

# Installation Instructions for Fortress AI<sup>13</sup> HOME Traditional Panels with Straight Brackets and AI<sup>13</sup> HOME 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> HOME posts must always be secured to the deck framing. Fortress AI<sup>13</sup> HOME 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:

- 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 stains on the deck surface.

### Torx Safety Tips

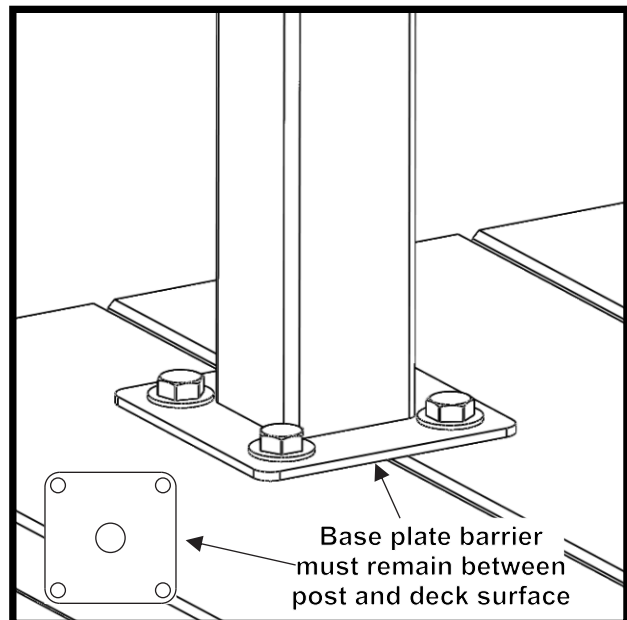
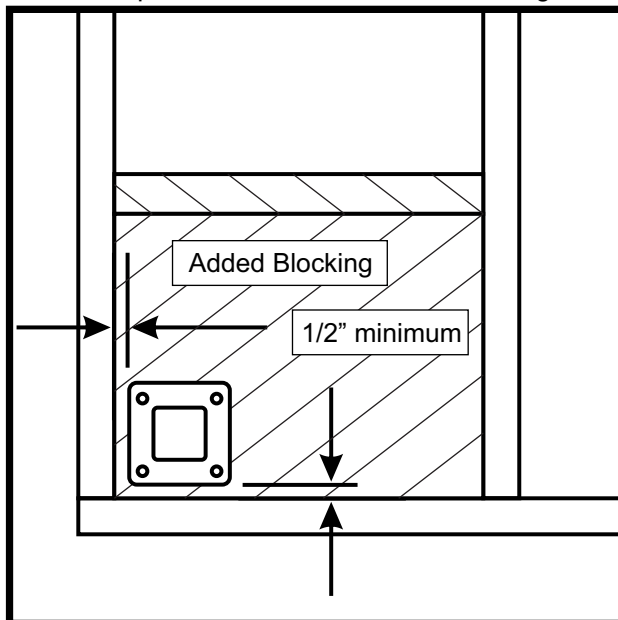
- Always use the lowest speed setting on drill.
- To reduce chance of bit breakage, start tightening with drill on low torque setting and work up until screw is secured.
- **Tip:** Pre-drill holes with 1/8" drill bit.

### Required Materials

Miter saw with carbide fine blade, T-25 driver bit, #2 phillips head screwdriver, #2 phillips head bit, 1/8" drill bit, 5/16" nut driver bit, bit extender, tape measure, socket set, speed square, touch up paint, crescent wrench, level, framing square, eye protection, and other personal protective equipment.

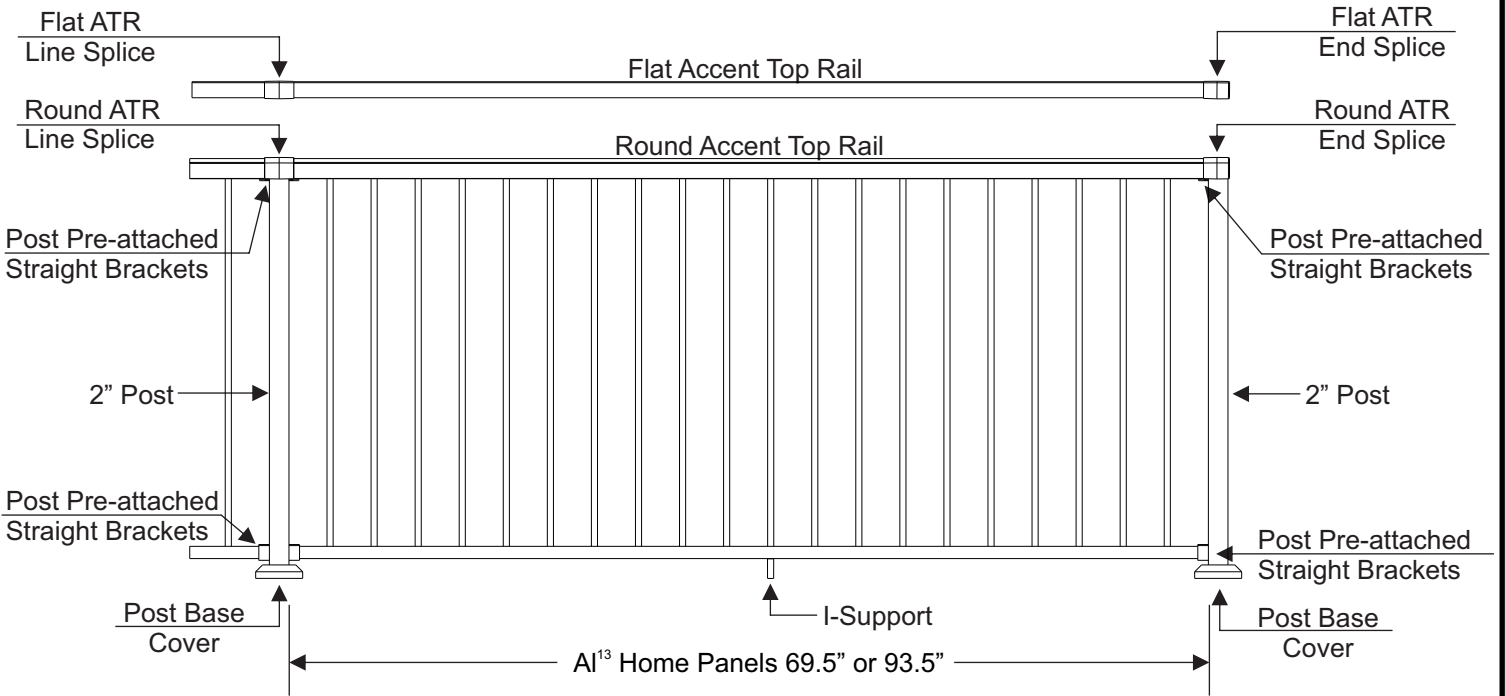
### Mount AI<sup>13</sup> HOME Posts\*

- 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 AI<sup>13</sup> HOME base plate a minimum of 1/2" from the inside edge of rim joist.
- Mount AI<sup>13</sup> HOME posts at appropriate points based on panel length.
- Attach AI<sup>13</sup> HOME posts with 3/8" X 3-1/2" hex head galvanized bolts.

