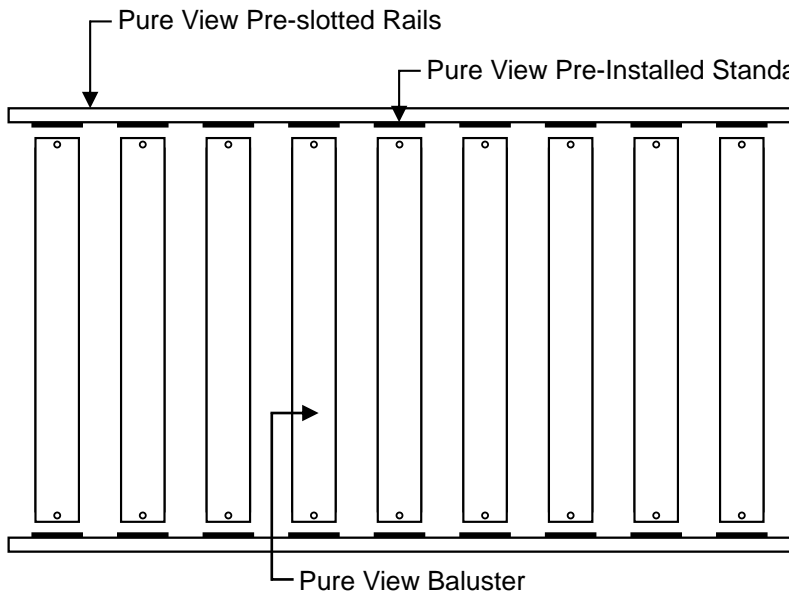
\*Dimension A positions bottom edge of rail 3-3/4" above deck surface.

\*Dimension A is measured from the bottom surface of post base.

Remove all metal shavings from deck, post base cover, post, and panel before bracket is screwed to post to prevent rust stains.

## Pure View Baluster Pre-slotted Rail Assembly

- If pre-slotted rails were cut to length, file cut edges and coat with 2 coats of Fortress zinc based touch-up paint.
- Check fit of pre-slotted rail between installed posts.
- Insert ends of Pure View Balusters into the Pure View Pre-slotted rail and Grommet Assemblies.

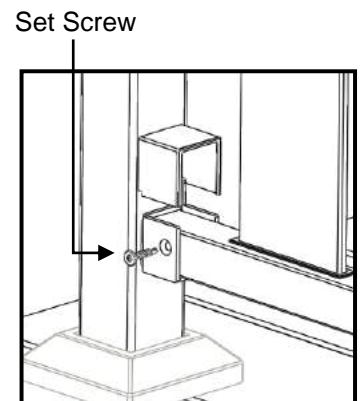
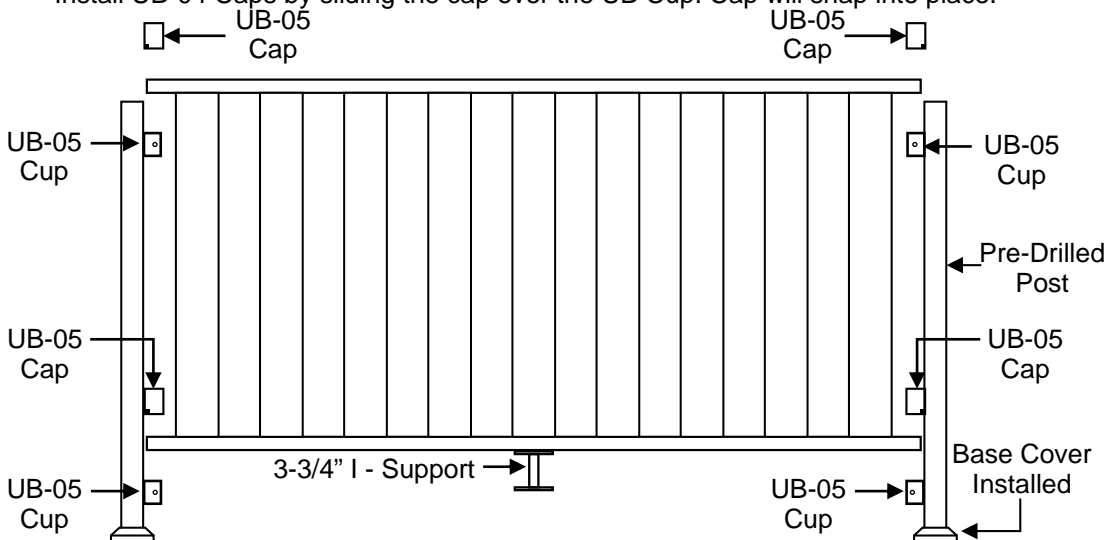


\*Pure View Standard Grommets come installed in pre-slotted rails.

## Pure View Panel Installation with UB-05

**When using UB brackets rails MUST be cut 1/2" shorter than the distance between posts. 1/4" should be cut from the end of each rail to keep rail panel centered between posts.**

- If rails were cut to length, file cut edges and coat with 2 coats of Fortress zinc based touch-up paint.
- Check fit of rail between installed posts.
- If using a Base Cover install it now by sliding over the top of Iron Post.
- Secure UB brackets to posts with provided metal screws. Use two screws per bracket. Use low speed setting on drill.
- Install 3-3/4" I-Support at mid point of bottom rail.
- Drop Pure View Panel into installed UB brackets.
- Secure rails with provided set screws at each UB bracket.
- Install UB-04 Caps by sliding the cap over the UB Cup. Cap will snap into place.







PURE  
VIEW

GLASS RAILING  
SIMPLIFIED

GLASS BALUSTER - ALUMINUM



# Installation Instructions for Fortress Pure View Railing Panels with Evolve External Brackets and Al<sup>13</sup> Posts

It is the responsibility of the installer to meet all code and safety requirements, and to obtain all required building permits. The deck and railing installer should determine and implement appropriate installation techniques for each installation situation. The Fortress Company or its distributors shall not be held liable for improper or unsafe installations.

Fortress Al<sup>13</sup> Posts must always be secured to the deck framing. Fortress Al<sup>13</sup> Posts should never be attached to only the deck boards.

## Note

When cutting Fortress railing, it is very important to complete the following at cut points.

- Remove all metal shavings from the cut area
- File any sharp edges left by cutting. Thoroughly wipe and remove any filings, grime or dirt from the railing.
- Apply two coats of Fortress zinc based touch-up paint to the cut area. If touch up is at rail ends, allow paint to dry before connecting bracket to post.
- Be sure to remove any metal shavings from the surface of deck, patio or balcony to prevent corrosion on the surface.

## Torx Safety Tips

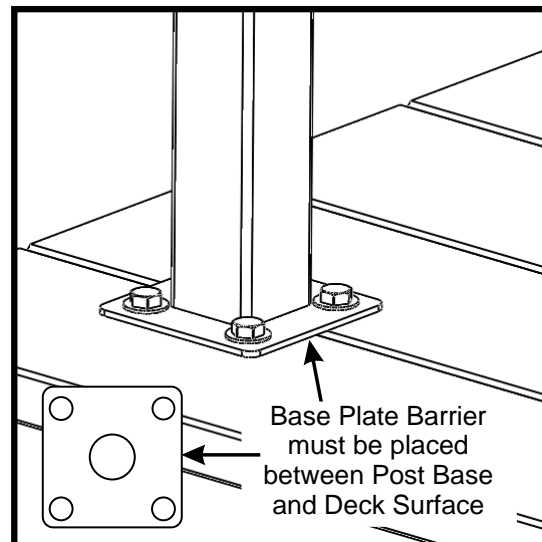
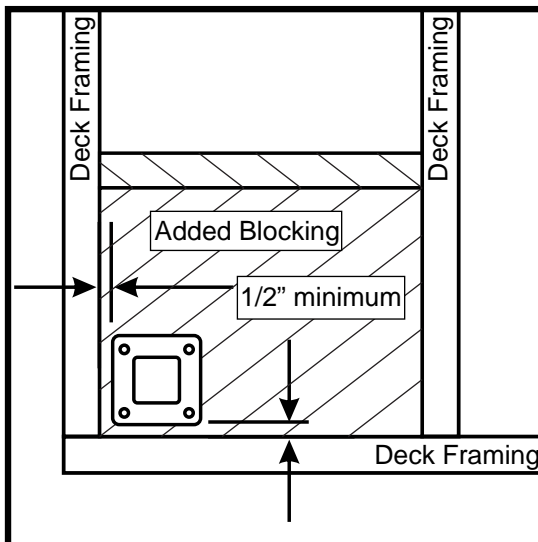
- Always pre-drill holes with a 3/16" drill bit.
- Always use the lowest speed setting on drill.
- To reduce chance of bit breakage, start tightening with drill on low torque setting and work up until screw is secured.

