



TABLE OF CONTENTS

English

Introduction.....	3
Installation.....	5
OTP & Proud Post Installation.....	5
Over The Top (OTP) Installation.....	9
Proud Post Installation.....	20
Angle Bracket Installation.....	29
Tensioning Cable.....	38
Care & Maintenance.....	40
Warranty.....	41

INTRODUCTION

READ INSTRUCTIONS COMPLETELY BEFORE STARTING INSTALLATION

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 AL¹³ HOME posts must always be secured to the deck framing and 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 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.

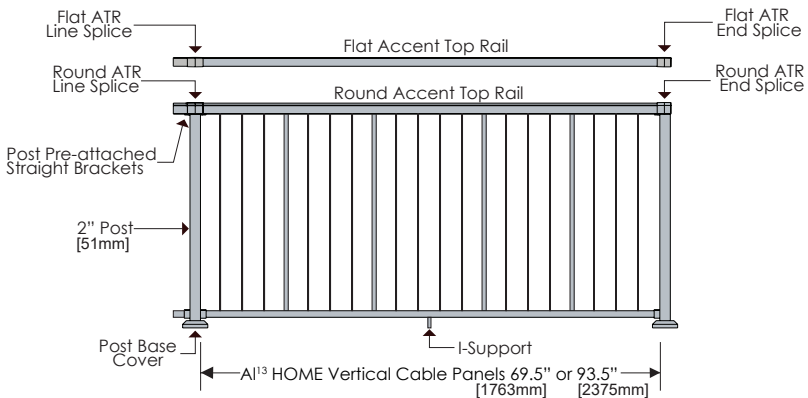
Tip: Pre-drill holes with 3/16" [4.5mm] drill bit.

Required Tools

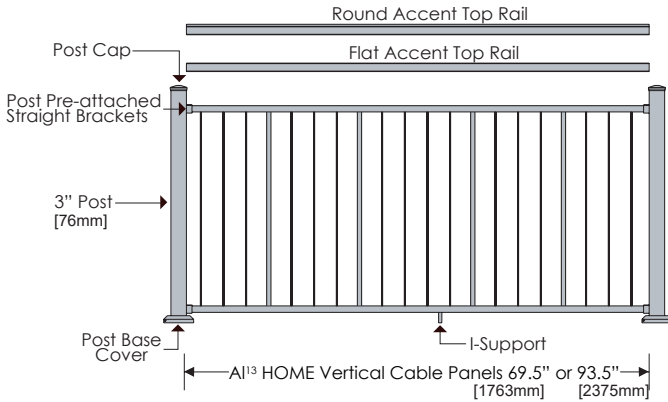


AL¹³ HOME Vertical Cable Installation Options

Over The Post (OTP)



Proud Post

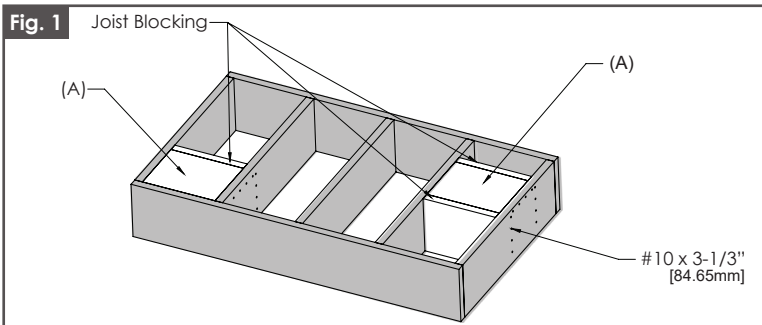


OTP & PROUD POST: POST MOUNTING

* If using Fortress Evolution Framing, contact Fortress for instructions.

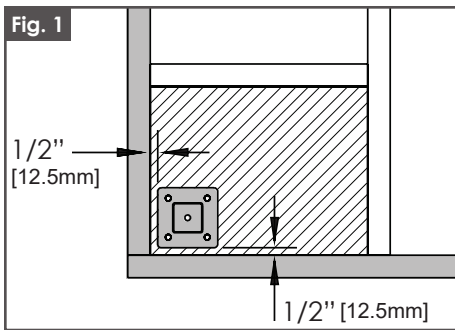
Step 1. Install Wood Blocks

1. Install Wood Block level with top of joist. As shown in Fig.1 (A)
2. Secure Wood Block to blocking on all four sides with #10 X 3-1/2" [89mm] deck screws.
 - Wood Block must be constructed with treated dimensional lumber with a minimum thickness of 1 1/2" [38mm].