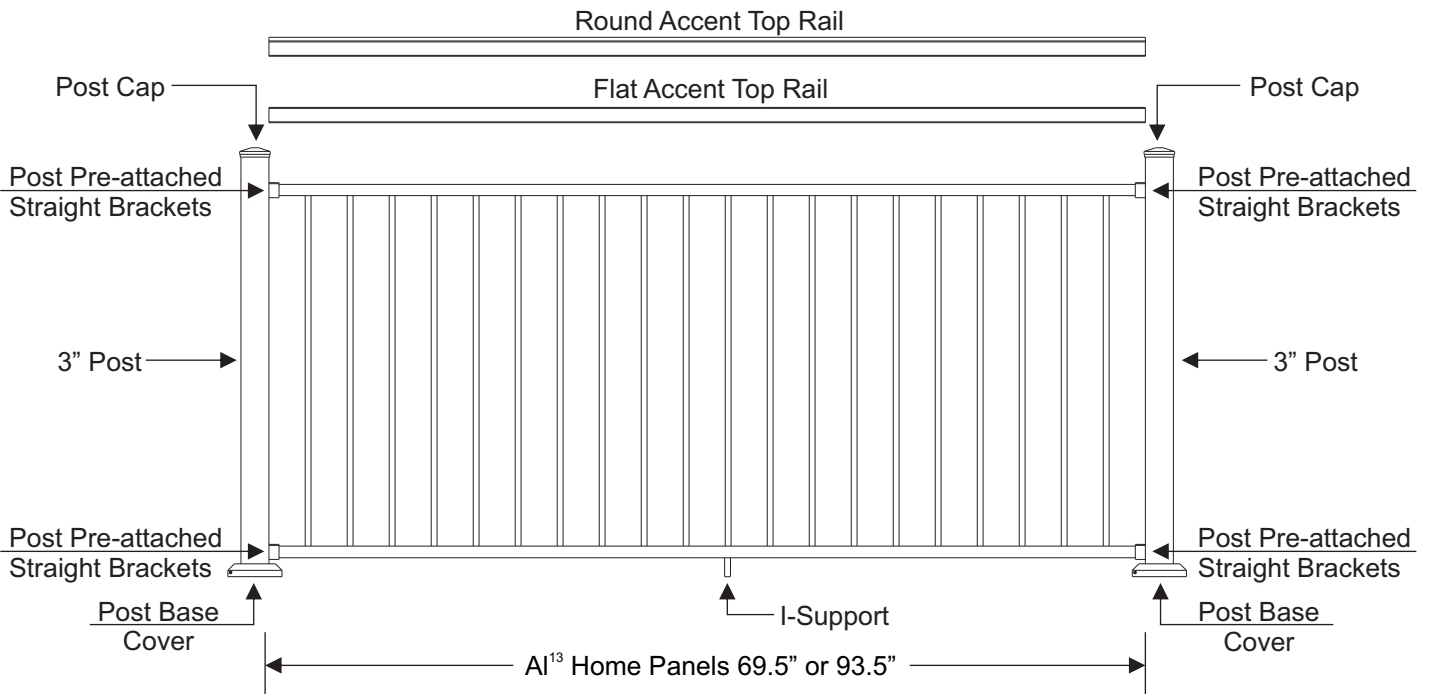


\*Reference Fortress AI<sup>13</sup> HOME post mounting instructions

## Option One: Over The Post (OTP)



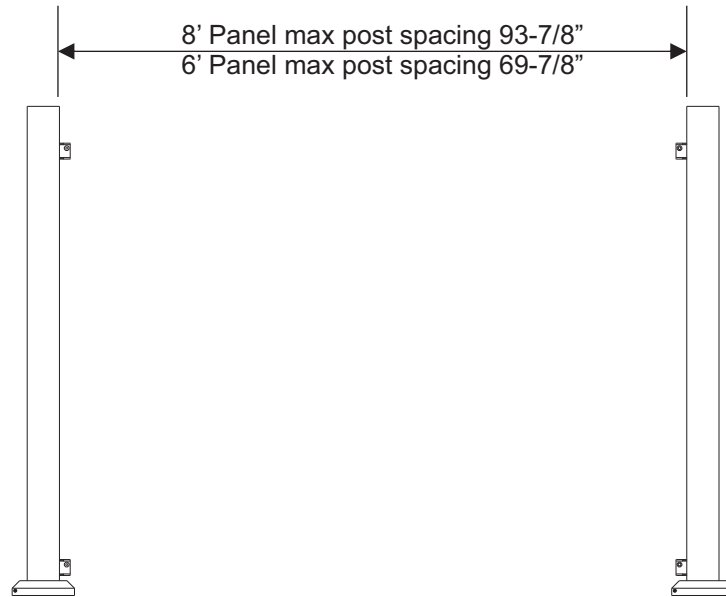
## Option Two: Proud Post



## OTP and Proud Post: Max Post Spacing

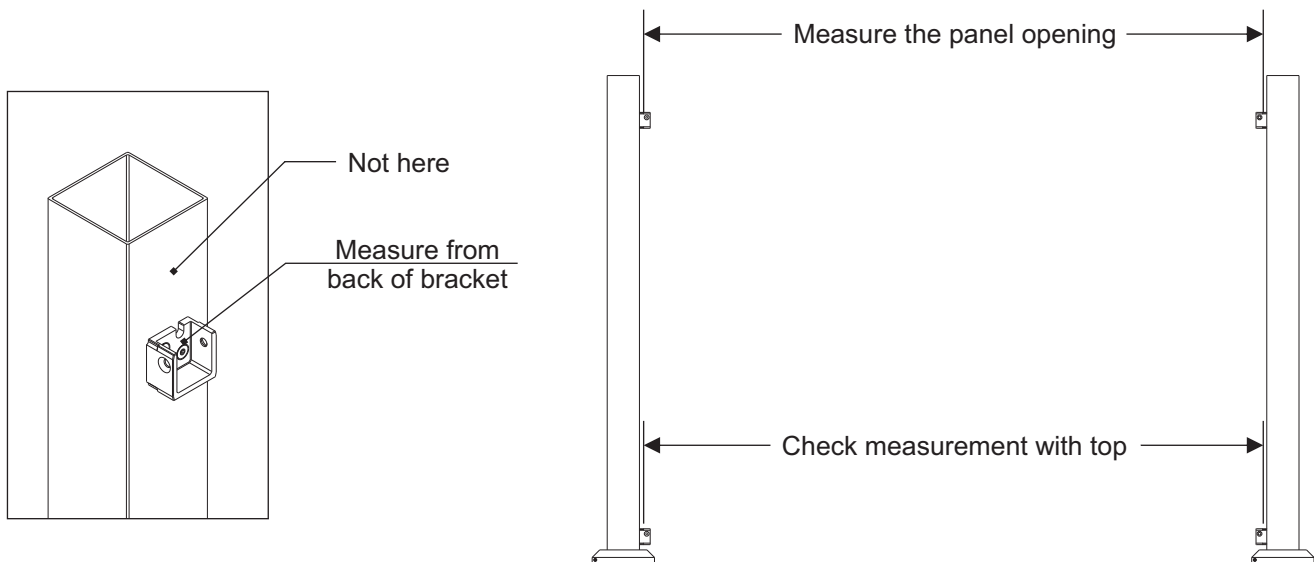
- 8' panel maximum post spacing is 93-7/8".
- 6' panel maximum post spacing is 69-7/8".

**Note: Do not exceed the maximum post spacing.**



## OTP and Proud Post: Measuring The Panel Opening Length

- Measure the distance of the panel opening.
- Measure from the back wall of the bracket to the back wall of the bracket on other post.
- Confirm that the measurements for the top brackets are the same as the bottom brackets.

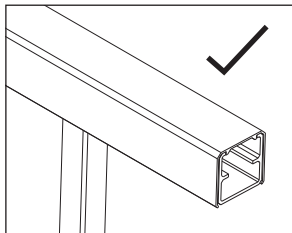
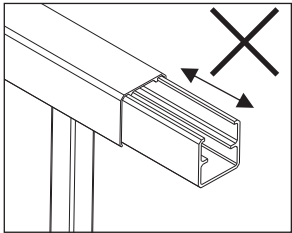
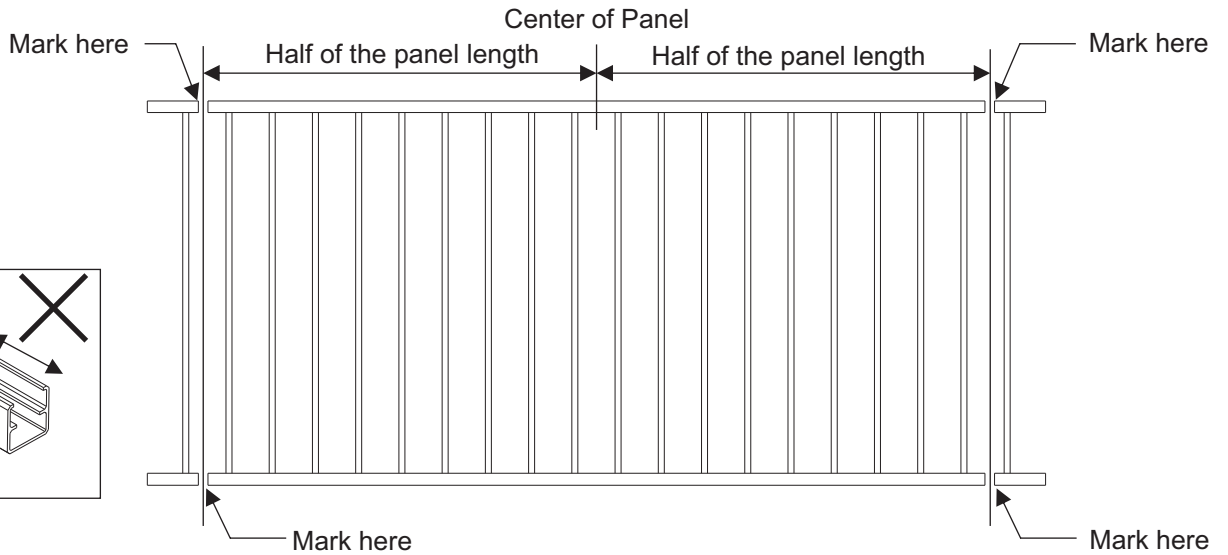


