

Installation Instructions for Fortress AI¹³ HOME Traditional Panels with Straight Brackets and AI¹³ 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 AI¹³ HOME posts must always be secured to the deck framing. Fortress AI¹³ 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 installing.
- 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

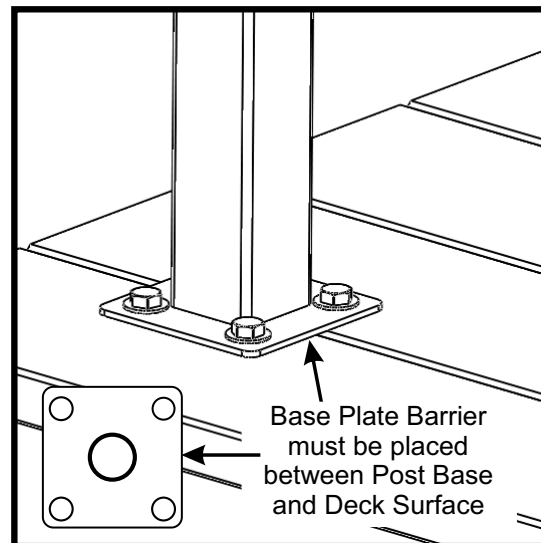
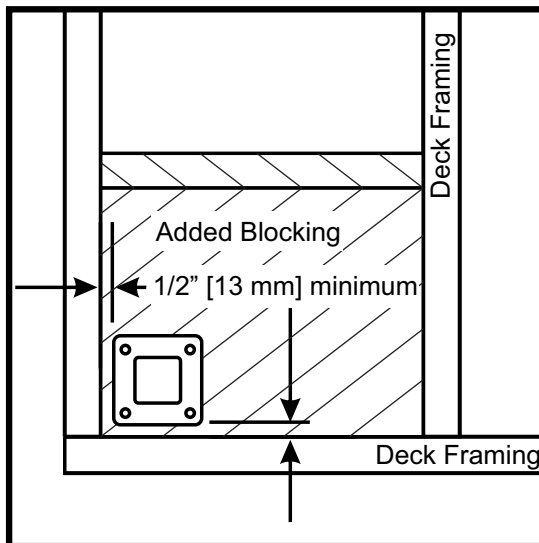
- Always use the lowest speed setting on drill.
- To reduce chance of bit breakage, start tightening with drill on low torque setting and work up until screw is secured.
- **Tip:** Pre-drill holes with 3/16" [4.5 mm] drill bit.

Required Materials

Miter saw with carbide fine tooth blade, reciprocating saw or portable band saw, T-25 driver bits, #2 phillips head screwdriver, #2 phillips head bit, drill bits, 5/16" nut driver bit, bit extender, tape measure, socket set, speed square, touch-up paint, touch-up paint pen, center punch, level, framing square, rubber mallet, eye protection, and other personal protective equipment

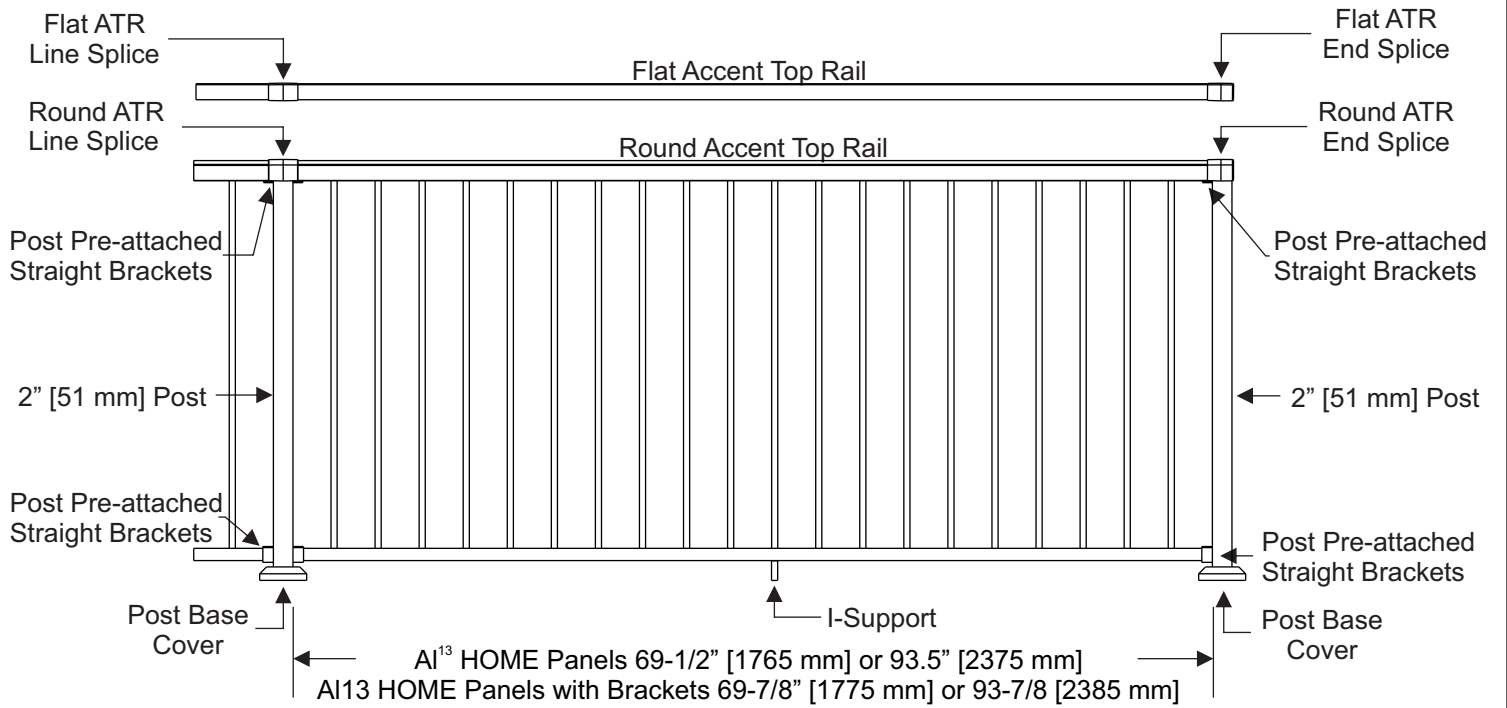
Mount AI¹³ HOME Posts*

- Wood Blocking tied to deck frame must be installed and constructed with treated dimensional lumber with a minimum thickness of 1-1/2" [38 mm].
- Position the edge of post base plate a minimum of 1/2" [13 mm] 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 posts with 3/8" [10 mm] X 3-1/2" [89 mm] hex head galvanized bolts.