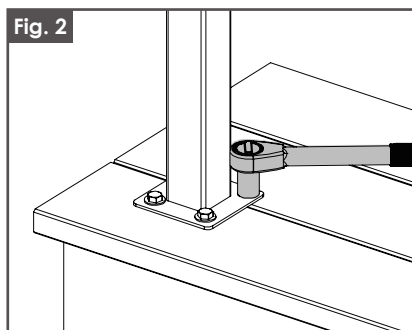
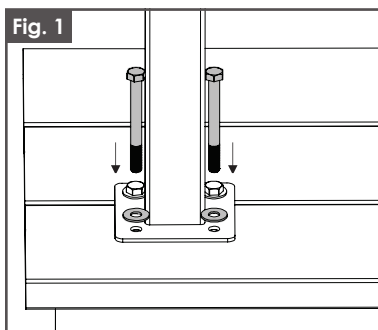
Step 2. Position Base Plate

1. Position the edge of AL¹³ HOME base plate a minimum of 1/2" [12.5mm] from the inside edge of rim joist. As shown in Fig. 1.



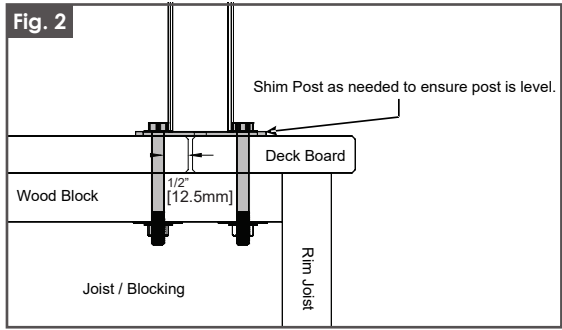
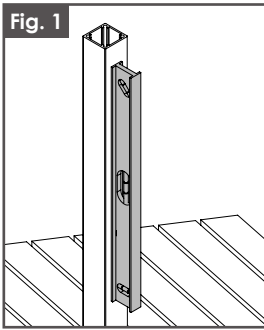
Step 3. Mount Posts

1. Mark mounting hole locations and pre-drill a 3/8" [9.5mm] hole.
2. Insert 3/8" x 3-1/2" [9.5mm x 89mm] Hex Head galvanized bolts through 3/8" [9.5mm] galvanized washer and post base plate.
 - Post Base Plate holes **MUST** be positioned a minimum 1/2" [12.5mm] from edge of deck board.
 - Use only 3/8" [9.5mm] Hex Head Galvanized Bolts. Lag Screws should **NOT** be used. Secure each post with four bolts.



Step 4. Check Mounted Posts

1. Shim post as needed to ensure post is level.

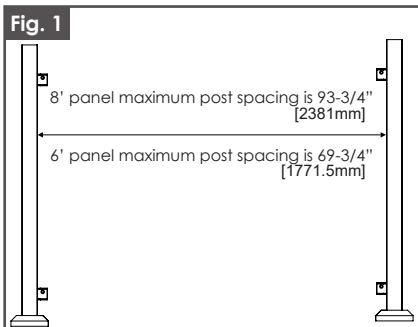


Step 5. Max Post Spacing

- 8' panel maximum post spacing is 93-3/4" [2381mm].
- 6' panel maximum post spacing is 69-3/4" [1771.5mm].

Note:

- **Do not exceed the maximum post spacing.**

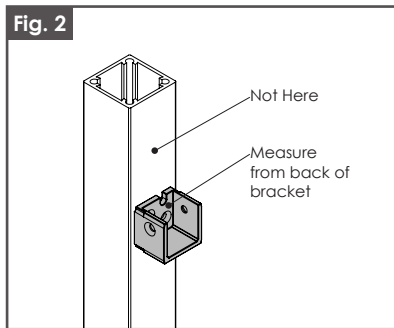
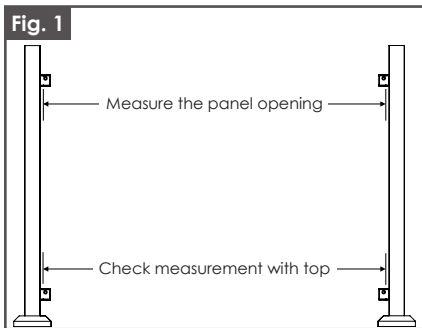


Step 6. Measure The Panel Opening Length

1. Measure the distance of the panel opening. As shown in Fig. 1.
2. Confirm that the measurements for the top brackets are the same as the bottom brackets.