## OTP and Proud Post: Cut Down Panel to Correct Length

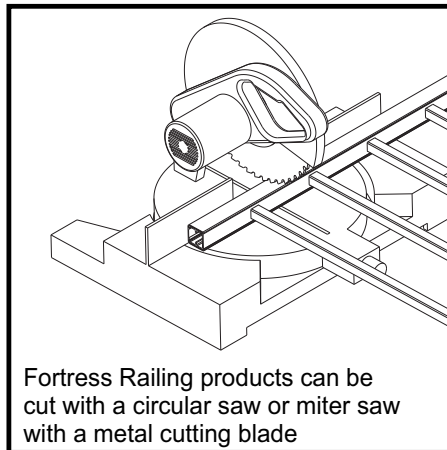
- To insure both ends of the panel look the same, divide the bracket to bracket measurement by 2 to find half of the panel length.
- Find the center of the panel and measure out half of the length each direction.
- Mark these locations with a paint pen or other tool on the top and bottom rail.

**If installing an Over The Post railing continue on page 5.**

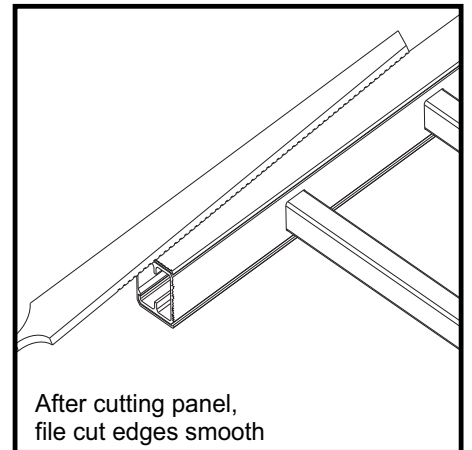
**If installing a Proud Post railing continue on to page 9.**



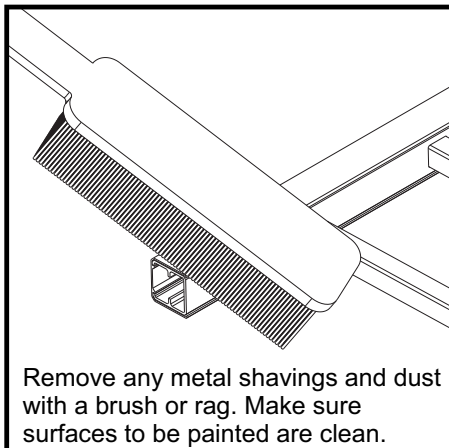
**\*Top rail cover can slide\***  
Make sure the cover lines up with the end of the rail before cutting down the panel



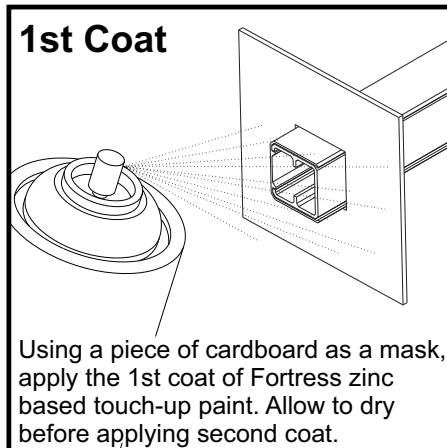
Fortress Railing products can be cut with a circular saw or miter saw with a metal cutting blade



After cutting panel, file cut edges smooth

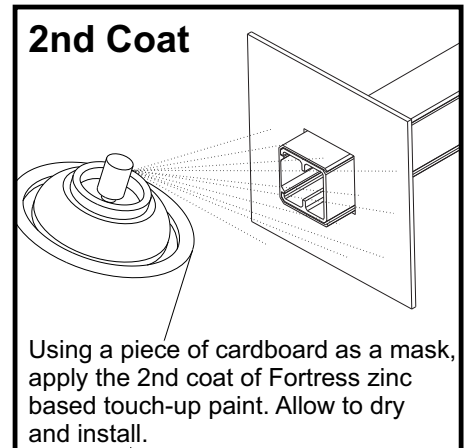


Remove any metal shavings and dust with a brush or rag. Make sure surfaces to be painted are clean.



**1st Coat**

Using a piece of cardboard as a mask, apply the 1st coat of Fortress zinc based touch-up paint. Allow to dry before applying second coat.