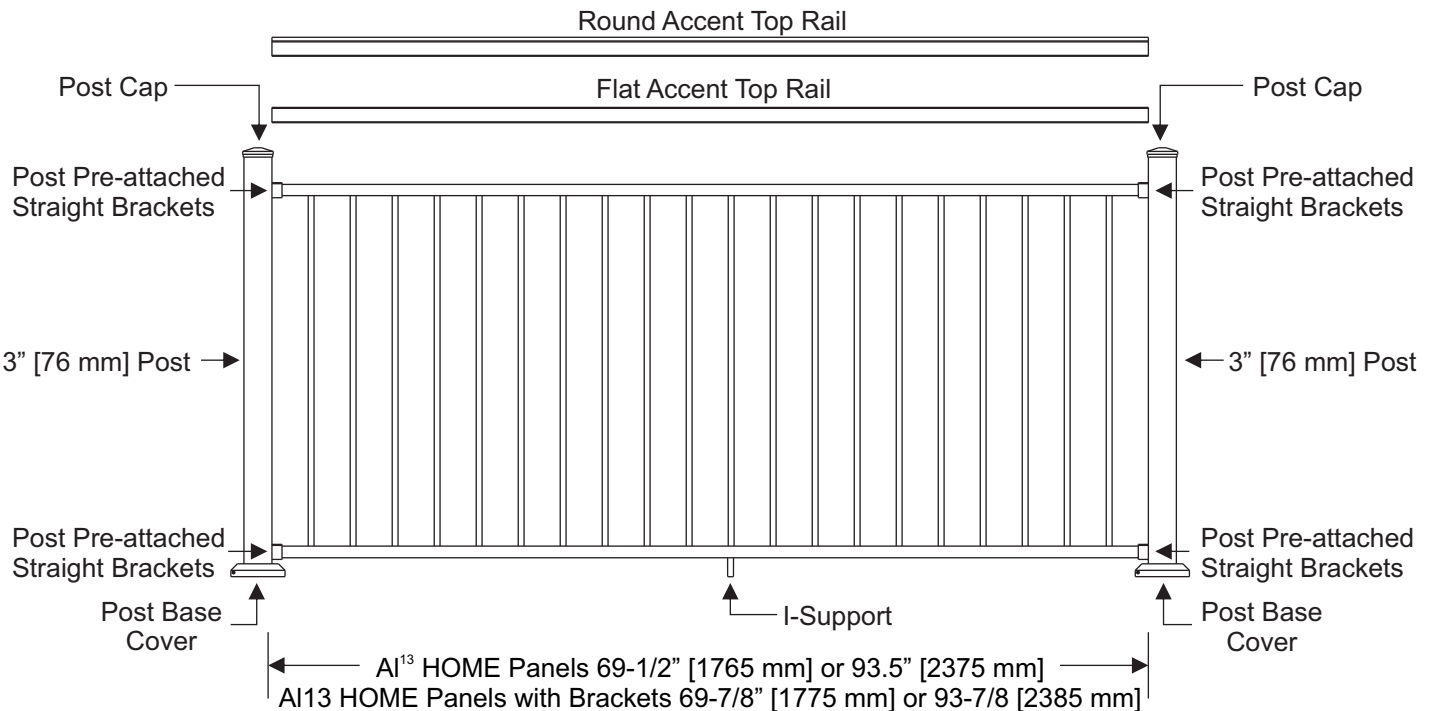


*Reference Fortress AI¹³ Post mounting instructions

Over The Post (OTP) Installation



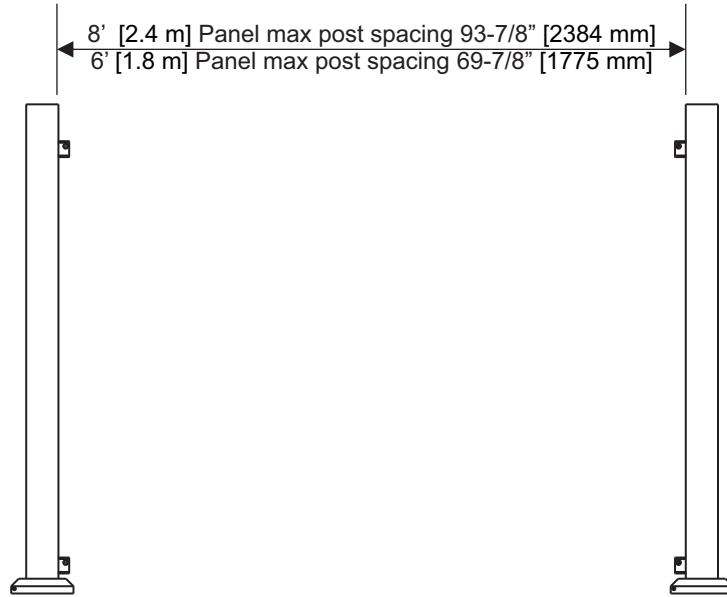
Proud Post Installation



OTP and Proud Post: Max Post Spacing

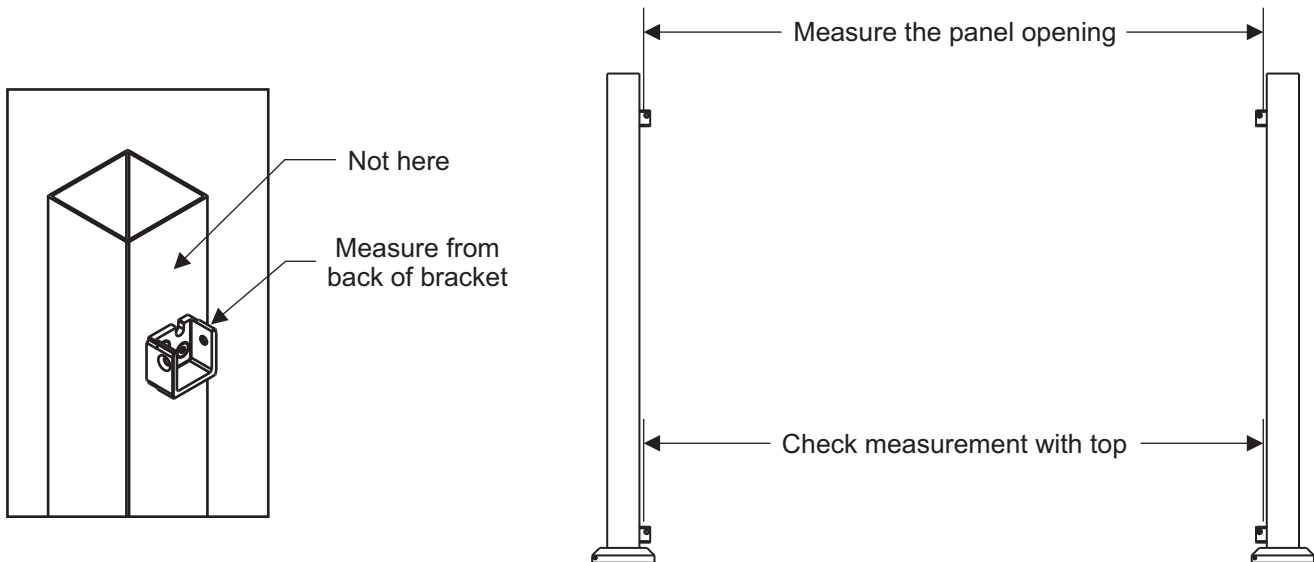
- 8' [2.4 m] panel maximum post spacing is 93-7/8" [2384 mm].
- 6' [1.8 m] panel maximum post spacing is 69-7/8" [1775 mm].

Note: Do not exceed the maximum post spacing.



OTP and Proud Post: Measuring The Panel Opening Length

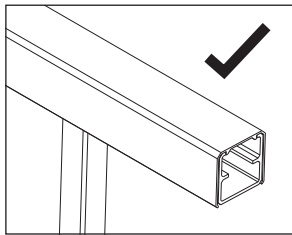
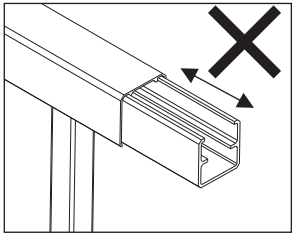
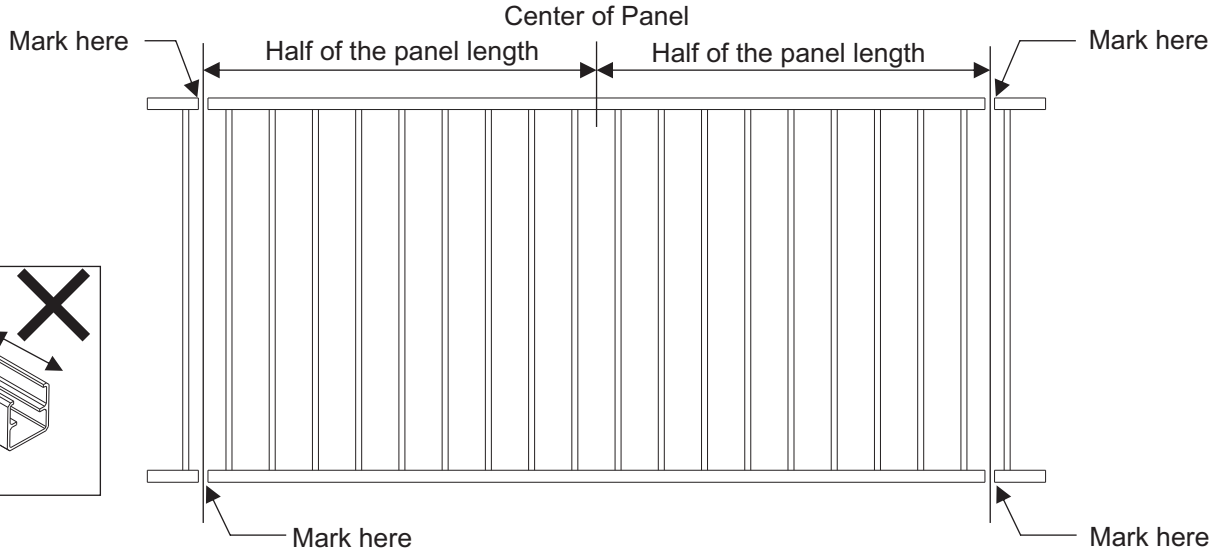
- Measure the distance of the panel opening.
- Measure from the back wall of the bracket to the back wall of the bracket on other post.
- Confirm that the measurements for the top brackets are the same as the bottom brackets.