## Required Materials

Miter saw with fine-tooth blade, Drill, 3/16" Drill Bits, T-25 Driver Bit, Drill Bit Extender, Tape Measure, Wrenches, Speed Square, Center Punch, 3-1/2" Support, and Hammer.

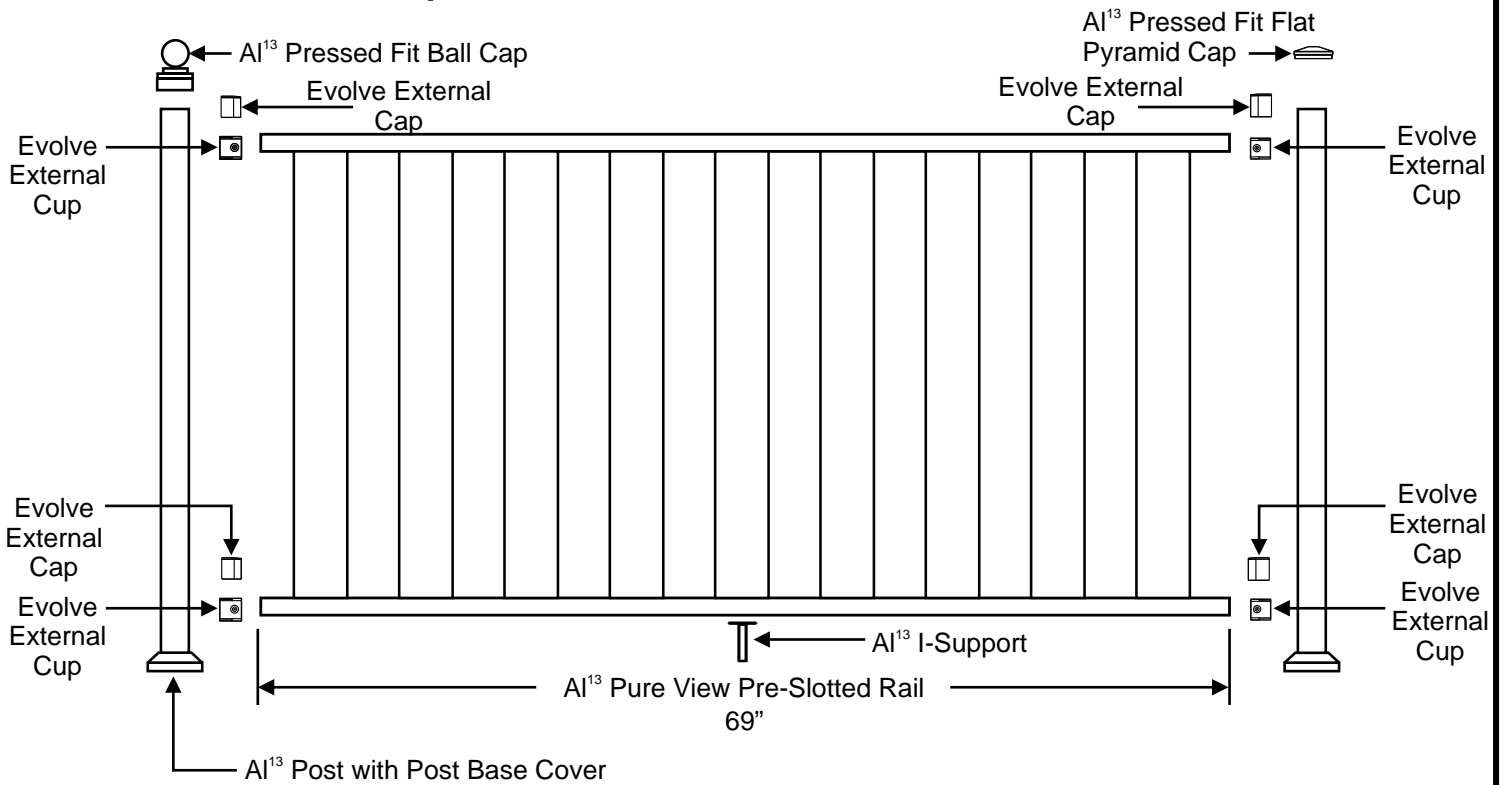
## Mount Al<sup>13</sup> Posts\*

- Wood Blocking tied to deck frame must be installed and constructed with treated dimensional lumber with a minimum thickness of 1-1/2".
- Al<sup>13</sup> 3" Post Spacing must not exceed 96" for 8' Panels and 72" for 6' Panels.
- Position the edge of post base plate a minimum of 1/2" from the inside edge of rim joist.
- Place included Base Plate Barrier between post base and deck surface.
- Mount posts at appropriate points based on panel length.
- Attach Al<sup>13</sup> posts with 3/8" X 3-1/2" Hex Head galvanized bolts.



\*Reference Fortress Al<sup>13</sup> Post mounting instructions

## Pure View Installation Options



## Pure View Panel and Al<sup>13</sup> Post Configurations

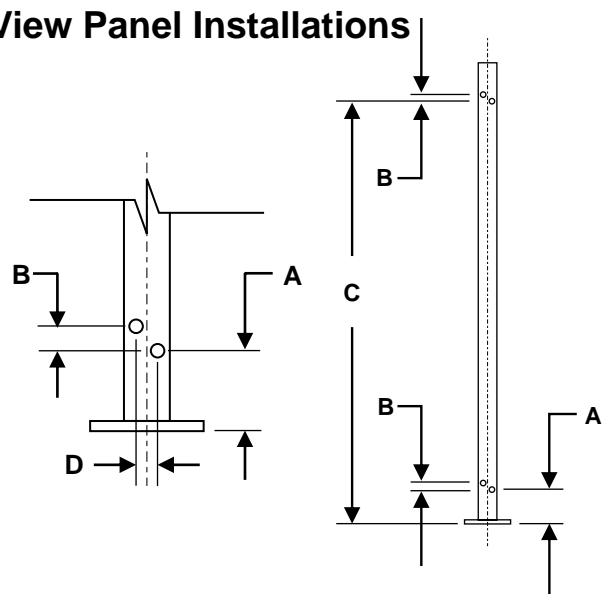
Rail Panel Height	Rail Panel Only	
	Installed Panel Height*	Required Post
34-3/8"	37-7/8"	39-1/2"
40-1/8"	43-5/8"	45-1/2"

\*Heights include a 3-1/2" space between deck surface and bottom edge of bottom rail.

## Evolve External Bracket Hole Locations for Pure View Panel Installations

Pre-Drilling with a 3/16" drill bit is required.

Rail Panel Height	Pre-Drill Dimensions			
	A*	B	C	D
34-3/8"	3-13/16"	1/2"	37-1/16"	13/16"
40-1/8"	3-13/16"	1/2"	42-13/16"	13/16"



\*Dimension A positions bottom edge of rail 3-1/2" above deck surface.