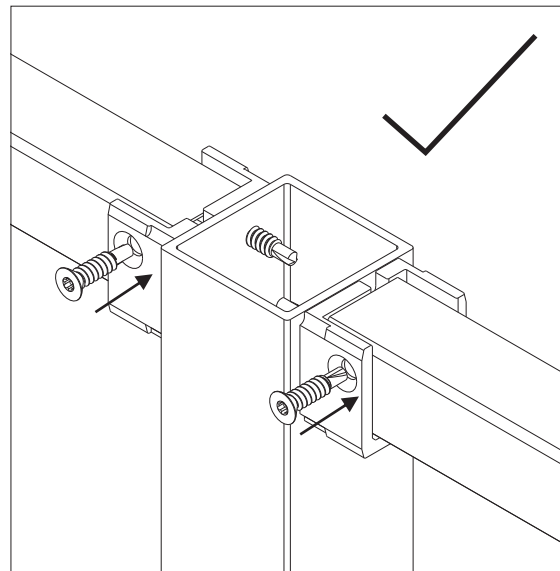
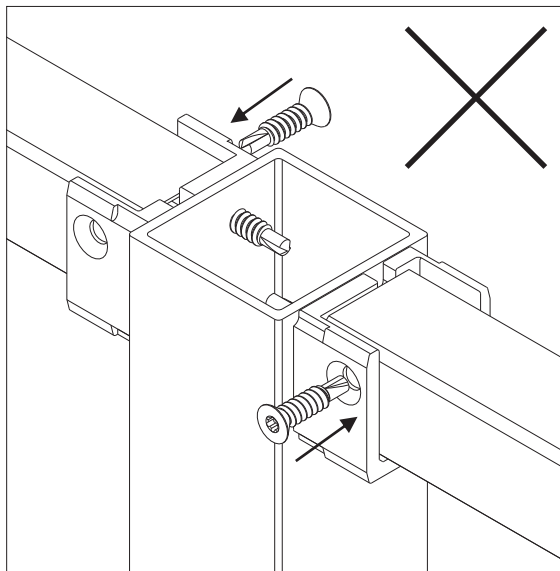
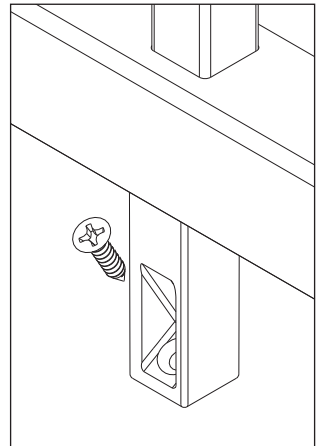
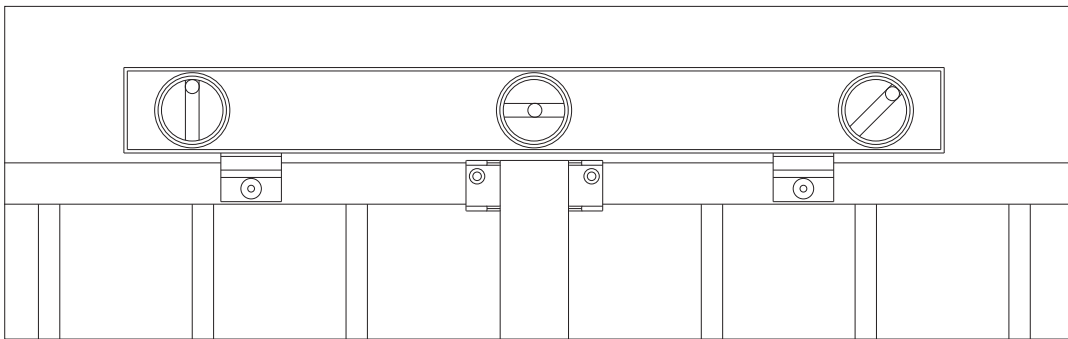
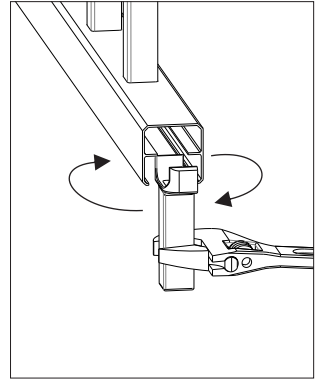
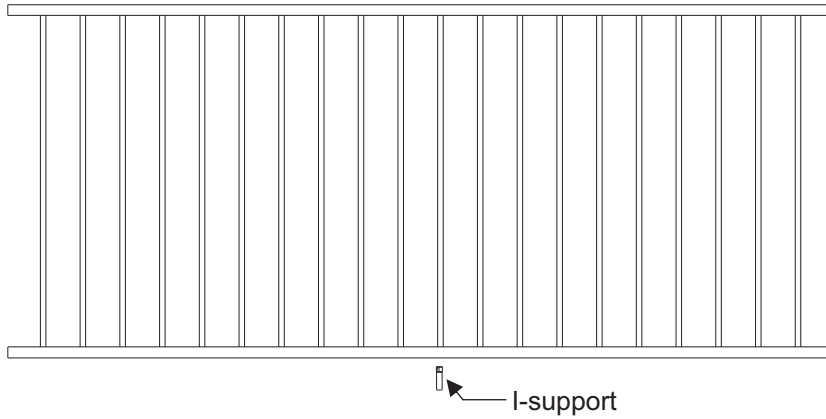


**2nd Coat**

Using a piece of cardboard as a mask, apply the 2nd coat of Fortress zinc based touch-up paint. Allow to dry and install.

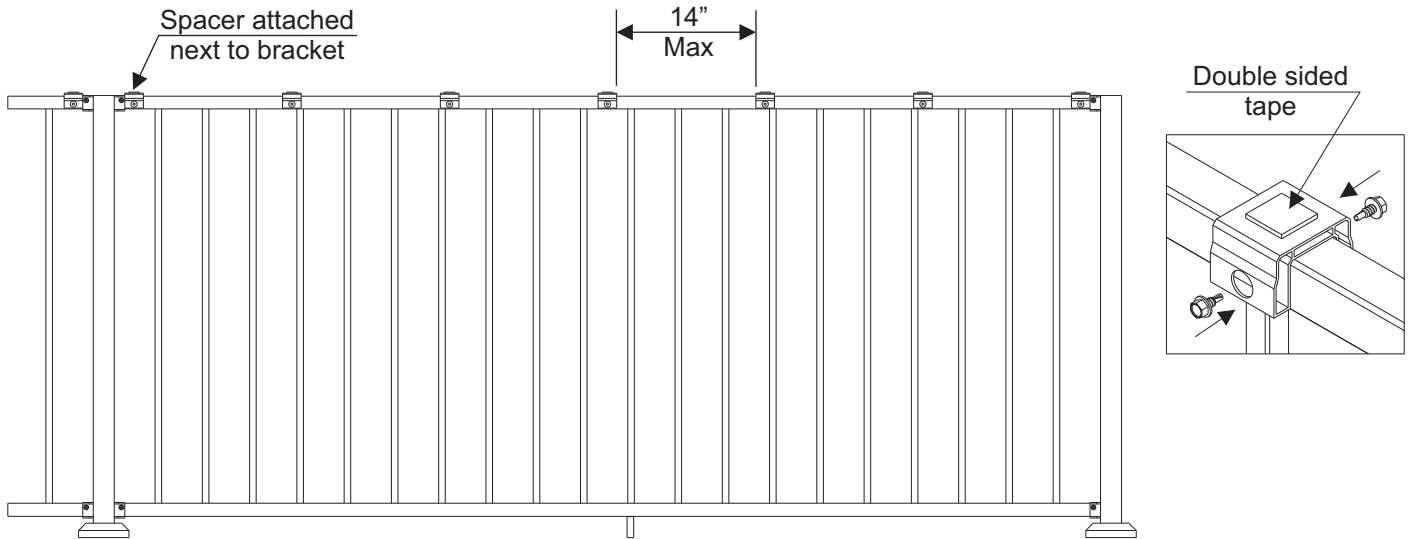
## Over the Post: Installing the Panel & I-Support

- Install the panel I-support by twisting it into the center of the bottom rail directly under a baluster. Position the I-support so the attachment screw can be easily installed on the deck.
  - Insure that all panels are at the same height before attaching them to the post. The use of an ATR spacer or block might be needed to measure over a post. See the images below.
  - It is recommended that all panels are attached with provided screws on the same side of the bracket when using a line post.
  - Attach the panel to each of the 4 brackets using the provided self-drilling screw with a T25 bit.
- Tip:** Pre-drill with a 1/8" drill bit.



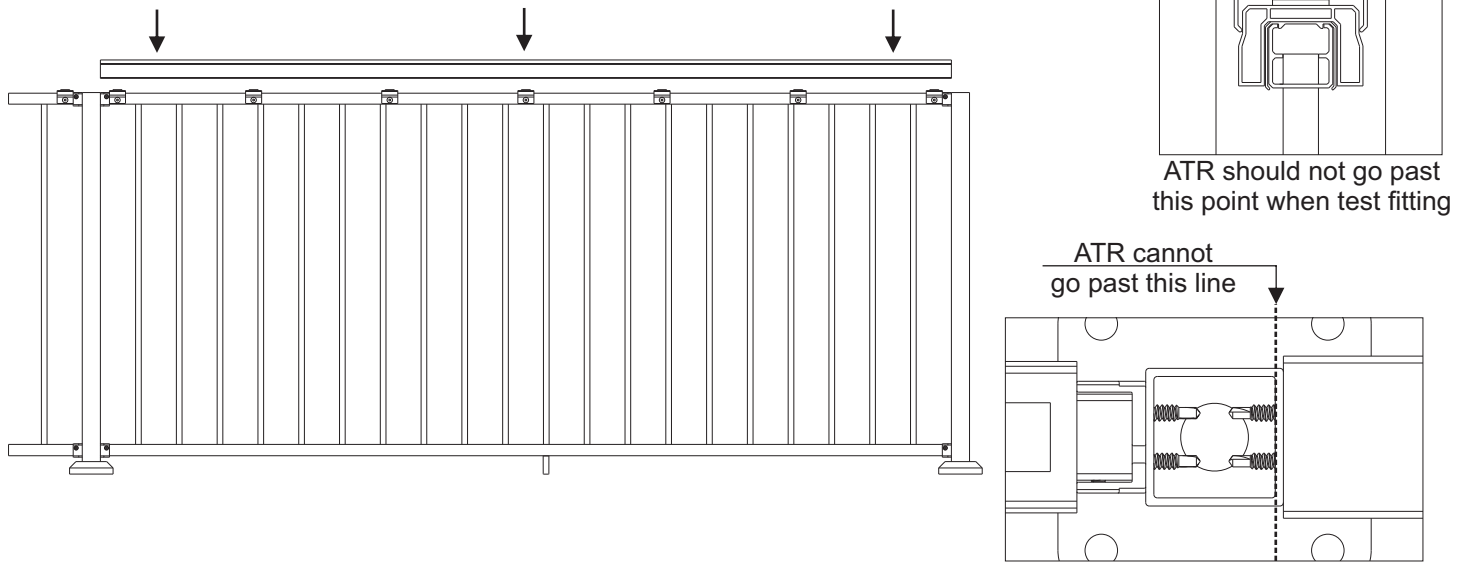
## Over the Post: Accent Top Rail (ATR) Spacers