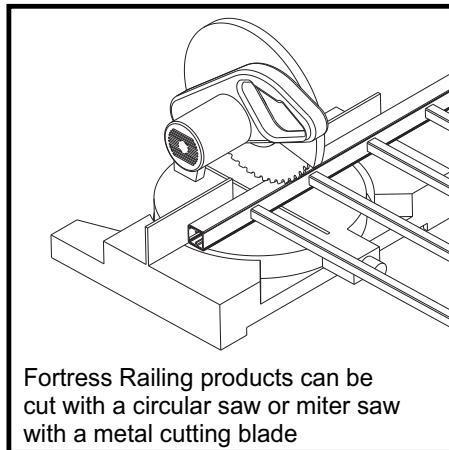
OTP and Proud Post: Cut Down Panel to Correct Length

- 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.
- From the center of the panel measure out half of the length each direction.
- Mark these locations with a paint pen or other tool on the top and bottom rails.

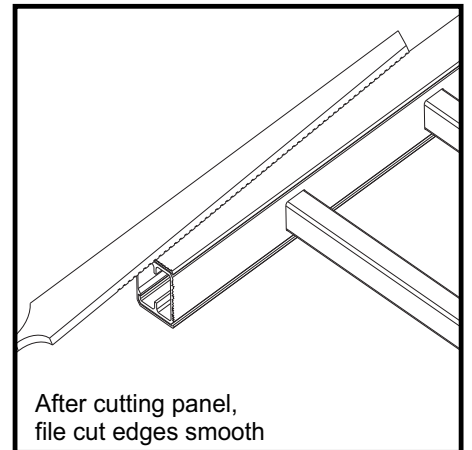
Example: 78" [1981 mm] / 2 = 39" [991 mm]. Measure out 39" [991 mm] from the center point in both directions.



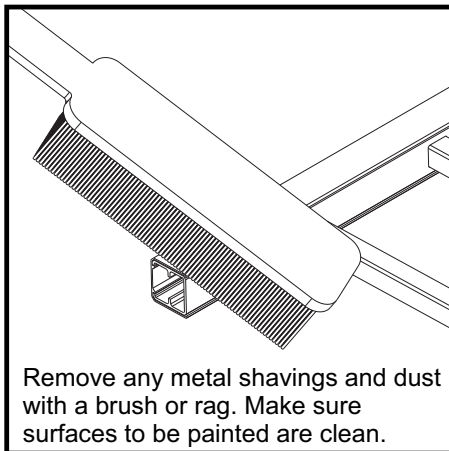
Top rail cover can slide
Make sure the cover lines up with the end of the rail before cutting down the panel



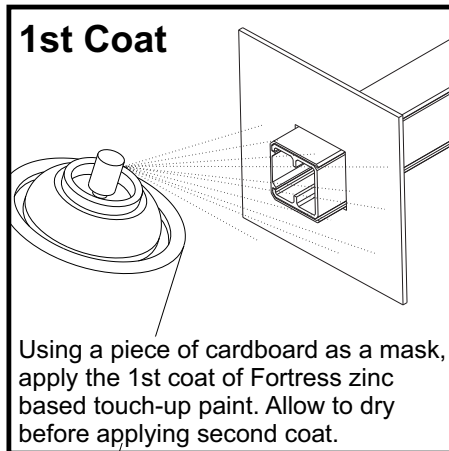
Fortress Railing products can be cut with a circular saw or miter saw with a metal cutting blade



After cutting panel, file cut edges smooth

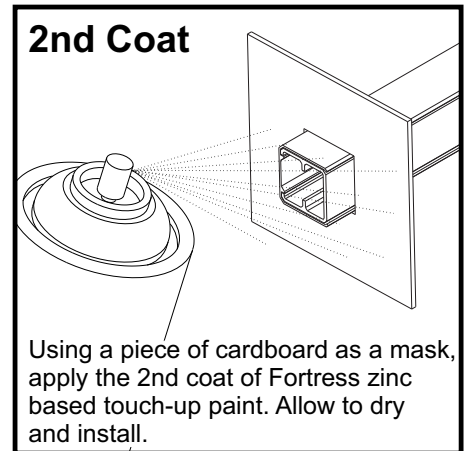


Remove any metal shavings and dust with a brush or rag. Make sure surfaces to be painted are clean.



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.