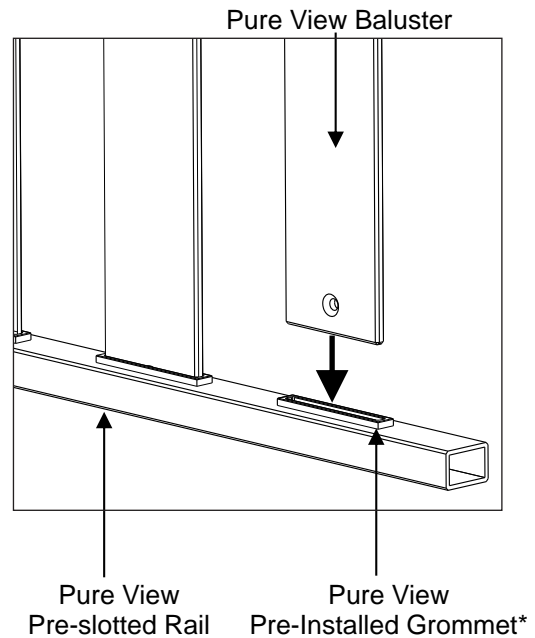
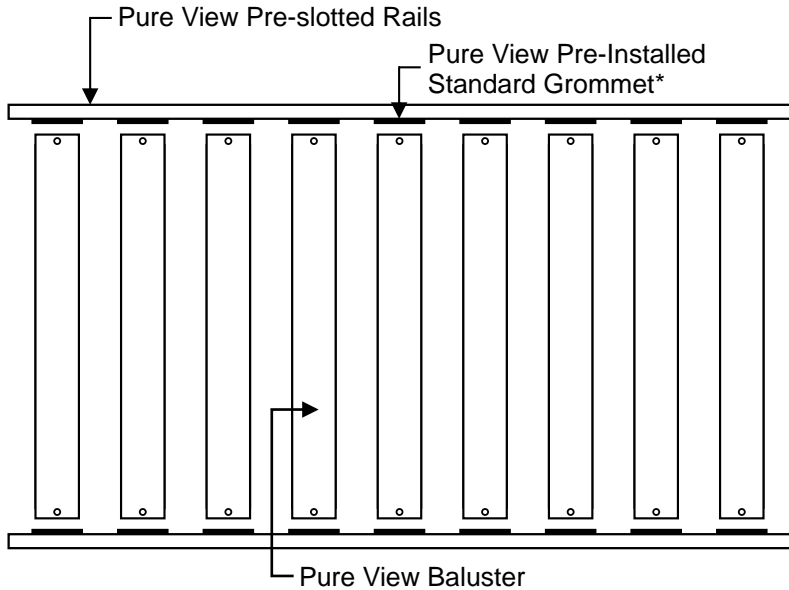
\*Dimension A is measured from the bottom surface of post base.

Remove all metal shavings from deck, post base cover, post, and panel before bracket is screwed to post to prevent corrosion.

## Pure View Baluster Pre-slotted Rail Assembly

- If pre-slotted rails were cut to length, file cut edges and coat with 2 coats of Fortress zinc based touch-up paint.
- Check fit of pre-slotted rail between installed posts.
- Insert ends of Pure View Balusters into the Pure View Pre-slotted rail and Grommet Assemblies.

Note: Holes in balusters should not be visible after insertion of baluster into rail.

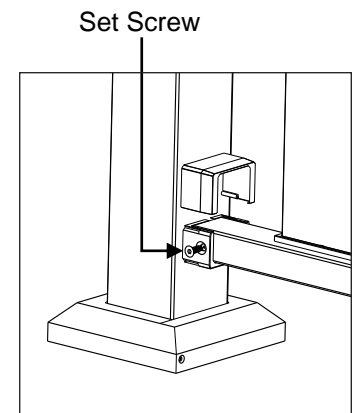
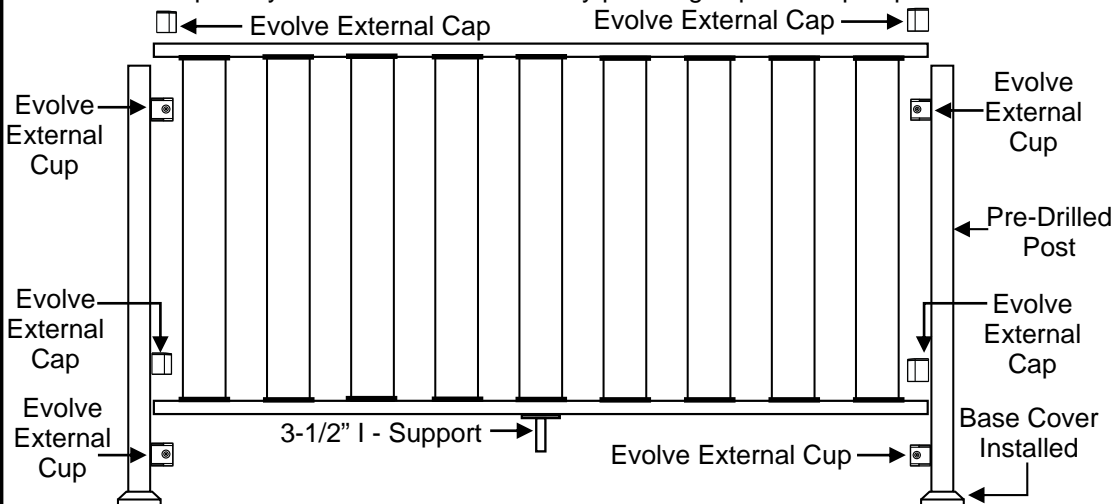


\*Pure View Standard Grommets come installed in pre-slotted rails.

## Pure View Panel Installation with Evolve External Brackets

When using Evolve External brackets rails **MUST** be cut  $1/2''$  shorter than the distance between posts.  $1/4''$  should be cut from the ends of each rail to keep rail panel centered between posts.

- If rails were cut to length, file cut edges and coat with 2 coats of Fortress zinc based touch-up paint.
- Check fit of rail between installed posts.
- If using a Base Cover install it now by sliding over the top of Al<sup>13</sup> Post.
- Secure Evolve External brackets to posts with provided T-25 Drive Thread-Cutting Screws. Use low speed setting on drill.
- Install 3-1/2" I-Support at mid point of bottom rail.
- Drop Pure View Panel into installed Evolve External brackets.
- Secure rails with provided T-25 Drive Thread-Cutting screws at each Evolve External bracket.
- Install Evolve External Caps by sliding the cap over the Evolve External Cup. Cap will snap into place.
- Al<sup>13</sup> Post caps may be installed at this time by pressing cap onto top of post.



# Installation Instructions for Pure View Pre-Slotted Rails for Stair Applications With Evolve Stair Brackets and AI<sup>13</sup> Posts

It is the responsibility of the installer to meet all code and safety requirements, and to obtain all required building permits. The deck and railing installer should determine and implement appropriate installation techniques for each installation situation. Fortress Railing Products and its distributors shall not be held liable for improper or unsafe installations.

Fortress AI<sup>13</sup> Posts must always be secured to the deck framing. Fortress AI<sup>13</sup> Posts should never be attached to only the deck boards.

## Read Instructions Completely Before Starting Installation

### Note

When cutting Fortress railing, it is very important to complete the following at cut points. Not following the below steps will result in corrosion at the cut areas:

- Remove all metal shavings from the cut area.
- File any sharp edges left by cutting. Thoroughly wipe and remove any filings, grime or dirt from the railing.
- Apply two coats of Fortress Zinc-based touch-up paint to all cut areas.
- Be sure to remove any metal shavings from the surface of deck, patio or balcony to prevent corrosion on the surface.

### Required Materials

Miter saw with fine tooth blade, Drill, 3/16" Drill Bits, T-25 Torx Driver Bits, Phillip's Head Screwdrivers, Drill Bit Extender, Tape Measure, Wrenches, Speed Square, Center Punch, 3-1/2" Support Blocks, Clamps, Hammer, Pencil and Eye Protection .