Note:

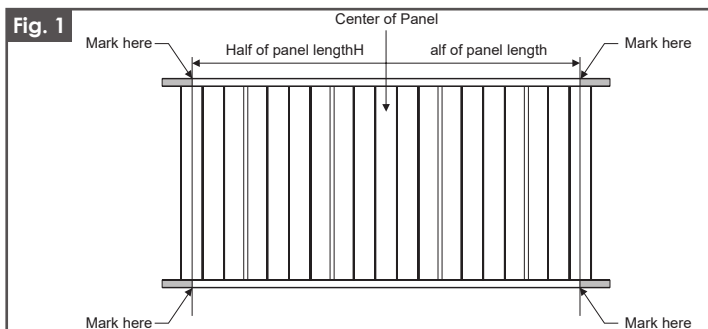
- **Measure from the back wall of the bracket to the back wall of the bracket on other post. As shown in Fig. 2.**



OTP & PROUD POST: CUTTING DOWN PANELS

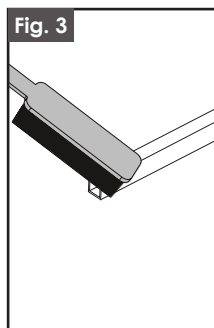
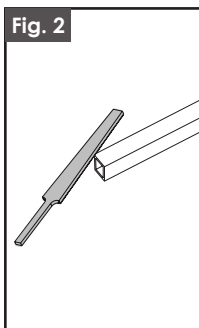
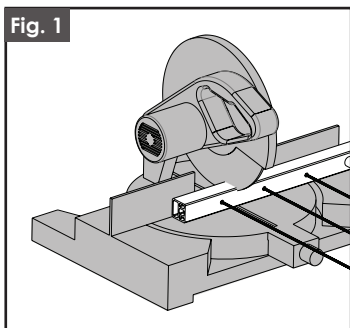
Step 1. Measure & Mark Panels Where Cuts Will Be Made

1. To ensure panel is symmetrical, take the measurement found on page 7 step 6 and divide it in half. Then cut equal lengths from both ends.
2. Find the center of the panel and measure out half of the length each direction.
3. Mark these locations with a pencil on the top and bottom rail.



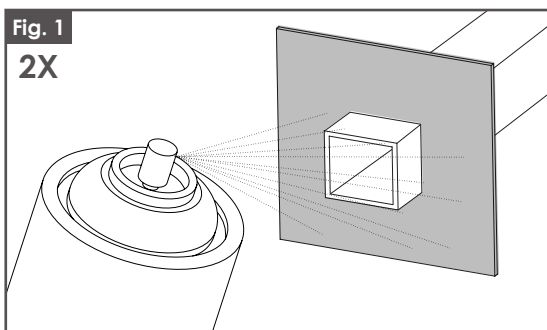
Step 2. Cut & Clean Panel

1. Cut rails using a saw with a fine tooth carbide cutting blade.
2. Use file to smooth cut edges.
3. Remove any metal shavings and dust with a brush or rag.
4. Make sure surfaces to be painted are clean.



Step 3. Apply Spray Paint To Cut Areas

1. Using a piece of cardboard as a mask, apply the 1st coat of Fortress zinc based touch-up paint.
2. Allow to dry before applying second coat.
3. Apply the 2nd coat of Fortress zinc based touch-up paint.
4. Allow to dry and install.

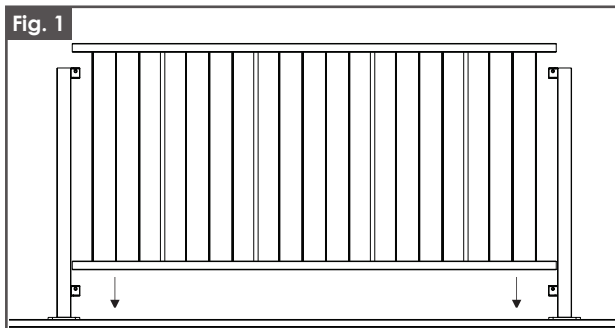


OTP INSTALLATION

Step 1. Test Fit Panel

1. Insert cut panel to ensure proper fit.

Fig. 1



Step 2. Install I-Support On Panel

1. Install I-Support to underside of bottom rail with the 2 supplied Phillips head self-drilling screws. As shown in Fig. 1.