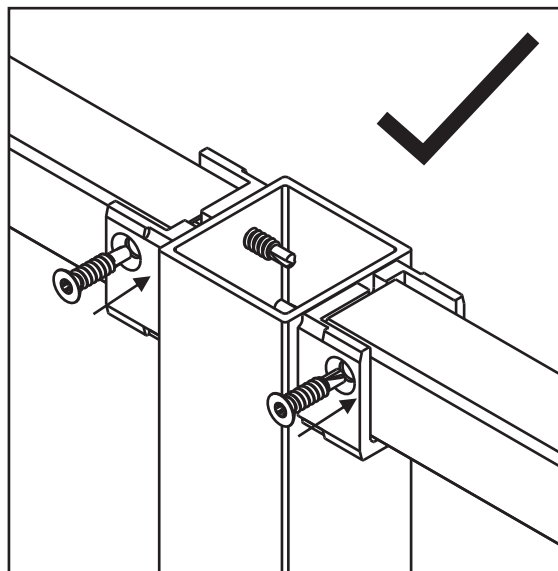
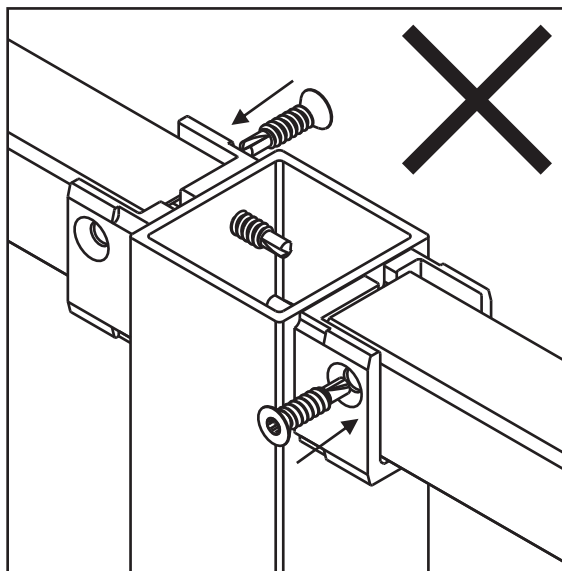
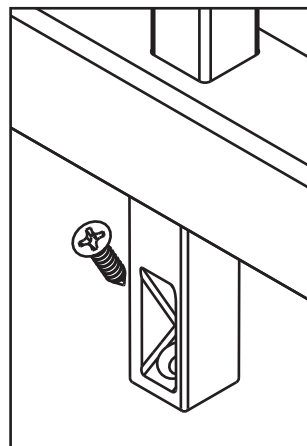
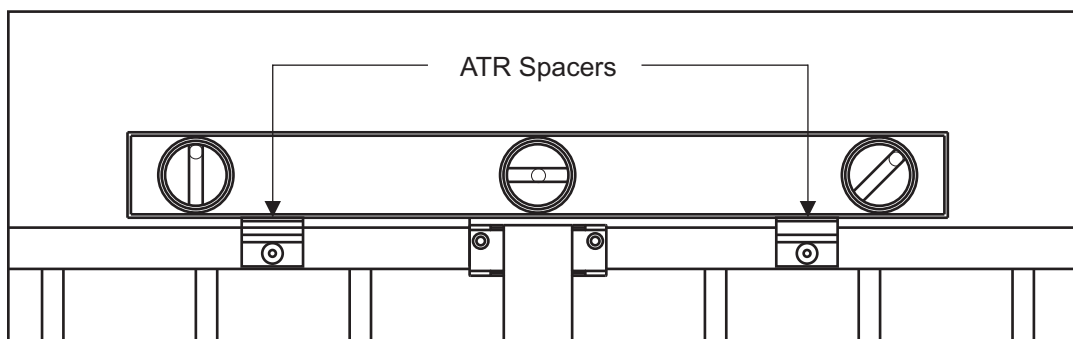
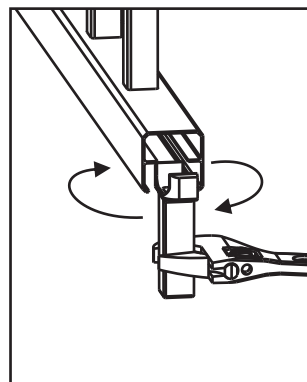
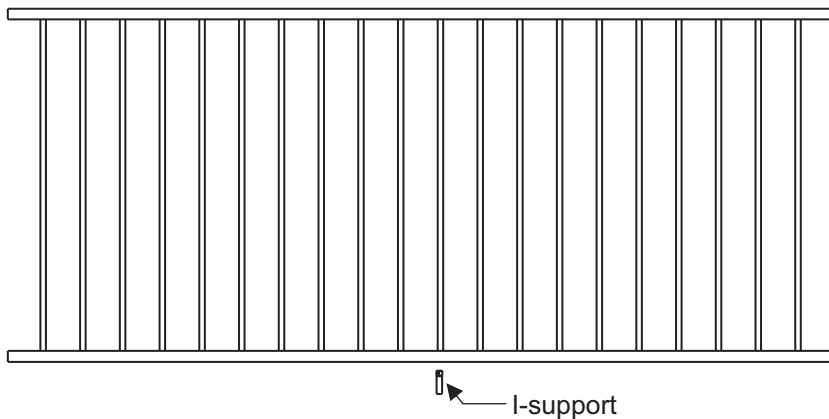


2nd Coat

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

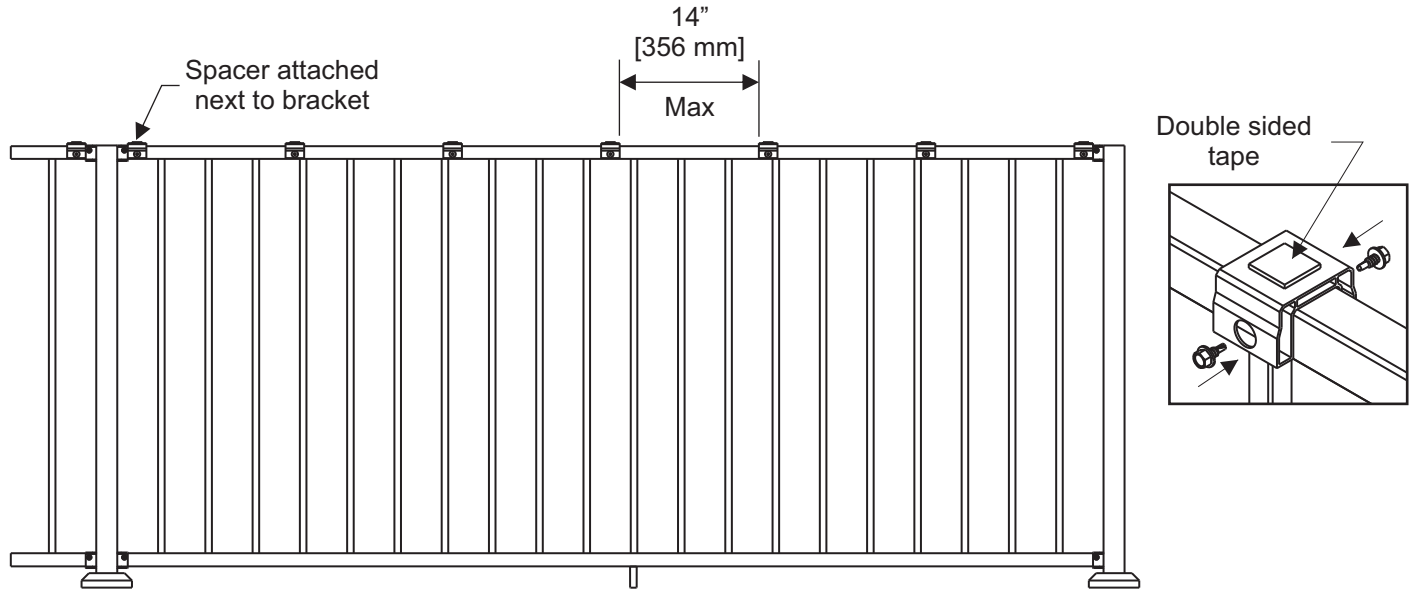
Over the Post: Installing the Panel & I-Support

- 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. Use ATR spacers positioned temporarily on top rail to check panels for level. See the image 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 T-25 bit.
- Tip:** Pre-drill with a 3/16" [4.5 mm] drill bit.
- Attach the panel I-Support to the deck surface using the provided Phillips head screw.



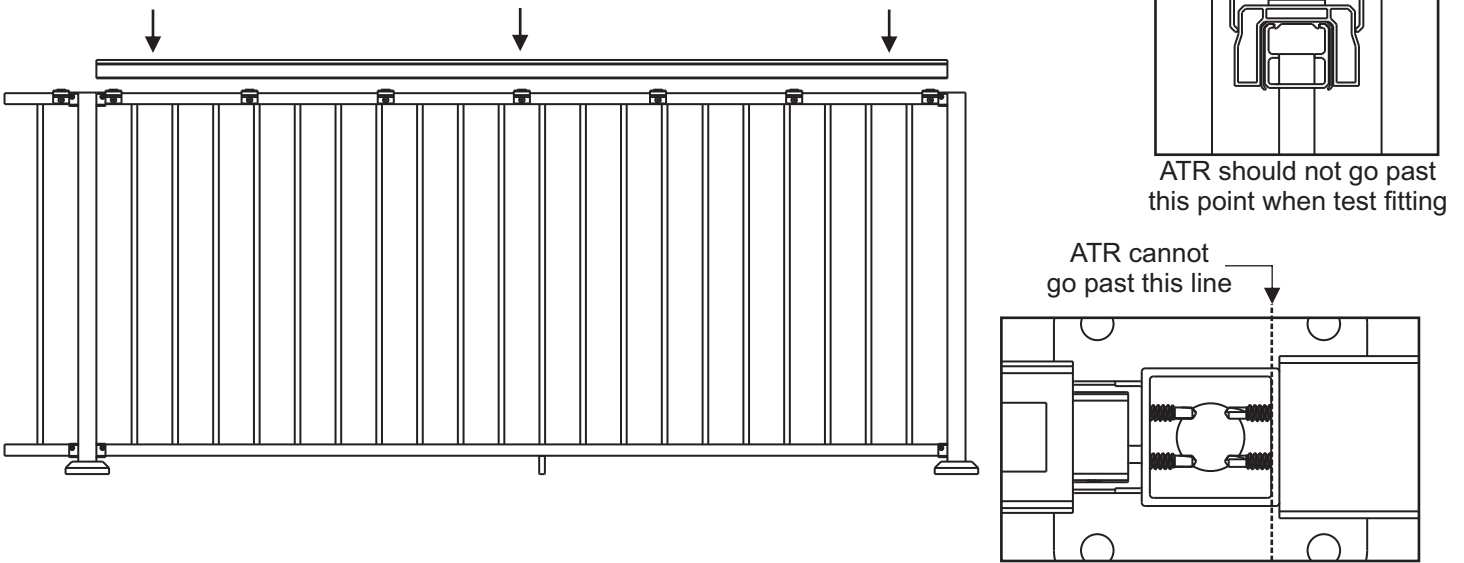
Over the Post: Accent Top Rail Spacers

- The spacers should be equally spaced along the length of the rail, with no more than 14" [356 mm] 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 Round ATR.**