### Torx Bits Tips

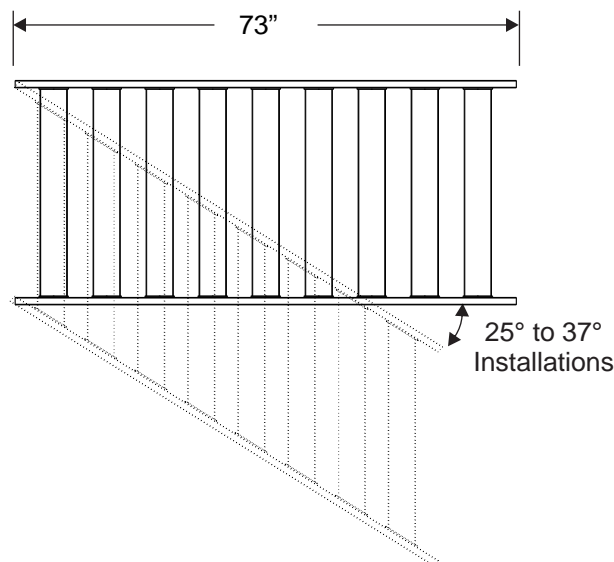
- Have several bits on hand before starting your installation.
- Always pre-drill holes with a 3/16" drill bit.
- Use the lowest possible torque setting on drill. This will help to minimize breakage and twisting of Torx Bits.

### Pure View Pre-Slotted Rails for Stair

Pure View Pre-Slotted Rails for 6' stair sections (actual length 73")

Available Heights 34" and 40"

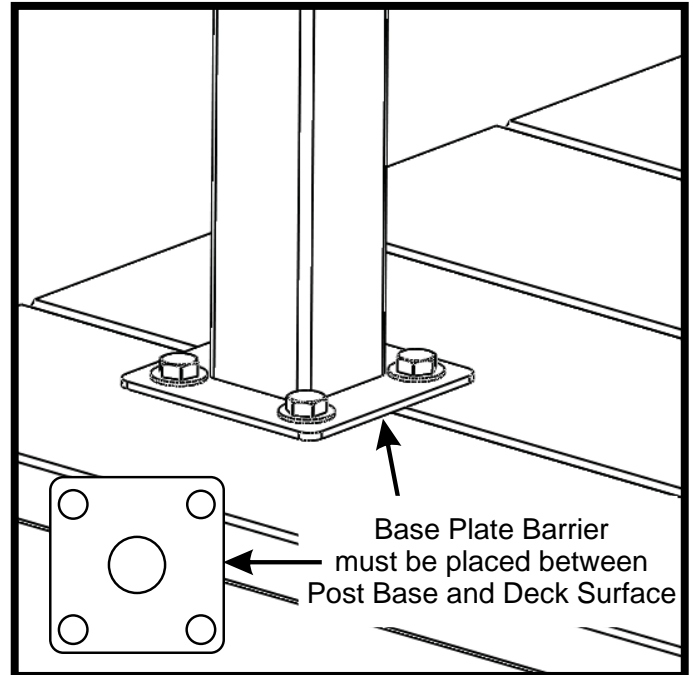
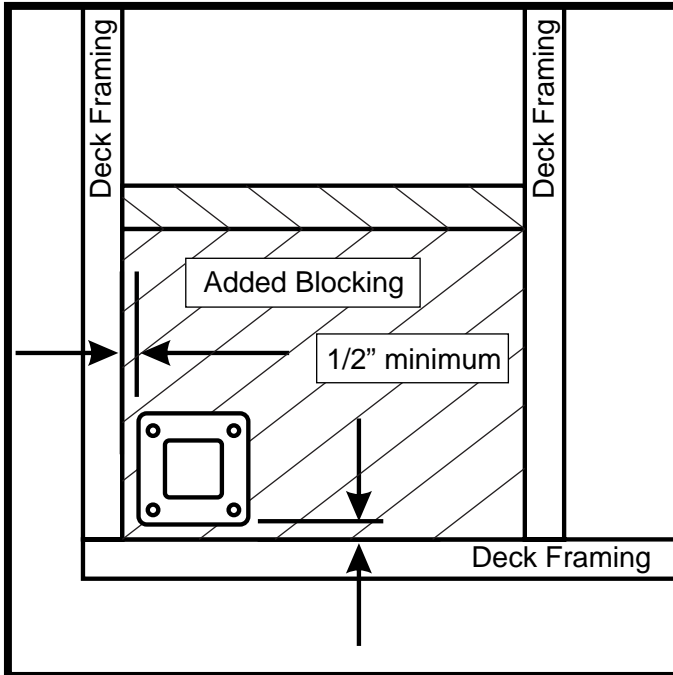
Adjustable Range from 25° to 37°



**IMPORTANT - Every stair installation will be different. The rise and run, post position, and post height all need to be carefully laid out before posts are permanently installed and Fortress Pure View Adjustable Panels are cut.**

### Mount Al<sup>13</sup> Posts\*

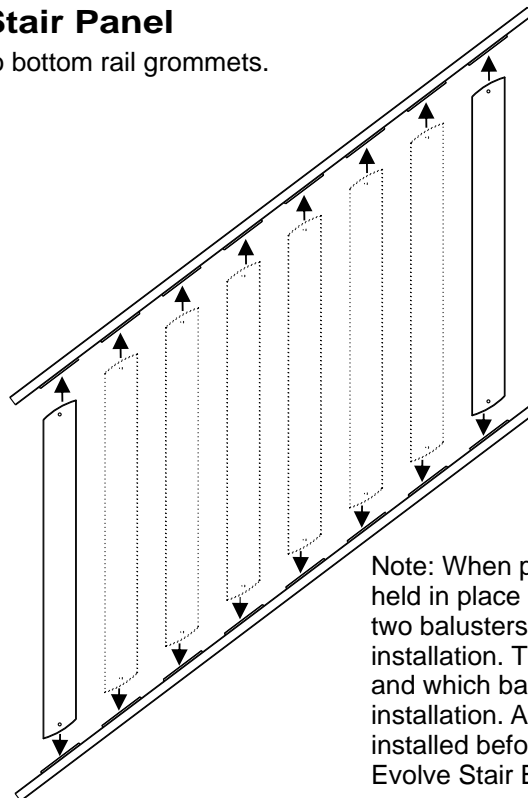
- Wood Blocking tied to deck frame must be installed and constructed with treated dimensional lumber with a minimum thickness of 1-1/2".
- Position the edge of post base plate a minimum of 1/2" from the inside edge of rim joist.
- Place included Base Plate Barrier between post base and deck surface.
- Mount posts at appropriate points based on panel length.
- Attach Al<sup>13</sup> posts with 3/8 X 3-1/2" Hex Head galvanized bolts.



\*Reference Fortress Al<sup>13</sup> Post mounting instructions

### Assemble Pure View Stair Panel

- Slip Al<sup>13</sup> Pure View Balusters into bottom rail grommets.



Note: When panel is installed, balusters will be held in place by the installed top and bottom rails. Only two balusters are needed to keep rails parallel during installation. The installer should determine how many and which balusters to use to allow for simplest installation. All balusters should be properly installed before rails are secured to Al<sup>13</sup> Evolve Stair Brackets in a later step.