Fig. 1

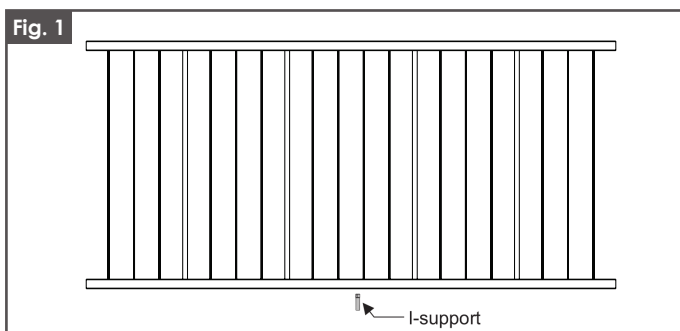
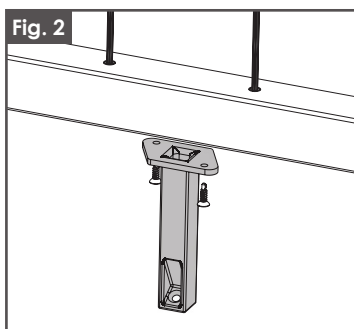
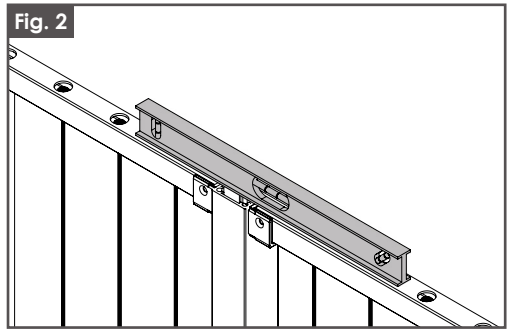
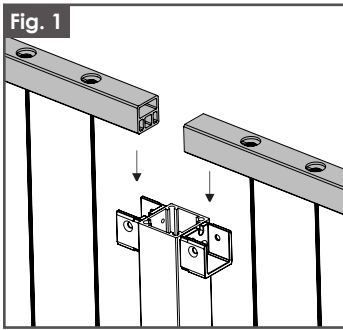


Fig. 2



Step 3. Install Panel

1. Use level to ensure 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.



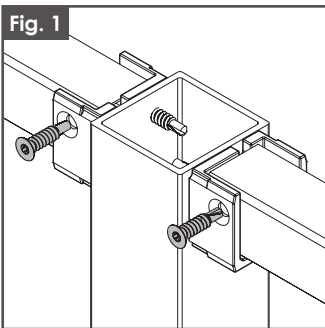
Step 4. Apply Screws

1. 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" [4.5mm] drill bit.

Note:

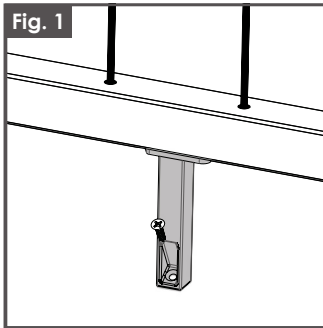
- It is recommended that all panels are attached with provided screws on the same side of the bracket when using a line post. As shown in Fig.1.
- Only one screw is needed to secure the bracket to the panel.



Step 5. Attach I-Support To Deck

1. Fasten I-Support to Deck Surface with the supplied Phillips Head Wood Screw.

Tip: Pre-drill with a 1/16" [1.5mm] drill bit.



OTP: TENSIONING CABLE

- Reference page 38 for tensioning steps.

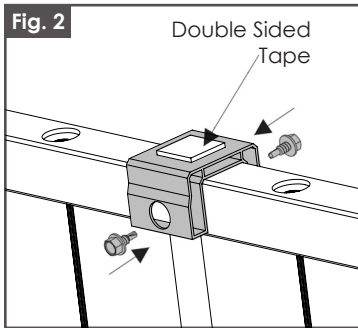
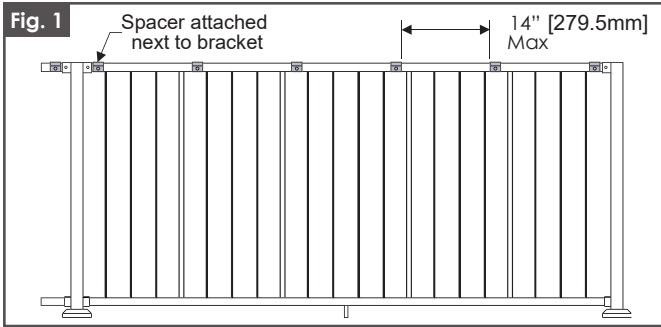
OTP: ROUND ACCENT TOP RAIL (ATR)

Step 1. Round ATR Spacers

1. Attach spacers using provided self-drilling screws with a 5/16" [8mm] nut driver, two screws per spacer. As shown in Fig. 2.
 - The Accent Top Rail Kit comes with 7 spacers in the 93.89" [2385mm] kit, 6 spacers in the 69.89" [1775mm] kit and 14 spacers in the 189.78" [4826mm] kit.
 - The spacers should be equally spaced along the length of the rail, with no more than 14" [279.5mm] spacing between them. As shown in Fig. 1.
 - The end spacers should be placed as close to the end brackets as possible.