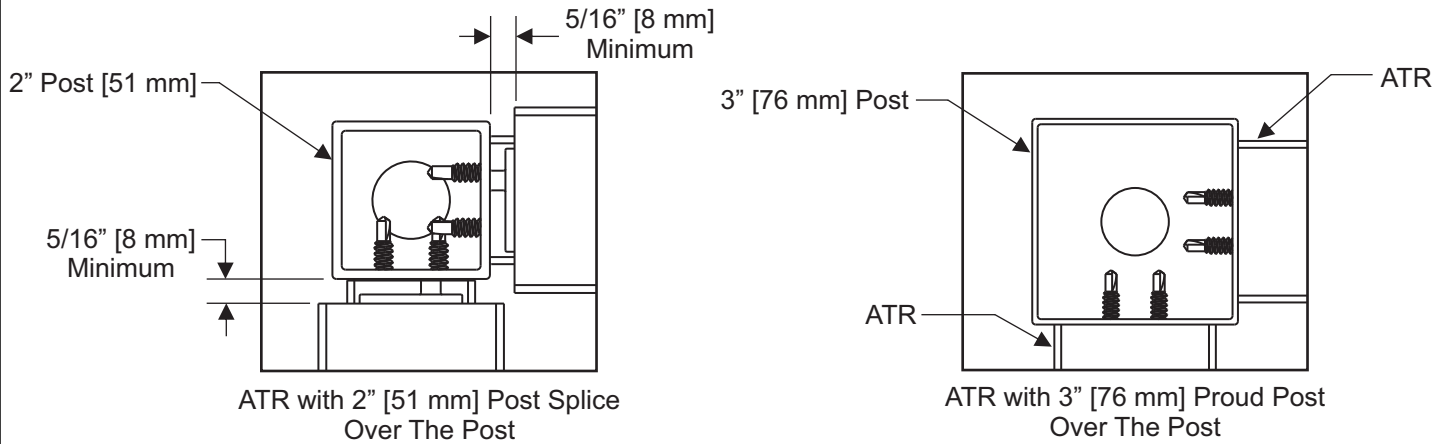
Over the Post: Accent Top Rail Line and End

- 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.**



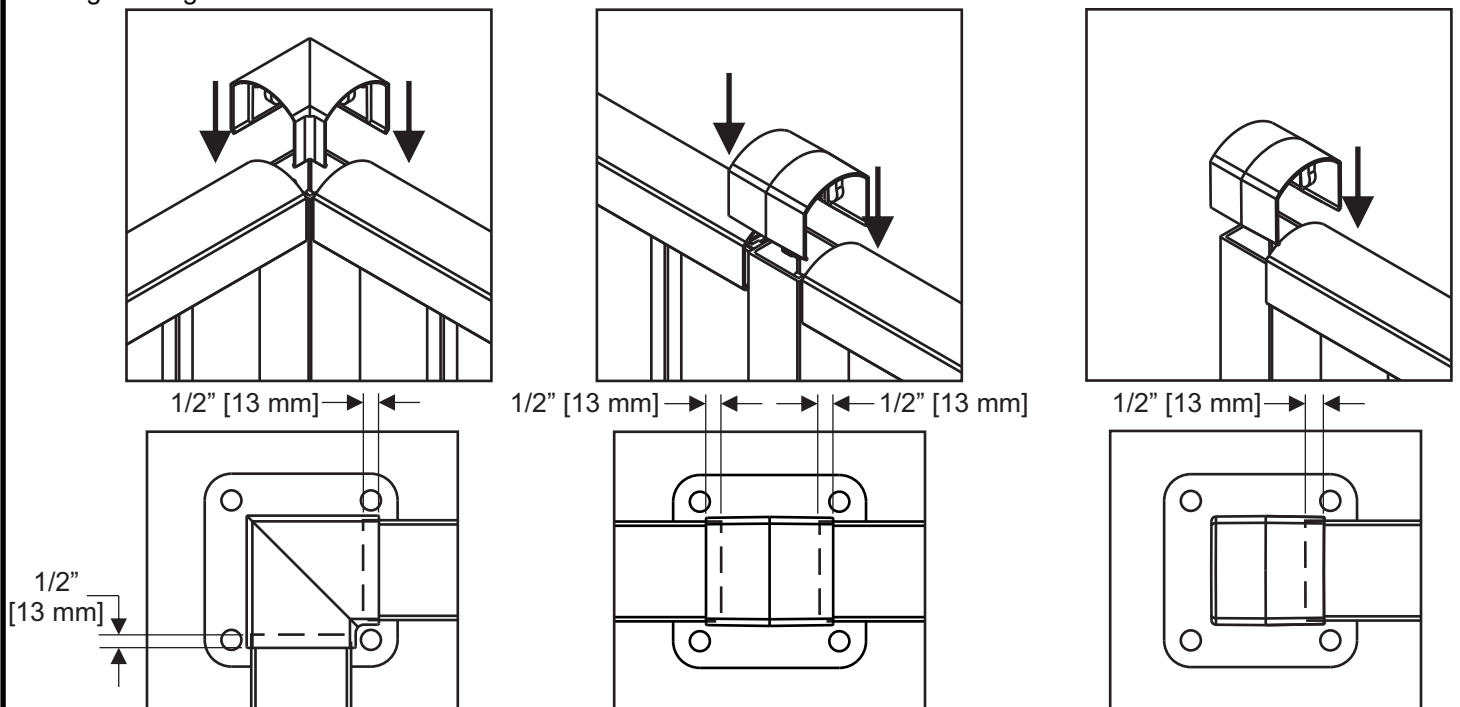
Over the Post: Accent Top Rail Corner

- When installing ATRs on corners with a 2" [51 mm] post, the ATR must be 5/16" away from the post.
- If installing a corner with a 3" [76 mm] proud post, install the ATR at full length from the inside edge of the post to the inside edge of the post.



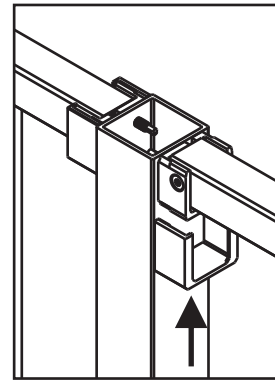
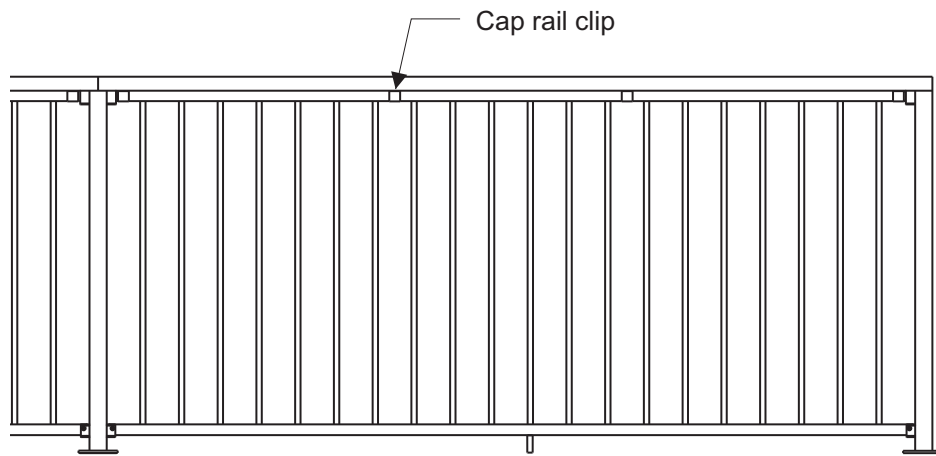
Over the Post: ATR Splice

- ATR splices reference the inside of the post and snap down around the ATR.
- ATR splices allow up to 1/2" [13 mm] 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.
- Use a rubber mallet to install ATR splice. We recommend that the ATR splice be covered with a cloth to protect the finish from damage during installation.