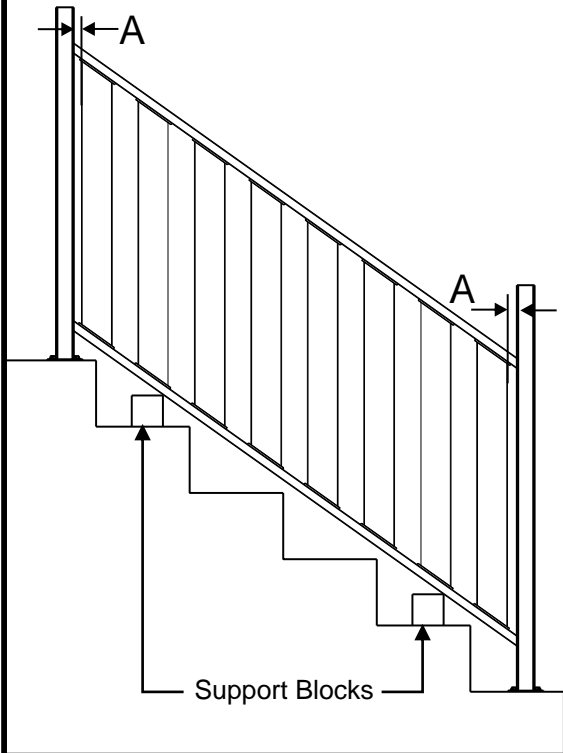
## Determine Rake and Center Pure View Rails Between AI<sup>13</sup> Posts

Use Pure View Rails to determine the angle of stair installation. To do this, use support blocks resting on the stair tread. Position support blocks so that the position of the bottom rail meets the spacing requirement of your building code.

Rake the assembled Pure View Railing system so that the balusters run parallel with the posts. Center the balusters so that there is an equal amount of rail between the post and baluster at each end (Dimension A).

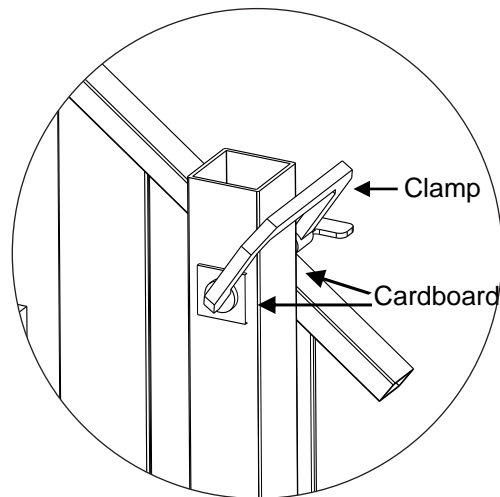
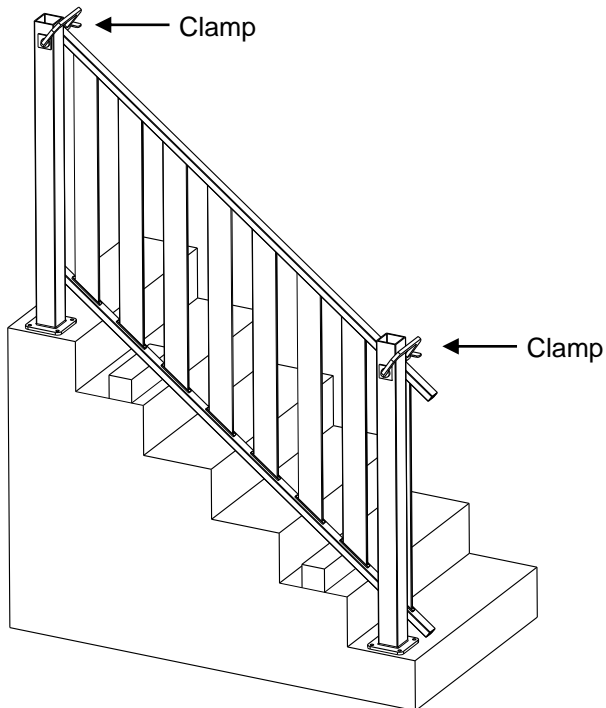
Make sure that there is a minimum distance of 2-1/2" between the post and first baluster to allow space for the bracket. The maximum allowable distance between the post and the first baluster is 3-15/16".

Mark location of support blocks on steps. Support Blocks will be used in a later step.



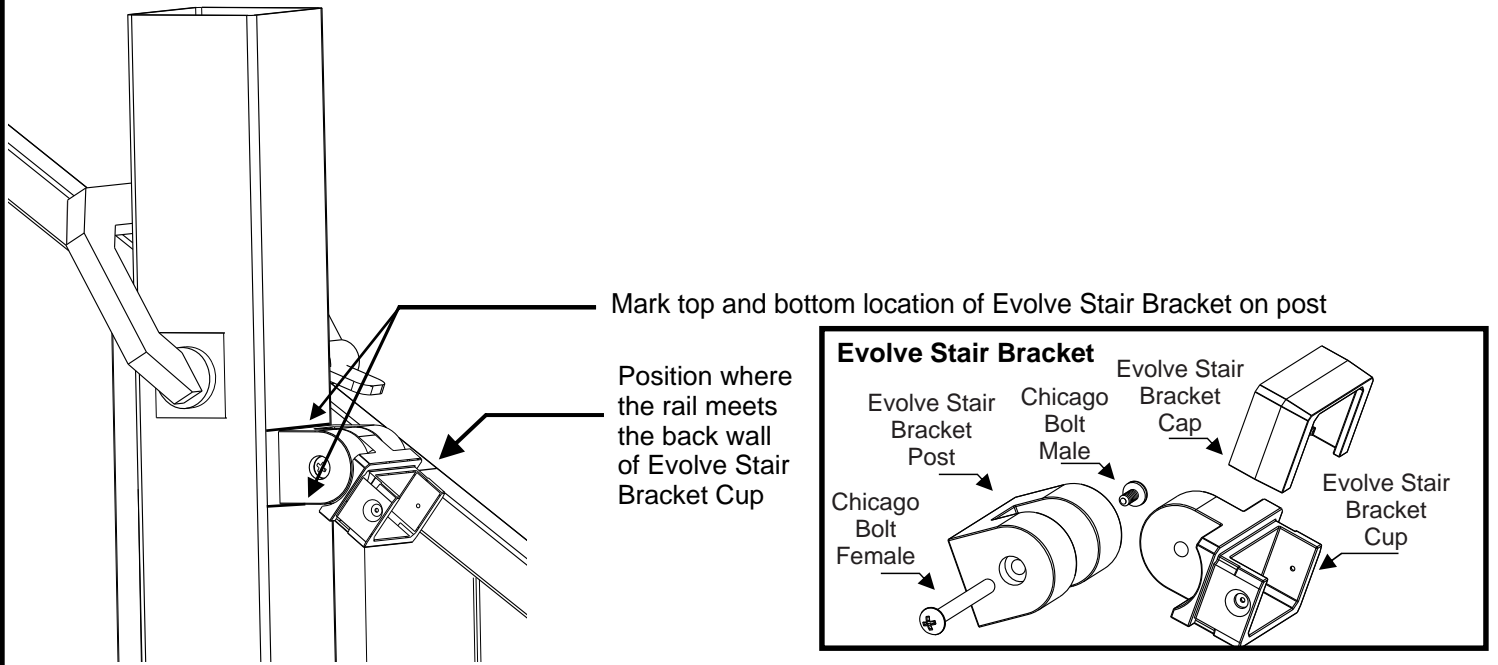
## Verify Pure View Pre-Slotted Rails Position and Secure with Clamps

- Verify the position of the AI<sup>13</sup> Pure View Pre-Slotted Rails. With the help of another person, secure the Pure View Pre-Slotted Rails into the correct position and secure with clamps to AI<sup>13</sup> Post.
- Place a piece of cardboard between the clamping surfaces and the surfaces of the rails and posts to protect the finish.