- The accent top rail kit comes with 7 spacers in the 93.89" Kit and 6 spacers in the 69.89" Kit.
- The spacers should be equally spaced along the length of the rail, with no more than 14" spacing between them.
- The end spacers should be placed as close to the end brackets as possible.
- Attach spacers using provided self-drilling screws with a 5/16" nut driver. Two screws per spacer.
- **Do not remove backing of double sided tape until you are ready to permanently attach the ATR.**



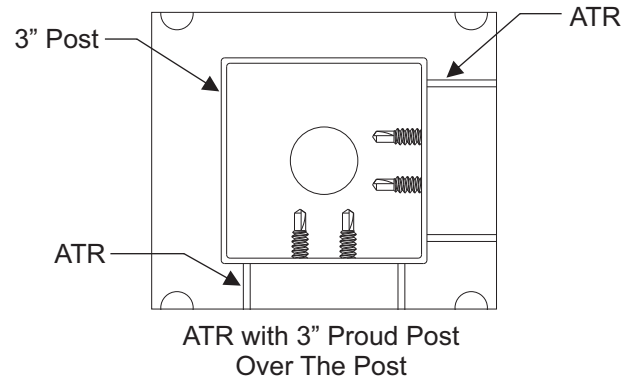
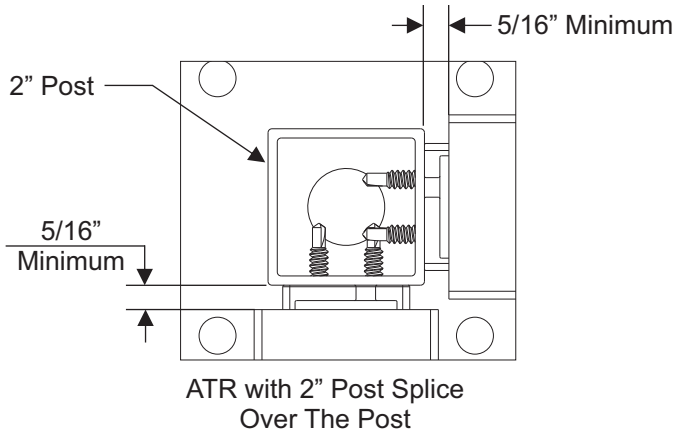
## Over the Post: Accent Top Rail Line and End

- Measure the distance from the inside edge of the 2 posts.
- Cut the ATR to this length using the same steps as used for cutting down a panel.
- The ATR cannot block the inside edge of the post.
- When test fitting the ATR, place on top of the spacers. **Do not** press the ATR down over the spacers. Removing the ATR from the spacers can damage the ATR and spacers.
- Remove the backing of all of the double-sided tape on the ATR spacers.
- Using force, the ATR snaps down around the ATR spacer.
- **See next page for corner ATR installation.**



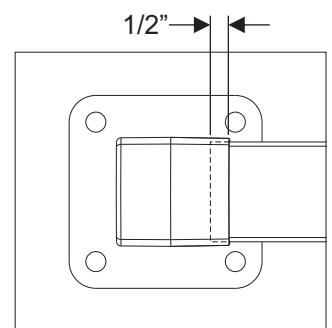
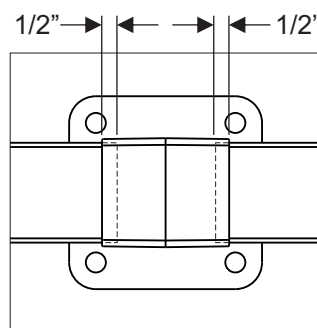
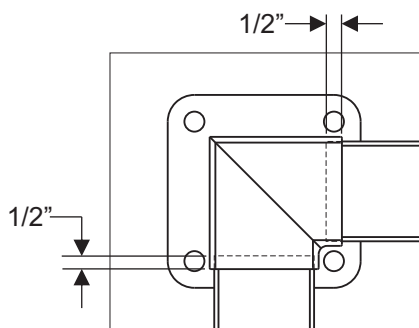
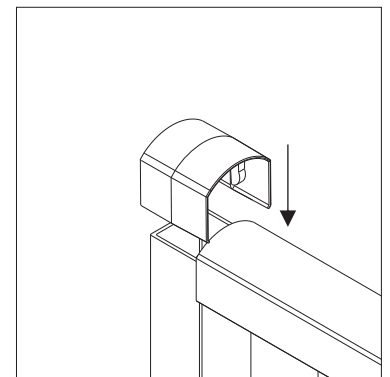
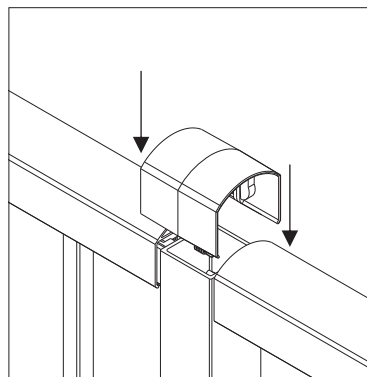
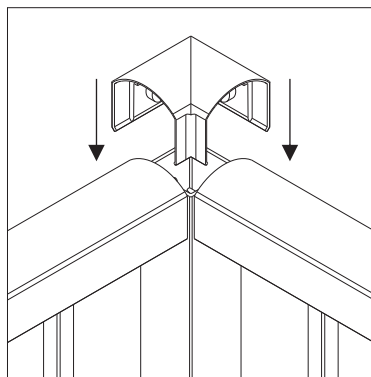
## Over the Post: Accent Top Rail Corner

- When installing ATRs on corners with a 2" post, the ATR must be 5/16" away from the post.
- If installing a corner with a 3" proud post, install the ATR at full length from the inside edge of the post to the inside edge of the post.



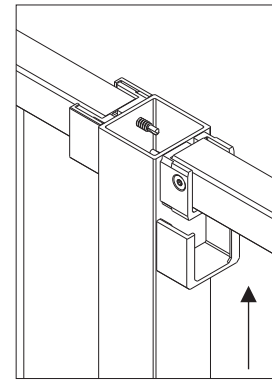
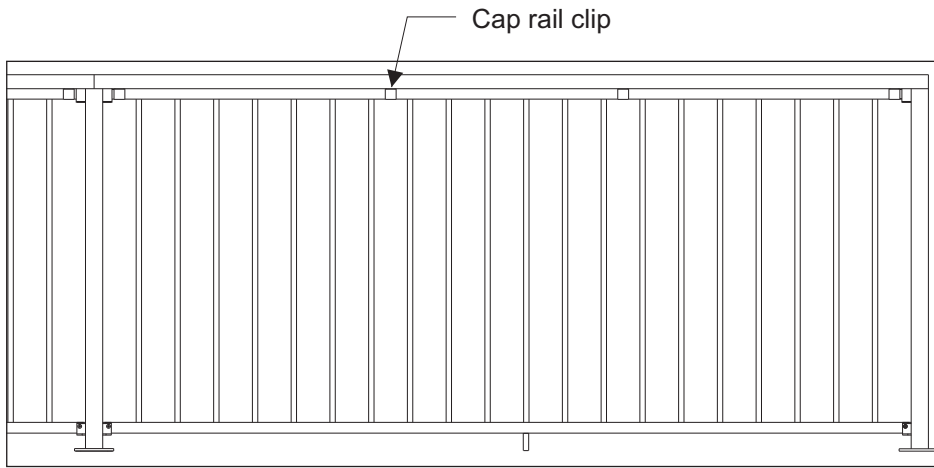
## Over the Post: ATR Splice

- ATR splices reference the inside of the post and snap down around the ATR.
- ATR splices allow up to 1/2" of length variation from the edge of the post.
- To install a ATR splice: Center the splice over the post and with force press down over the ATR.
- A mallet might need to be used to instal. If using a mallet, use a cloth to protect the splice from damage.