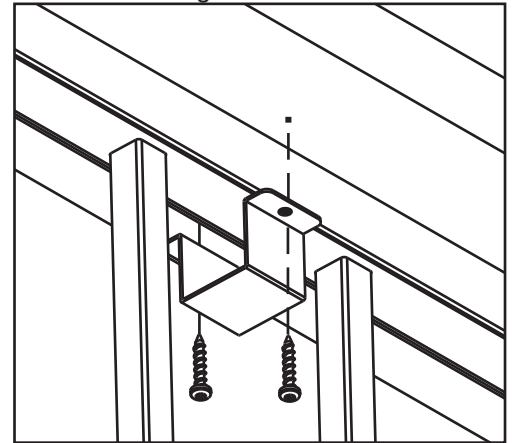


Over the Post: Cap Rail Clips

- 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.

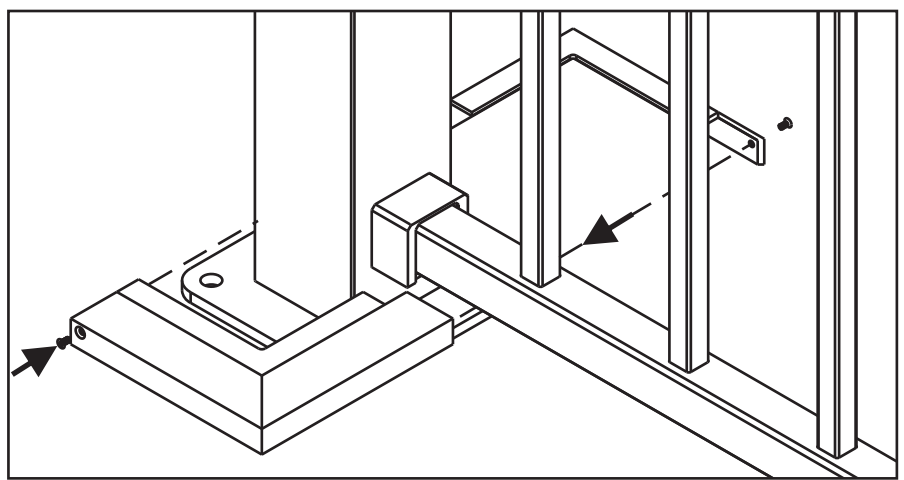
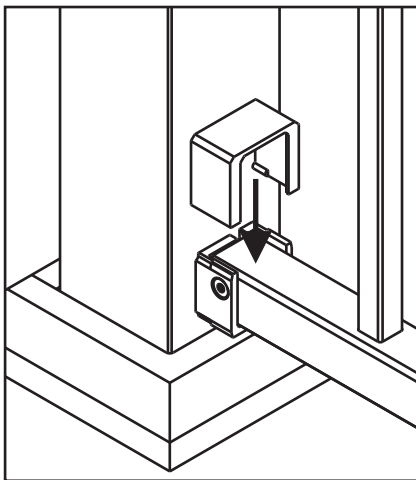


Top cap installation when installing a drink rail



Over The Post: Bracket Cover and Post Base Cover

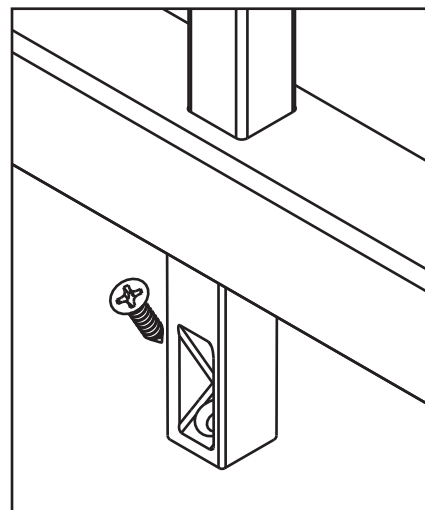
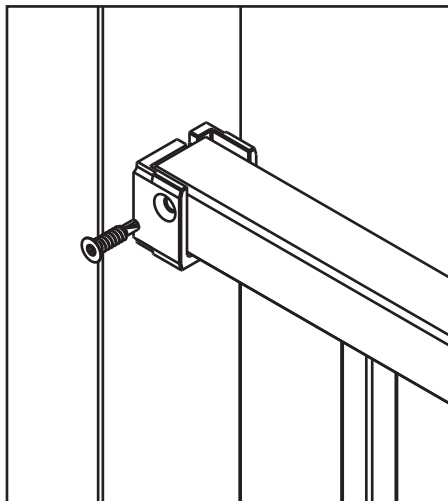
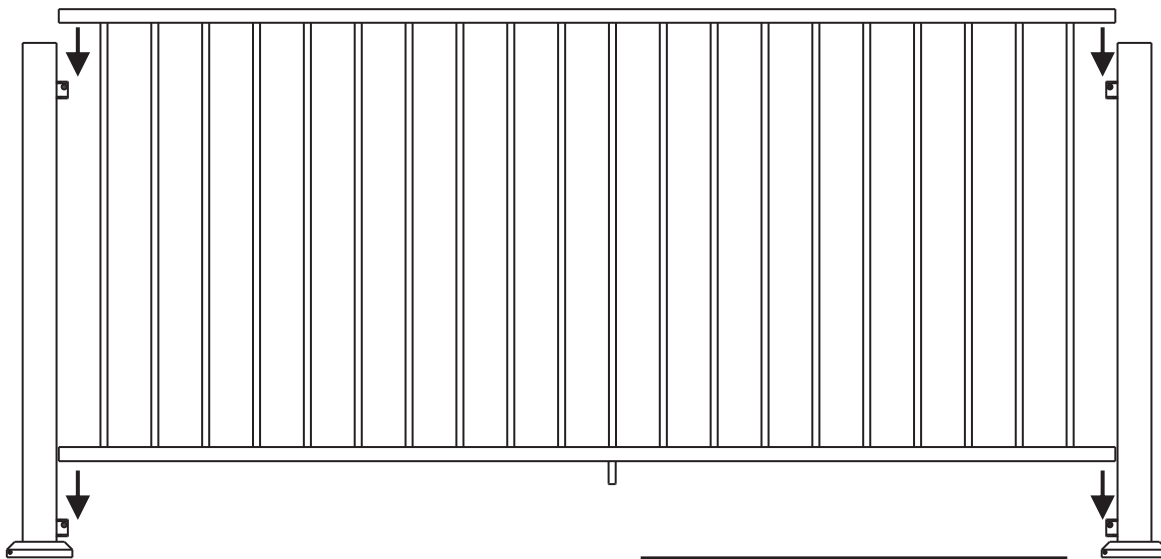
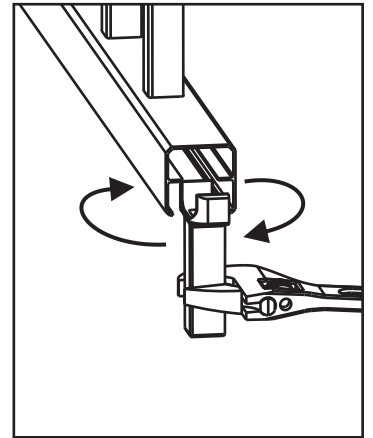
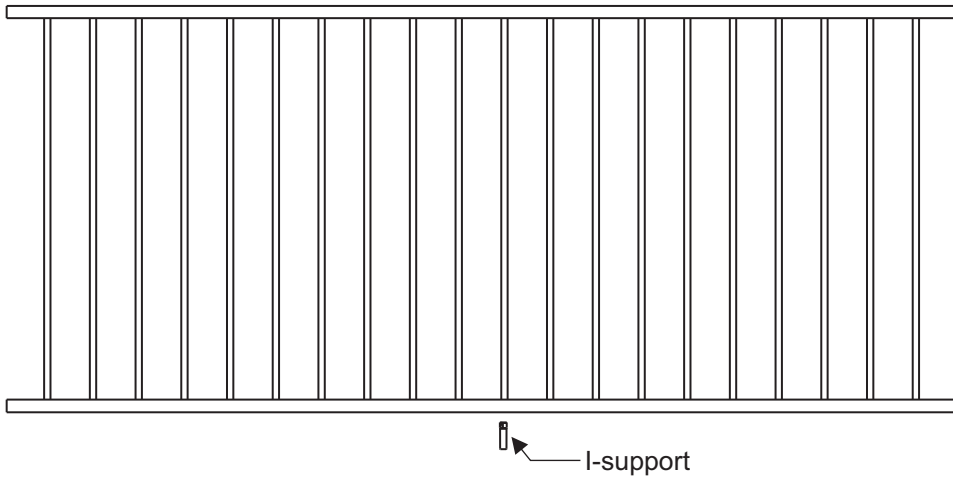
- Bracket caps snap down over bracket cups.
- Use a #2 phillips head screw driver to attach the two halves of the post base cover.
- Use a broom or compressor to remove debris from railing and deck surface.