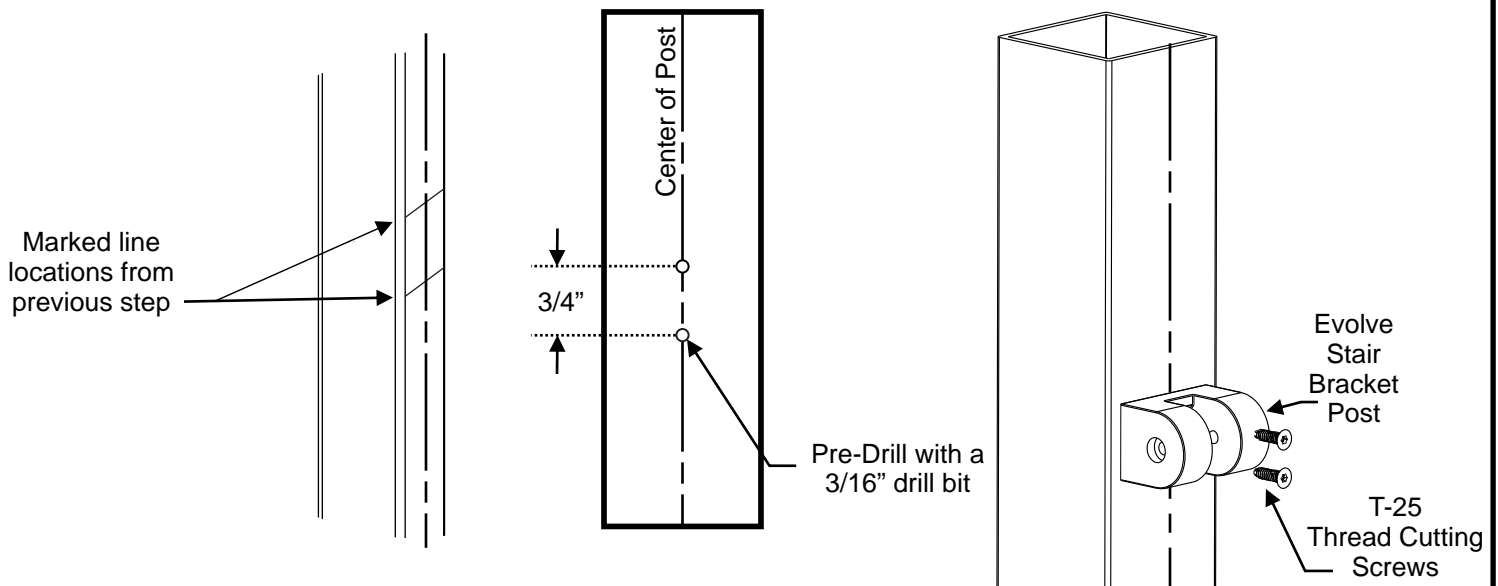
## Determine Evolve Stair Bracket Assembly Location and Mark Rail

- Do not install the Evolve Stair Bracket Cap at this time.
- Place the Evolve Stair Bracket Assembly against the Al<sup>13</sup> Post and position the Evolve Stair Bracket Cup so that it is parallel to the rail. With a pencil mark the position on the top of the rail where the rail meets the back wall of the Evolve Stair Bracket Cup. With the Evolve Stair Bracket in the same position, mark a horizontal line on the post right above and below the Evolve Stair Bracket.
- Repeat this step for all four Evolve Stair Bracket locations. In the next step, the Evolve Stair Bracket Assembly will be disassembled and placed between these lines so that hole locations can be marked and drilled.



## Pre-Drill and Install Evolve Stair Brackets to Al<sup>13</sup> Posts

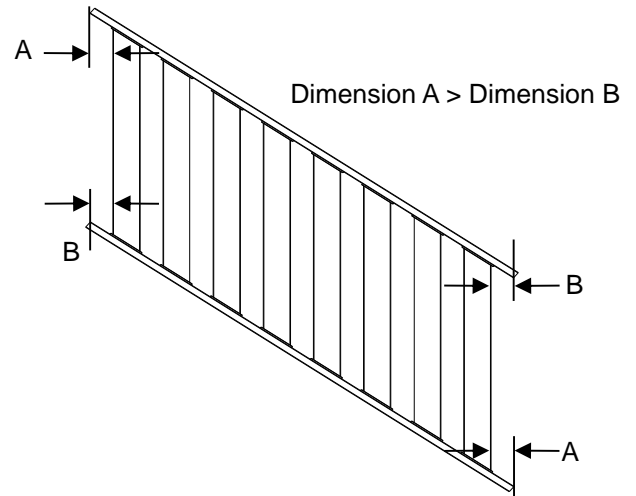
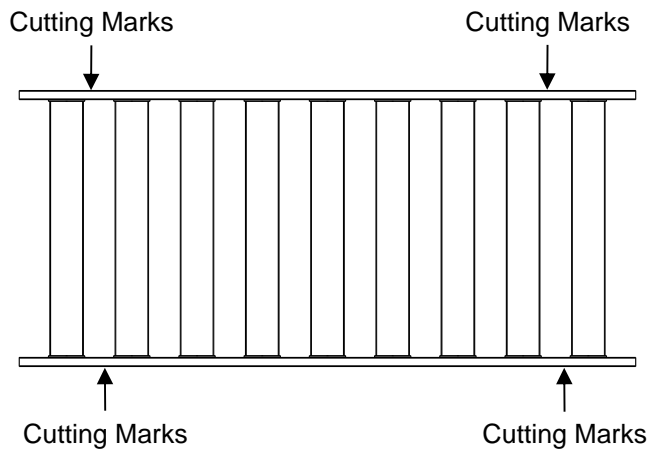
- Remove clamps and Pure View Rail Assembly.
- Mark the centerline of each post. The Evolve Stair Brackets will be installed on the centerline.
- Remove Chicago Bolt from the Evolve Stair Bracket Assembly.
- Place the Evolve Stair Bracket Post piece between the two lines drawn in the previous step and center it on the post.
- Use a 3/16" drill bit to pre-drill holes.
- Attach all Evolve Stair Bracket Post pieces to the posts with supplied T-25 thread cutting screws.
- Reinstall Evolve Stair Bracket Cup to Evolve Stair Bracket Post piece with Chicago Bolts
- **Remove all metal shavings from deck, post base cover, post, and panel before bracket is screwed to post.**





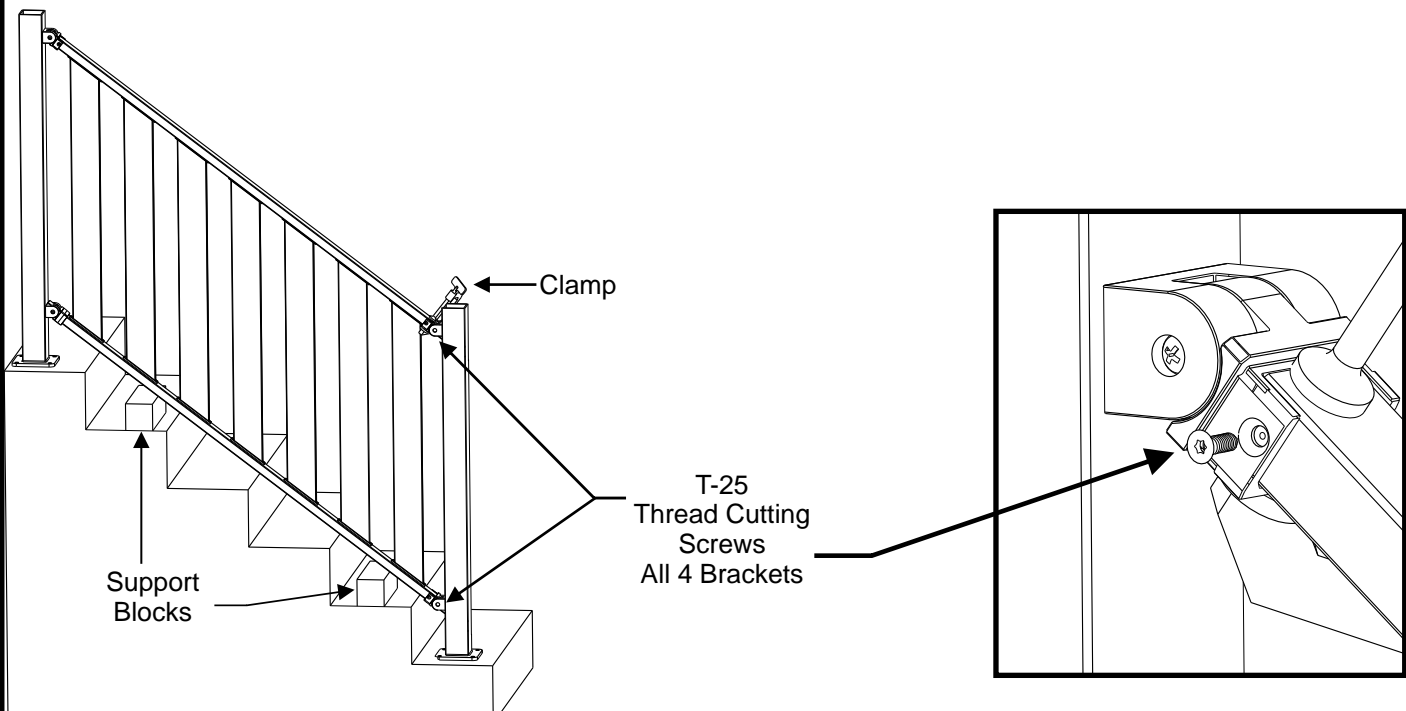
## Cutting Fortress AI<sup>13</sup> Railing Pure View Pre-Slotted Rails