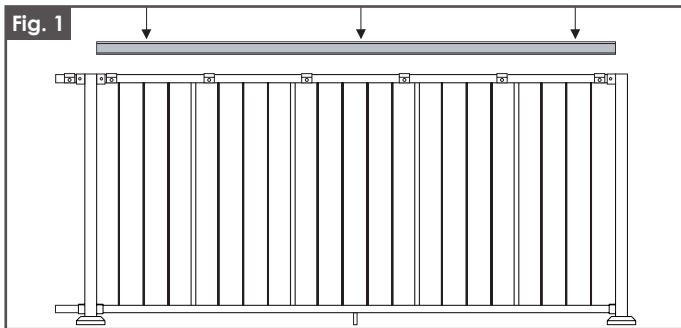
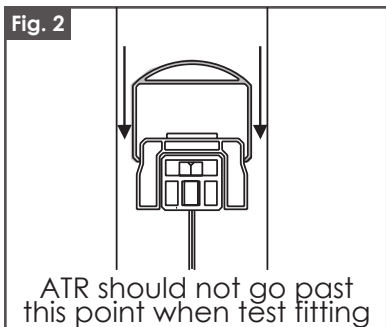
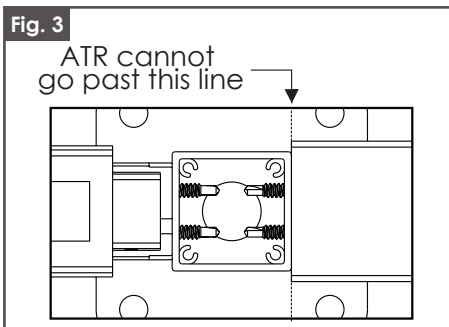
Note:

- **DO NOT REMOVE BACKING OF DOUBLE SIDED TAPE UNTIL YOU ARE READY TO PERMANENTLY ATTACH THE ATR.**



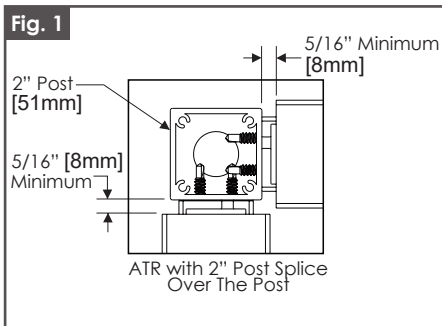
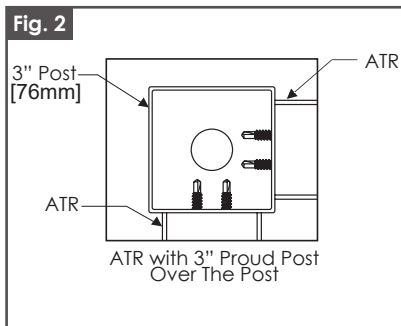
Step 2. Round ATR and End Posts

1. Measure the distance from the inside edge of the 2 posts.
2. Cut the ATR to measured length.
3. The ATR cannot block the inside edge of the post. As shown in Fig. 3.
4. 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. As shown in Fig. 2.
5. Remove the backing of all of the double-sided tape on the ATR spacers.
6. A Rubber Mallet might need to be used to install. If using a rubber mallet, use a cloth to protect the ATR from damage.

Fig. 1**Fig. 2****Fig. 3**

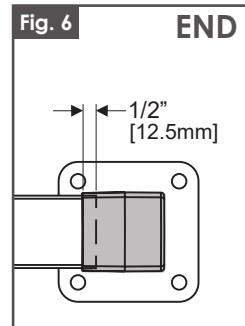
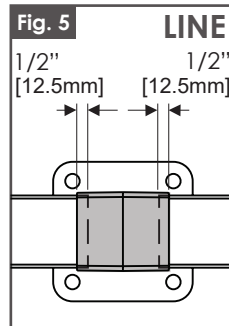
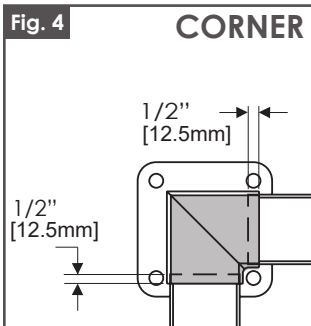
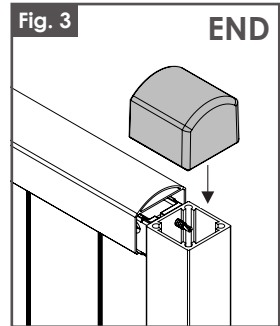
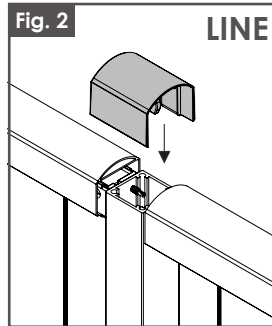
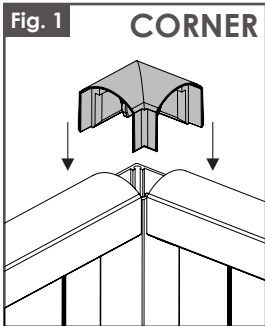
Step 3. Round ATR Corner