End of AI¹³ HOME Over The Post Installation

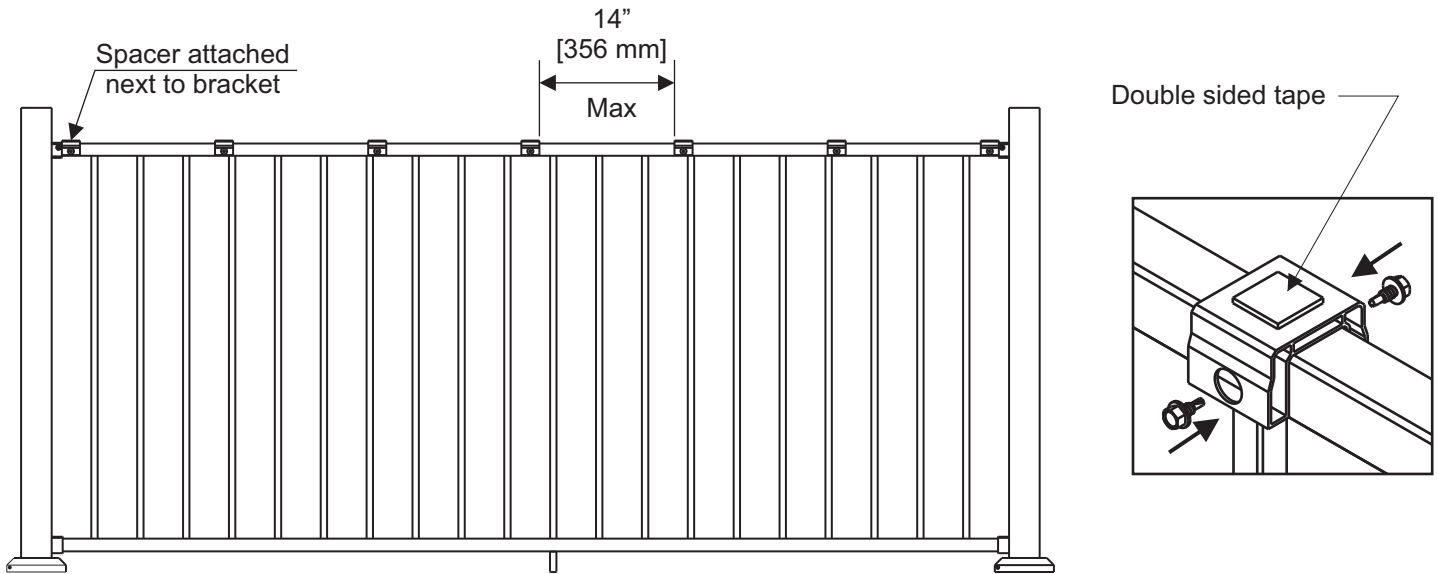
Proud Post: Installing the Panel & I-Support

- 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 T-25 bit.
- Tip:** Pre-drill with a 1/8" [3 mm] drill bit.
- Attach the panel I-support to the deck surface using the provided phillips head screw.



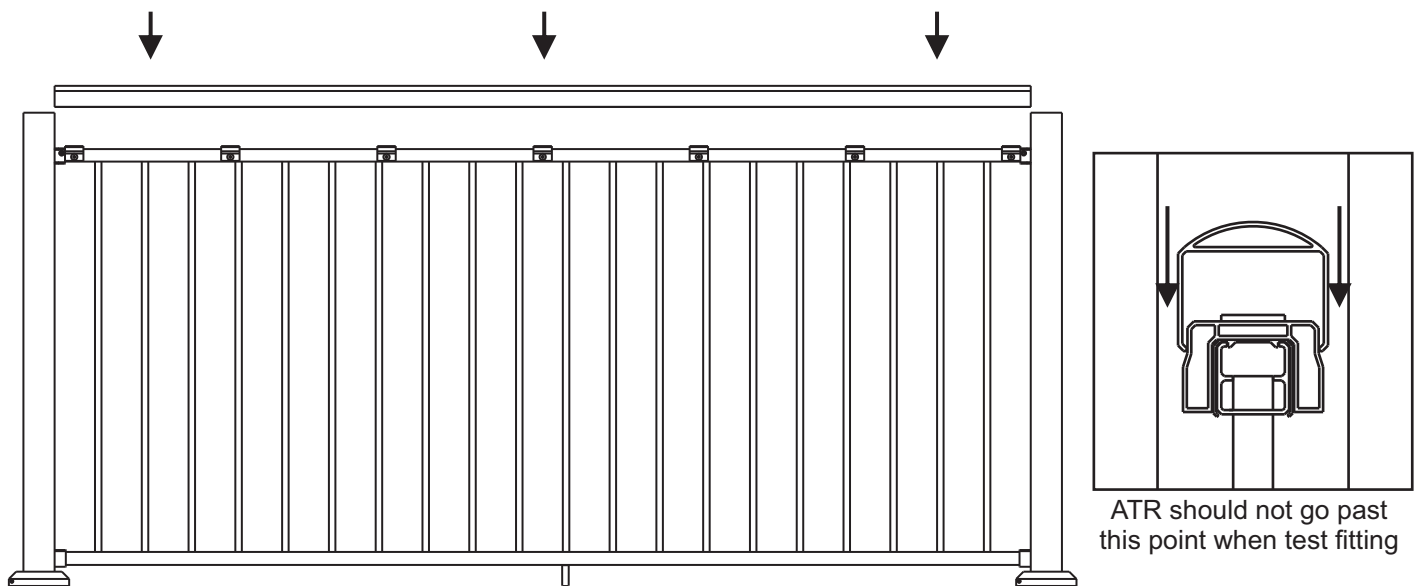
Over the Post: Accent Top Rail Spacers

- The spacers should be equally spaced along the length of the rail, with no more than 14" [356 mm] 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 Round ATR.**