- Using a metal cutting blade, cut the rail at the four cutting mark locations from previous step. It is advisable to make a practice cut on a scrap piece of rail before proceeding with the finish cuts.
- **The distances from the first baluster to the ends of the rail will be different from the top to bottom rail. The greater the angle of the steps, the more visible the difference will be. This is required in order to keep panel's balusters parallel to the post.**
- File and apply two coats of Fortress Zinc-based touch-up paint to all cut edges.



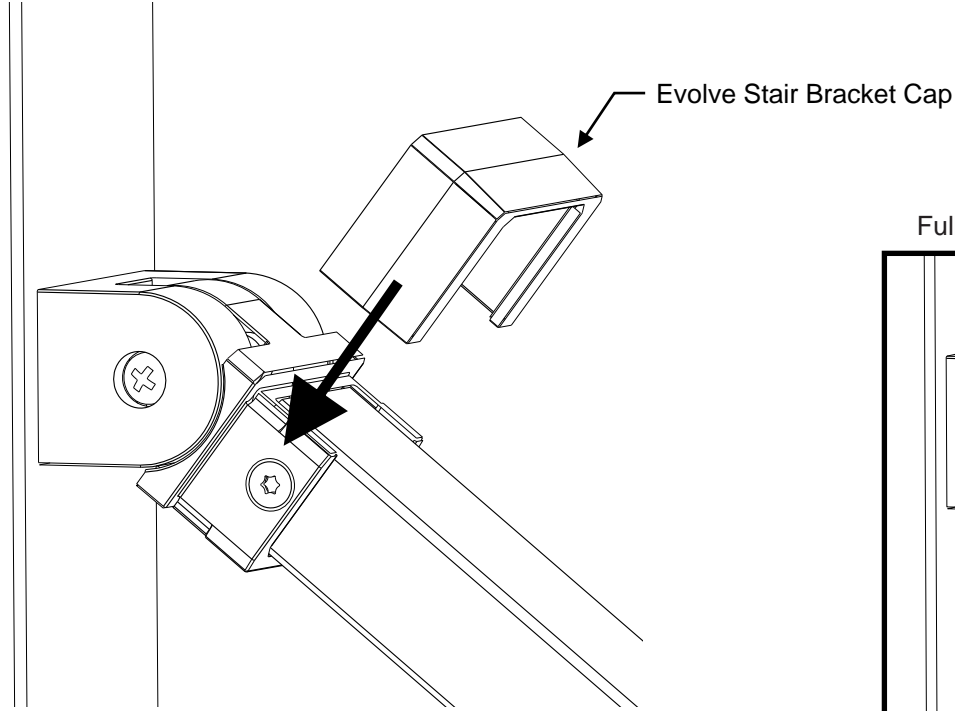
## Install Pure View Pre-Slotted Rail Assembly

- Reposition support blocks.
- Position the assembled Pure View Rail system so that it aligns with the Evolve Stair Brackets. Use a clamp to hold the Pure View Adjustable Panel in place.
- Check the fit of the Pure View Rail Assembly and make any required adjustments.
- Pre-drill Pure View Pre-Slotted Rails with a 3/16" drill bit, then secure to Evolve Stair Bracket with a T-25 thread cutting screw.

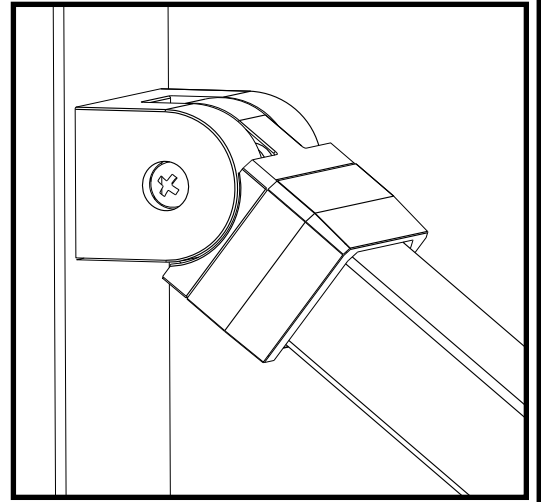


## Install Evolve Stair Bracket Caps

- Remove clamps, then install Evolve Stair Bracket Caps by snapping the Evolve Stair Bracket Cap into place.



Fully Installed Evolve Stair Bracket Cap



PURE  
VIEW

GLASS RAILING  
SIMPLIFIED

GLASS BALUSTER - OTHER



## Sandwich Method Glass Baluster Installation Instructions

1. Choose appropriate glass baluster for straight or stair application.
2. Measure the opening from post to post to determine length of baluster rail section. Cut top and bottom rails to appropriate length.
3. Place top and bottom rails side by side for accurate placement of Fortress Glass Balusters. Cut a 4" block to use in measuring and creating the necessary 4" on-center gap. Mark a point at the center of top and bottom rails. Place one end of the 4" block on the center point and mark your fastener point on other end of 4" block. Continue this through both ends of top and bottom rails.
4. Attach one bottom rail.
5. Attach one top rail.
6. Install glass baluster by attaching screws through pre-drilled holes of glass balusters then into top and bottom rail at marked points.
7. Repeat for all glass balusters in the section.
8. Attach another bottom rail to the other side of the bottom glass balusters to create the sandwich appearance for the bottom
9. Attach another top rail to the other side of the top glass balusters to create the sandwich appearance for the top.
10. Repeat process for each railing section.



# Installation Instructions for Fortress Pure View Glass Balusters with Pure View Nylon Mounting Shoes and Wood Rails

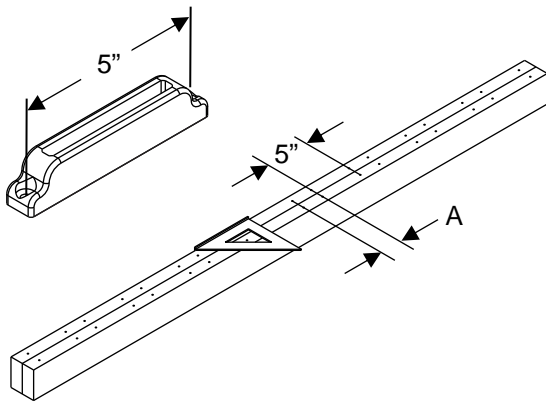
It is the responsibility of the installer to meet all code and safety requirements, and to obtain all required building permits. The deck and railing installer should determine and implement appropriate installation techniques for each installation situation. The Fortress Company nor its distributors shall not be held liable for improper or unsafe installations.