1. When installing ATR on corners with a 2" [51 mm] post, the ATR must be 5/16" [8mm] away from the post. As shown in Fig. 1.
2. If installing a corner with a 3" [76mm] proud post, install the ATR at full length from the inside edge of the post to the inside edge of the post.

Fig. 1**Fig. 2**

Step 4. Round ATR Splice

1. To install an ATR splice: Center the splice over the post and with force press down over the ATR. As shown in Fig. 1,2,3.
2. A Rubber Mallet might need to be used to install. If using a Rubber Mallet, use a cloth to protect the splice from damage.
 - ATR splices reference the inside of the post and snap down around the ATR.
 - ATR splices allow up to 1/2" [12.5mm] of length variation from the edge of the post. As shown in Fig. 4,5,6.



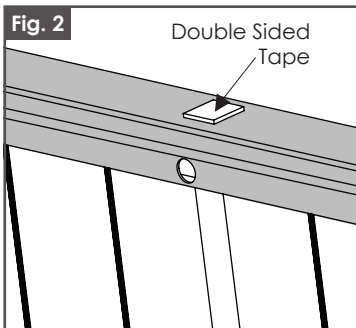
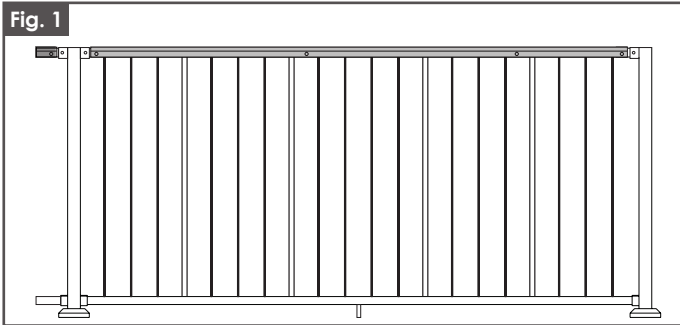
OTP: FLAT ACCENT TOP RAIL (ATR)

Step 1. Flat ATR Spacers

1. Measure distance between brackets and cut ATR spacer to length. The spacer can be $1/4"$ [6.5mm] shorter than the distance between brackets.
2. If one of the screw holes was cut off during the sizing of the ATR spacer, use a $5/8"$ [16mm] drill bit to add another hole 1" from the end of the ATR spacer.
3. Attach the ATR spacer using the provided self-drilling screws with a $5/16"$ [8mm] nut driver.
4. All screw holes must have a screw installed.

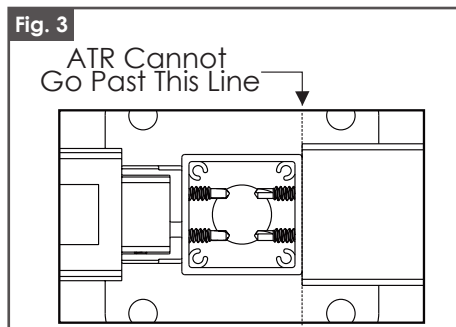
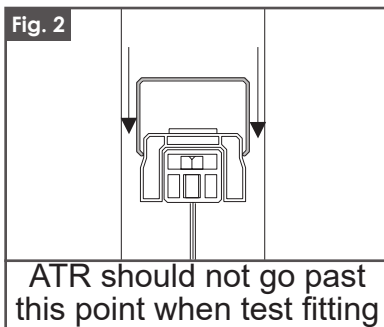
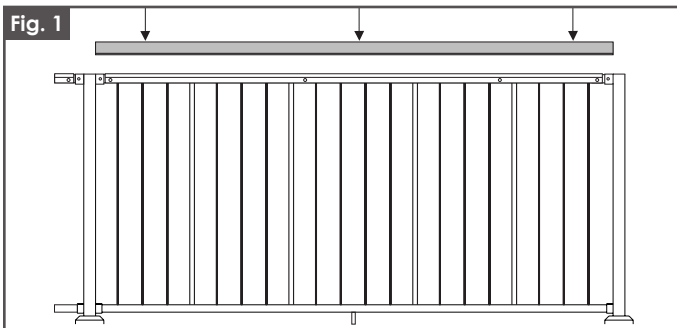
Note:

- **Flat ATR uses a full length ATR spacer.**
- **DO NOT REMOVE BACKING OF DOUBLE SIDED TAPE UNTIL YOU ARE READY TO PERMANENTLY ATTACH THE ATR.**



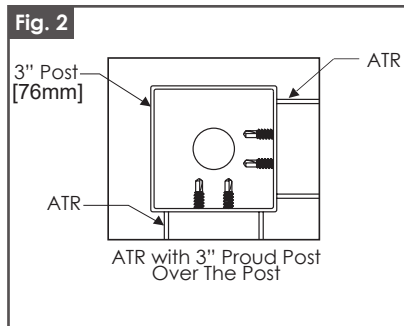
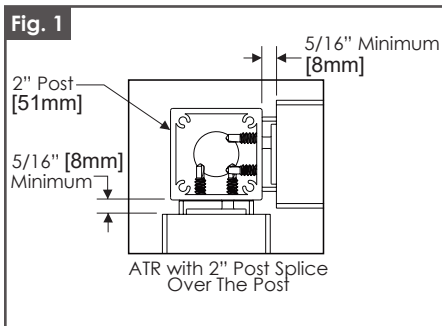
Step 2. Flat ATR Line And End

1. Measure the distance from the inside edge of the 2 posts.
2. Cut the ATR to measured length.
3. The ATR cannot block the inside edge of the post.
4. 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.
5. Remove the backing of all of the double-sided tape on the ATR spacers.
6. A Rubber Mallet might need to be used to install. If using a rubber mallet, use a cloth to protect the ATR from damage.



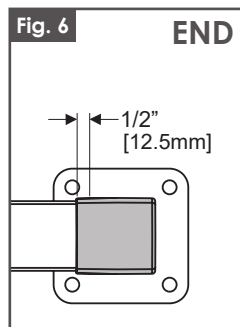
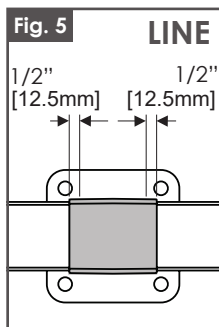
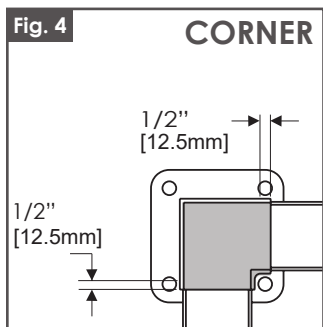
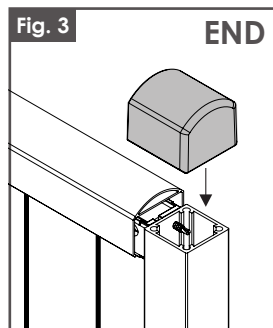
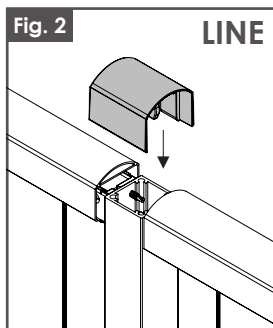
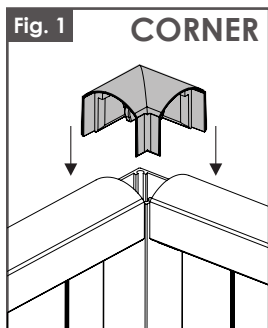
Step 3. Flat ATR Corner

1. When installing ATRs on corners with a 2" [51 mm] post, the ATR must be 5/16" [8mm] away from the post. As shown in Fig. 1.
2. If installing a corner with a 3" [76mm] proud post, install the ATR at full length from the inside edge of the post to the inside edge of the post. As shown in Fig. 2.



Step 4. Flat ATR Splice

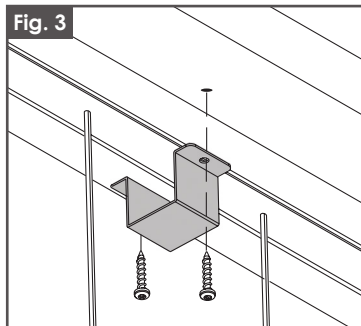
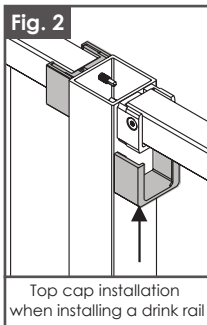
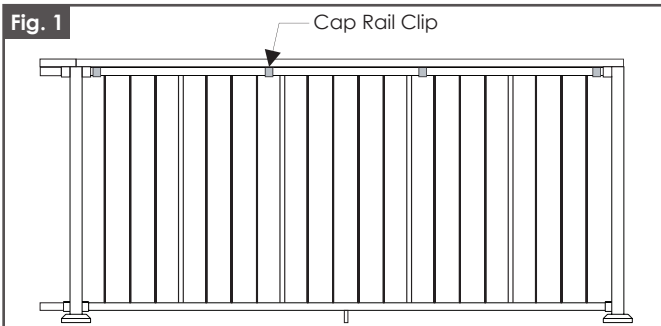
- To install an ATR Splice: Center the splice over the post and with force press down over the ATR.
- A Rubber Mallet might need to be used to install. If using a Rubber Mallet, use a cloth to protect the splice from damage.
 - ATR Splices reference the inside of the post and snap down around the ATR.
 - ATR Splices allow up to 1/2" [12.5mm] of length variation from the edge of the post.