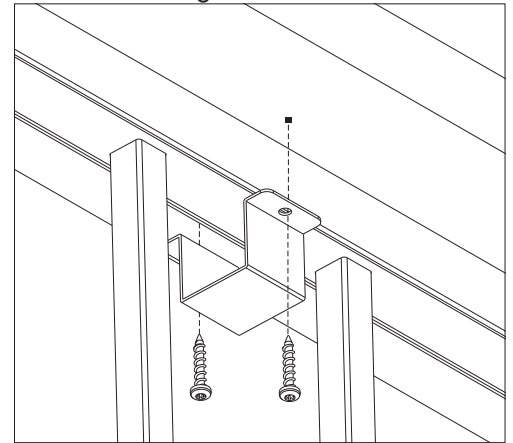


### Over the Post: Cap Rail Clips

- Install top rail bracket covers that come with the cap rail clips.
- Use cap rail clips when installing a drink rail.
- Cap rail clips should be equally spaced over the panel length.
- It is recommended to pre-drill the screw holes especially if the drink is a composite rail.

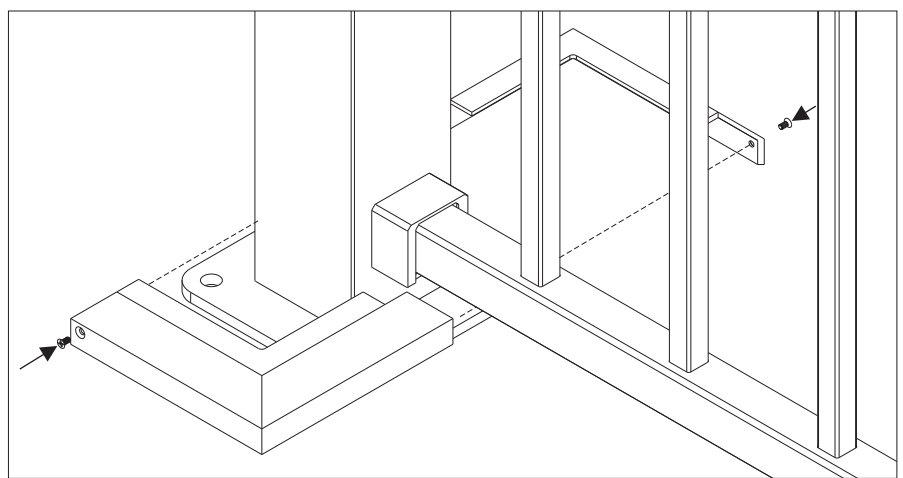
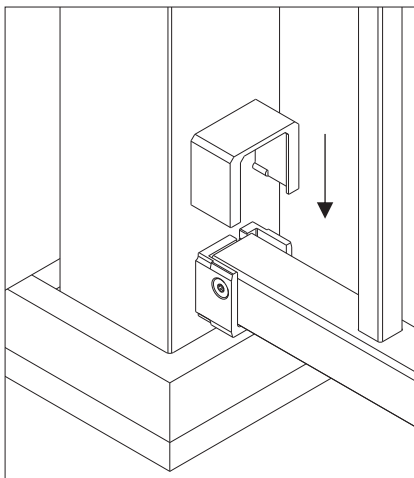


Top cap installation when installing a drink rail



### Over The Post: Bracket Cover and Post Base Cover

- Bracket caps snap down over bracket cups.
- Use a #2 phillips head screw driver to attach the two halves of the post base cover.
- Use a broom or compressor to remove debris from railing and deck surface.

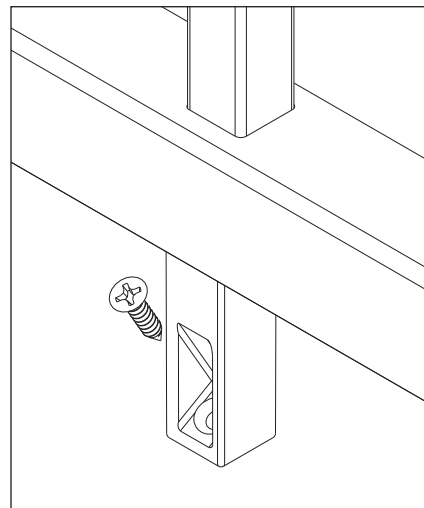
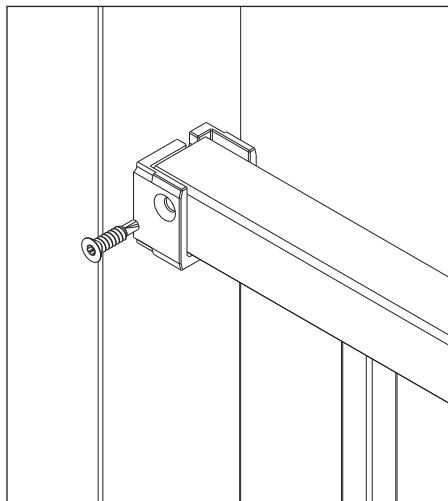
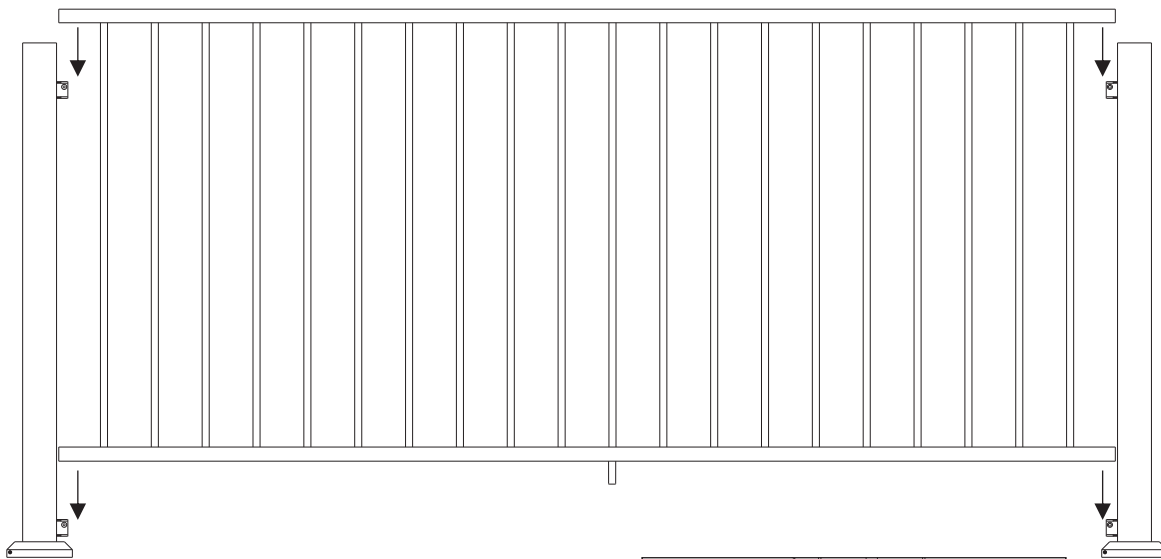
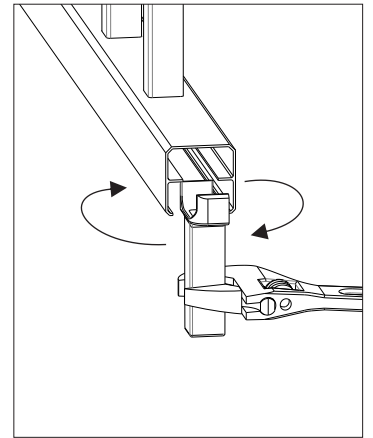
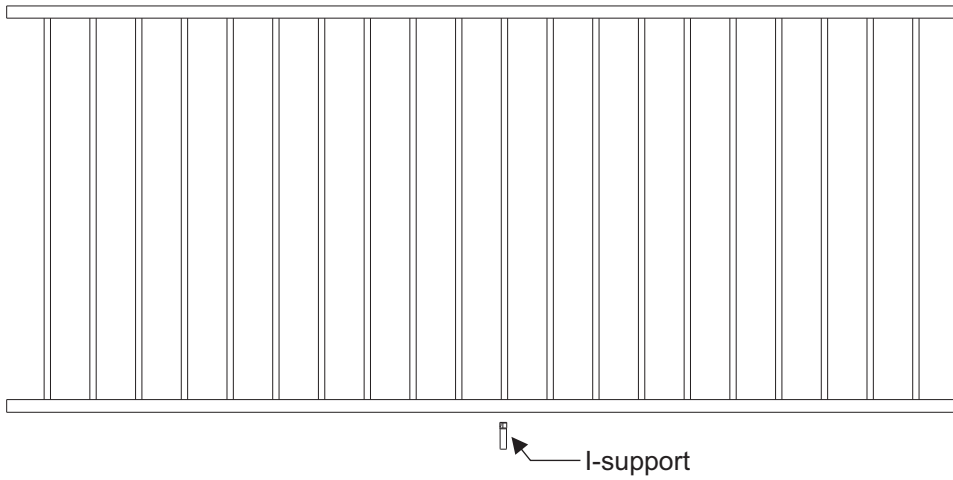