## Read Instructions Completely Before Starting Installation

### Required Materials

Saw, Drill, 1/16" Drill Bit, Phillips Driver Bit, Tape Measure, Pencil, Speed Square, Safety Glasses

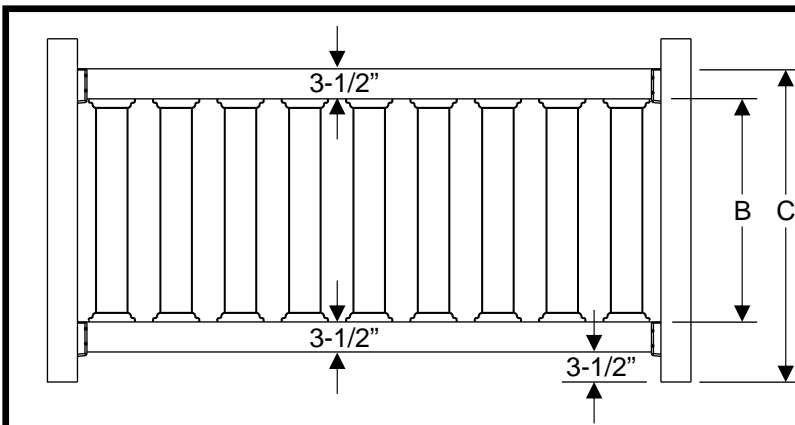
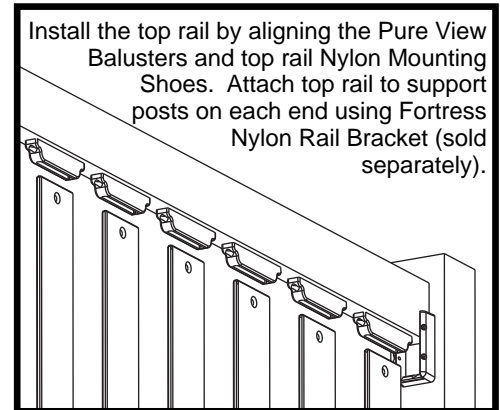
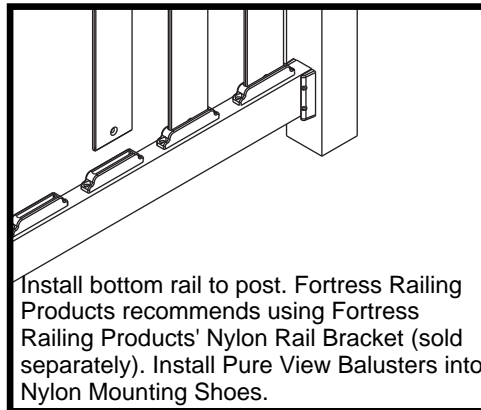
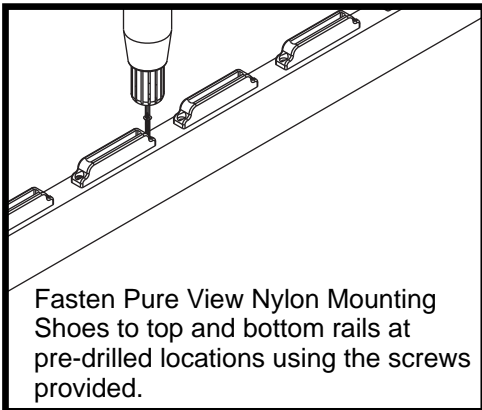
### Pure View Shoe Hole Layout



Cut Rails to required length. Place top and bottom 2x4 rails side by side for accurate placement of Fortress Pure View Nylon Mounting Shoes. **Fortress Pure View Glass Balusters CANNOT EXCEED 4" SPACING between balusters.** Mark layout on rails so that there is an equal distance between the first Pure View Baluster and the end of rail at each end. Using a square mark the location of each Pure View Nylon Mounting Shoe and pre-drill with a 1/16" drill bit.

#### Pure View Baluster Spacing

Dimension "A"	Space Between Balusters
2-1/2"	3-3/4"
2-5/8"	3-7/8"
2-3/4"	4"



#### Pure View Installed Rail Heights

Dimension "B"	Dimension "C" Top Rail Height with 3-1/2" Rails
26"	36-1/2"
34"	44-1/2"
40"	50-1/2"

# Installation Instructions for Fortress Pure View Glass Balusters with Pure View Nylon Mounting Shoes and Wood Rails

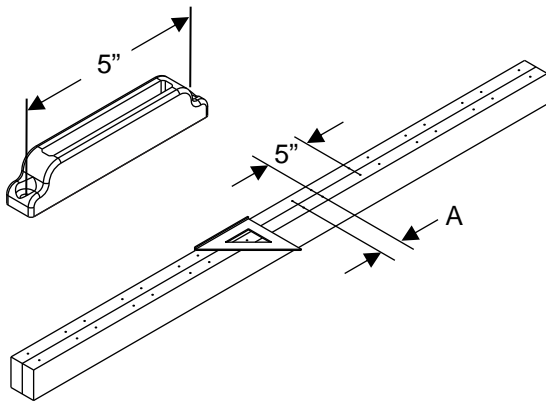
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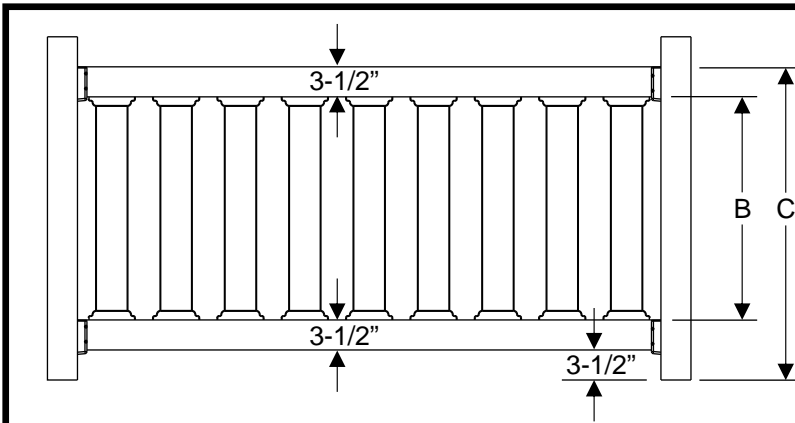
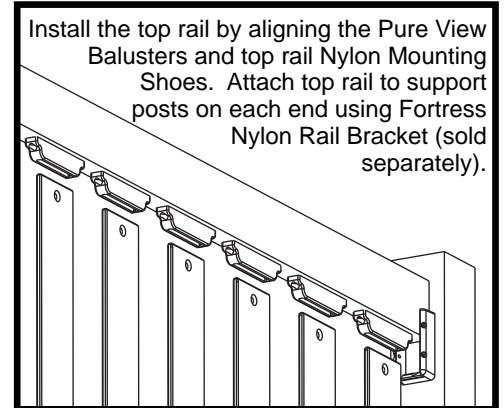
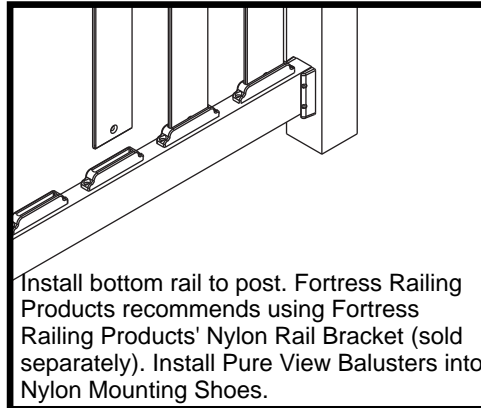
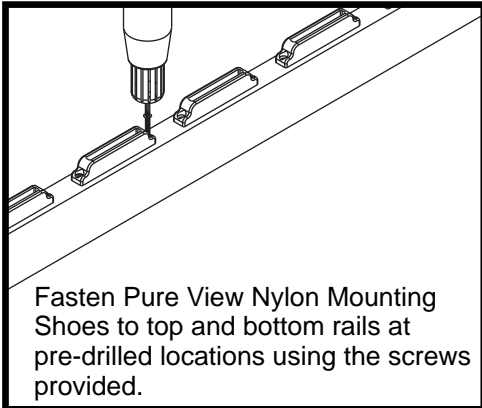
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