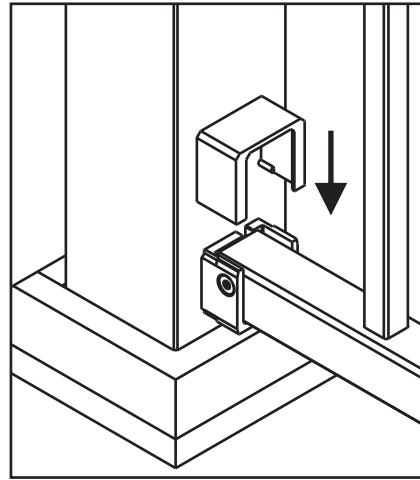
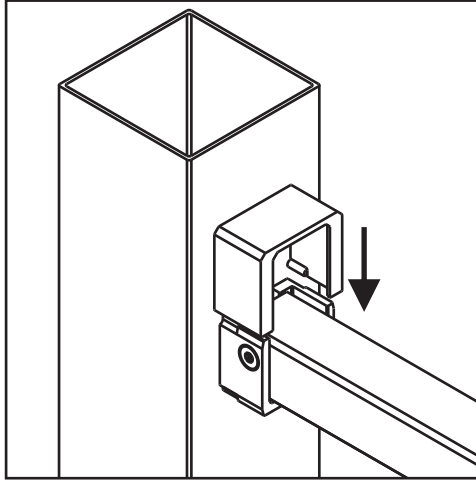
Proud Post: Accent Top Rail

- 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.



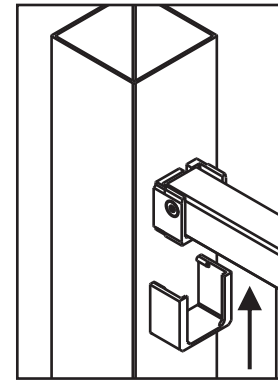
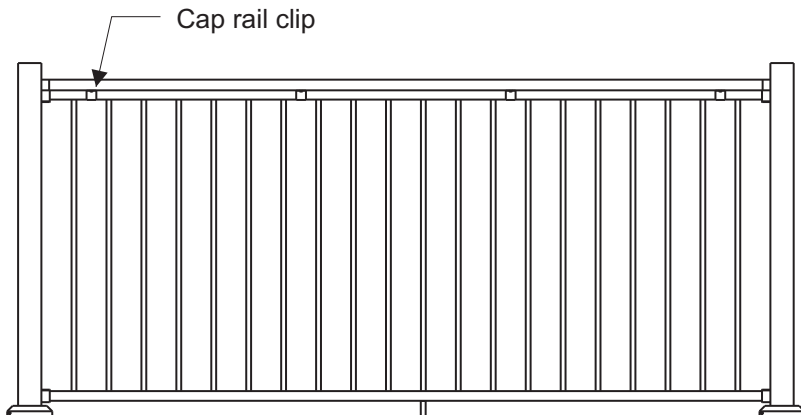
Proud Post: Bracket Caps

- 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.
- The top bracket cap can be installed when using an ATR, but is not required to be installed.

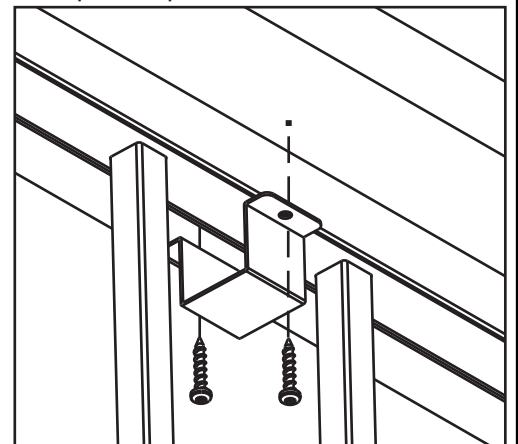


Proud Post: Cap Rail Clips

- 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.



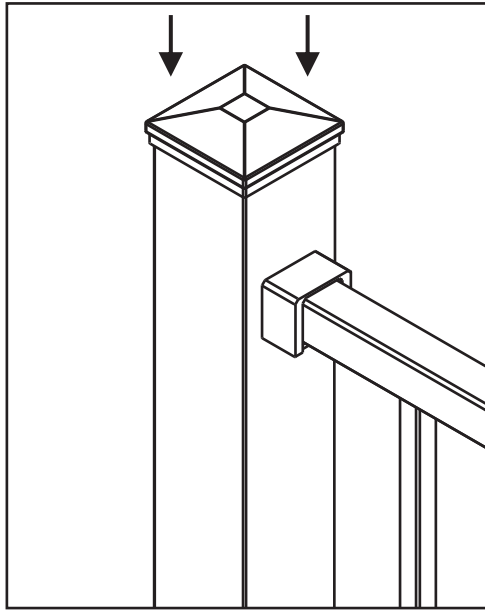
Top cap installation when using cap rail clips to install a drink rail



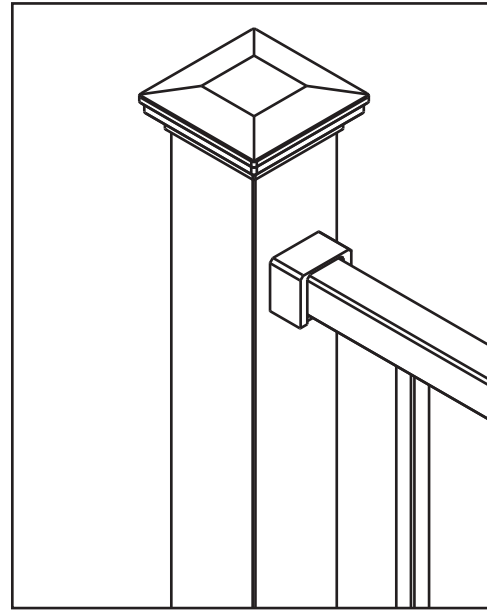
Proud Post: AI¹³ HOME Post Cap

- AI¹³ HOME 2" [51 mm] and 3" [76 mm] post cap are press fit into place.
- If using a FortressAccents 2" [51 mm] or 3" [76 mm] Flat Pyramid Cap follow the instructions included with the cap.

AI¹³ HOME 2" [51 mm] and 3" [76 mm]
Post Caps

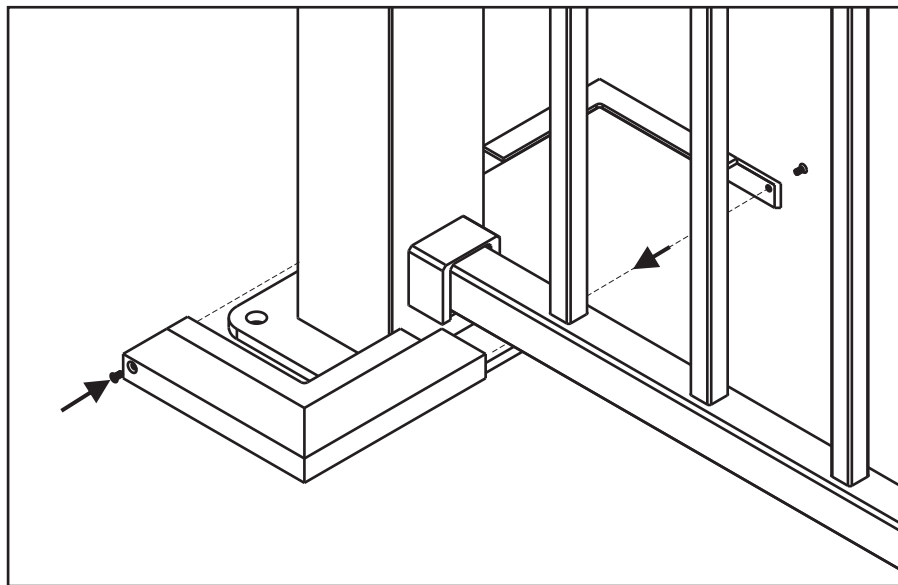


FortressAccents 2" [51 mm] and
3" [76 mm]



Proud Post: AI¹³ 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 AI¹³ HOME Proud Post Installation