**End of AI<sup>13</sup> HOME Over The Post Installation**



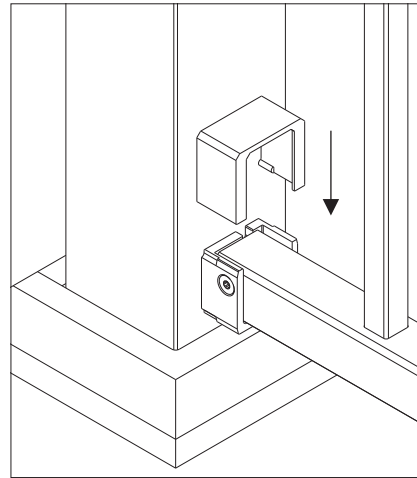
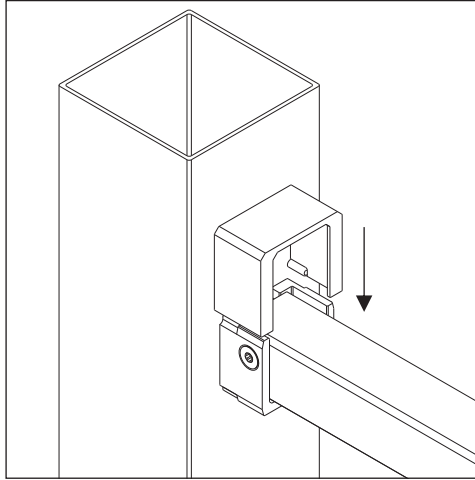
## Proud Post: Installing the Panel & I-Support

- Install the panel I-support by twisting it into the center of the bottom rail directly under a baluster. Position the I-support so the attachment screw can be easily installed on the deck.
- Attach the panel to each of the 4 brackets using the provided self-drilling screw with a T25 bit.  
**Tip:** Pre-drill with a 1/8" drill bit.
- Attach the panel I-support to the deck surface using the provided phillips head screw.



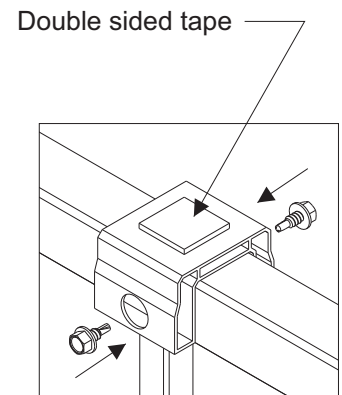
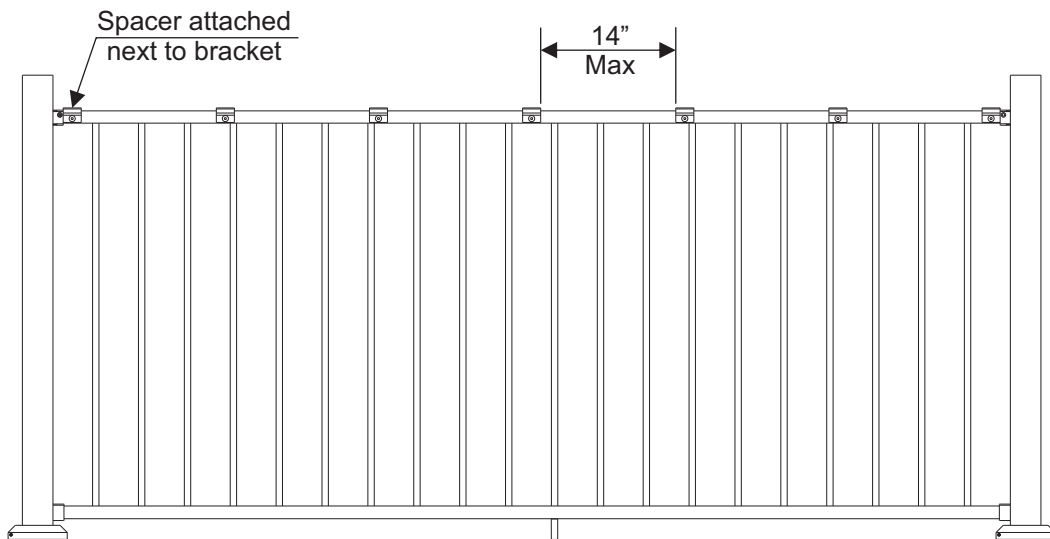
## Proud Post: Bracket Caps

- Bracket caps snap down over bracket cups.
- If you are installing a drink rail using the cap rail clips, the cap is installed under the bracket. See page 11 for details.
- The top bracket cap can be installed when using an ATR, but is not required to be installed.



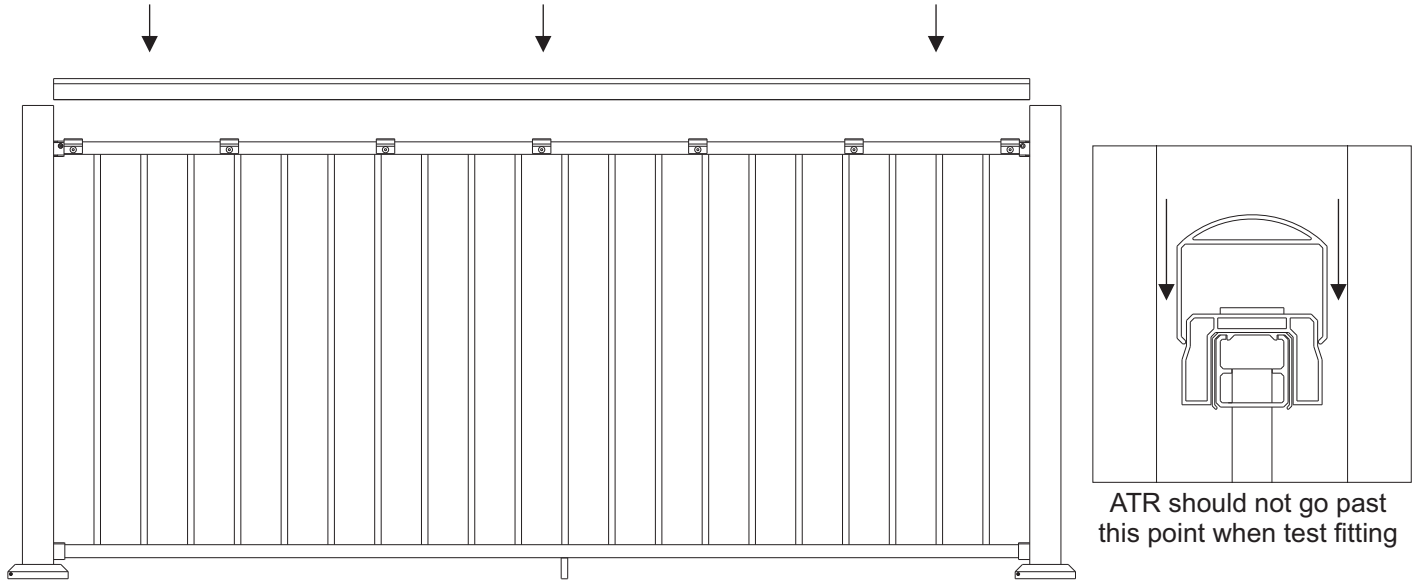
## Proud Post: Accent Top Rail Spacers

- The accent top rail kit comes with 7 spacers in the 93.89" Kit and 6 spacers in the 69.89" Kit.
- The spacers should be equally spaced along the length of the rail, with no more than 14" spacing between them.
- The end spacers should be placed as close to the end brackets as possible.
- Attach spacers using provided self-drilling screws with a 5/16" nut driver. Two screws per spacer.
- **Do not remove backing of double sided tape until you are ready to permanently attach the ATR.**



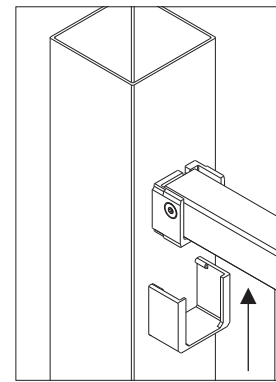
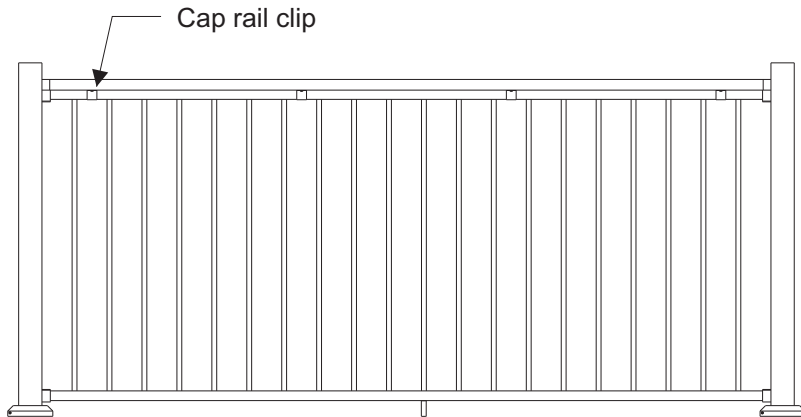
## Proud Post: Installing Accent Top Rail

- Measure the distance from the inside edge of the 2 posts.
- Cut the ATR to this length using the same steps as used for cutting down a panel.
- When test fitting the ATR, place it on top of the spacers. **Do not** press the ATR down over the spacers. Removing the ATR from the spacers can damage the ATR and spacers.
- Remove the backing of all of the double-sided tape on the ATR spacers.
- Using force, the ATR snaps down around the ATR spacer.

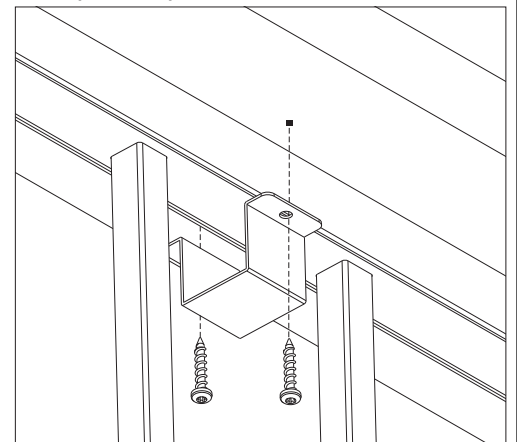


## Proud Post: Cap Rail Clips

- Use cap rail clips when installing a drink rail.
- Cap rail clips should be equally spaced over the panel length.
- It is recommended to pre-drill the screw holes especially if the drink will be a composite rail.

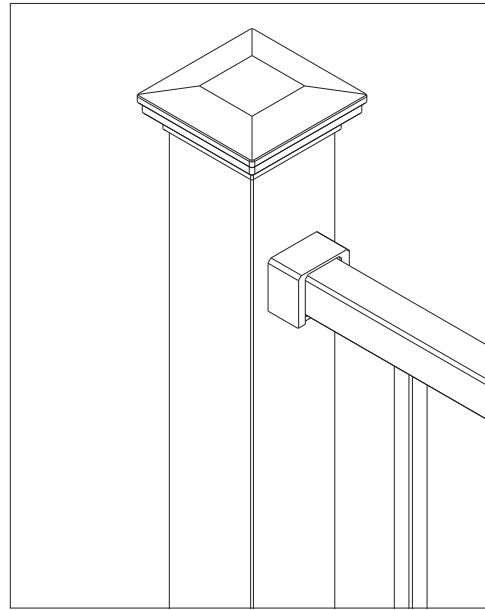
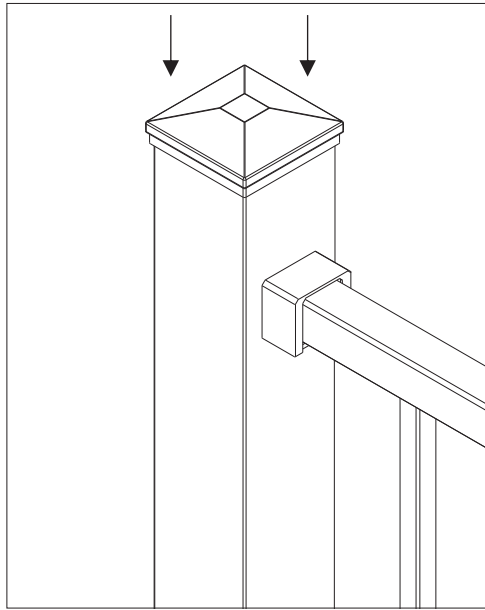


Top cap installation when using cap rail clips to install a drink rail



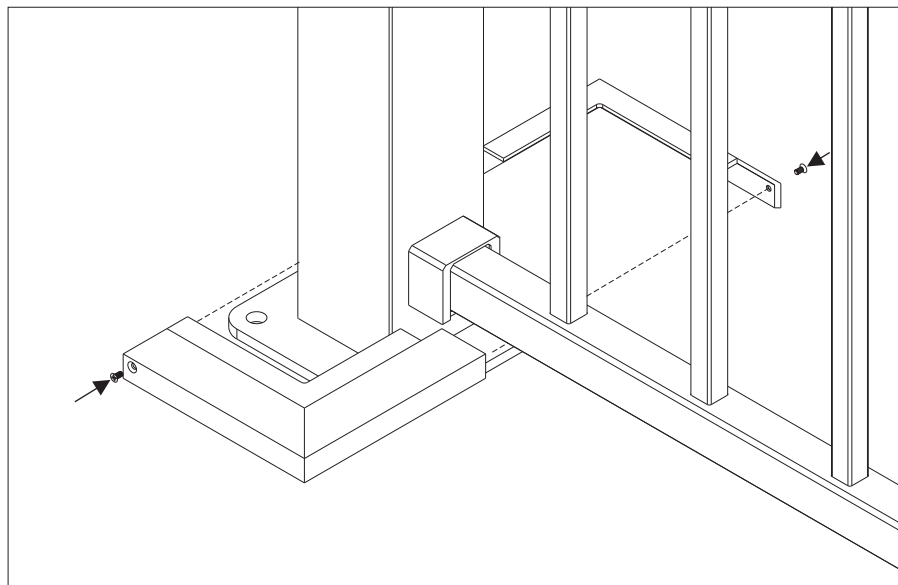
## Proud Post: AI<sup>13</sup> HOME Post Cap

- AI<sup>13</sup> HOME post cap is press fit into place.
- Follow the Fortress accents Instructions for fitting the post cap.



## Proud Post: AI<sup>13</sup> HOME Post Base Cover

- Use a #2 phillips head screw driver to attach the two halves of the post base cover.
- Use a broom or compressor to remove debris from railing and deck surface.



**End of AI<sup>13</sup> HOME Proud Post Installation**