OTP: CAP RAIL CLIPS & POST BASE COVER

Step 1. Cap Rail Clips

1. Install top rail bracket covers that come with the Cap Rail Clips. As shown in Fig. 2.
2. 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.



Step 2. Bracket Cover and Post Base Cover

1. Bracket Caps snap down over Bracket Cups.
2. Dis-assemble post base cover and install on post.
3. Use a broom or compressor to remove debris from railing and deck surface.

Fig. 1

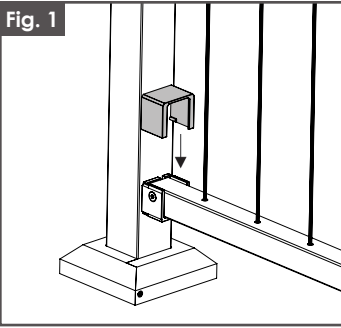
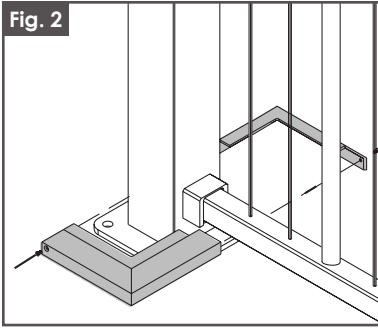


Fig. 2

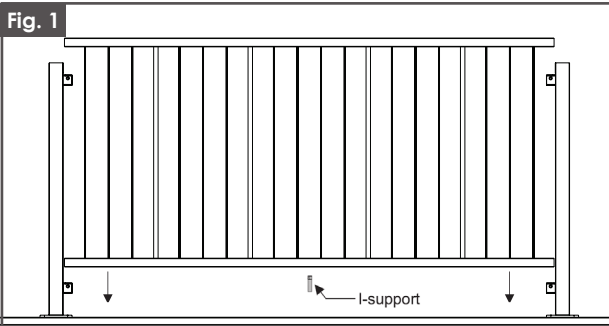


PROUD POST INSTALLATION

Step 1. Test Fit Panel.

1. Install cut panel to ensure proper fit.

Fig. 1



Step 2. Install I-Support On Panel

1. Install I-Support to underside of bottom rail with the 2 supplied Phillips Head Self-drilling Screws. As shown in Fig. 2.

Fig. 1

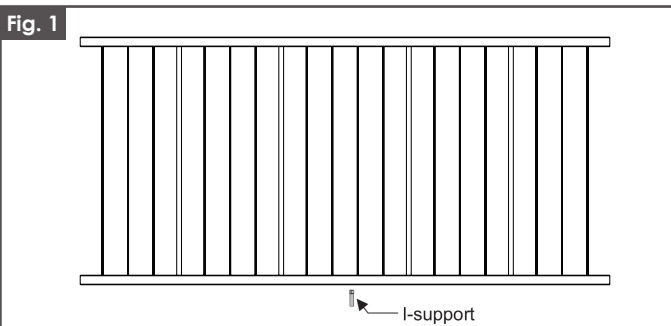
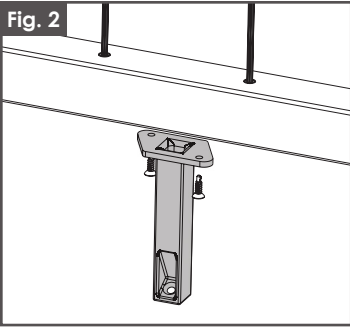


Fig. 2



Step 3. Apply Screws

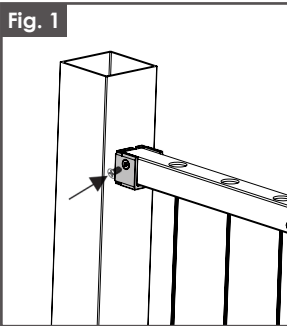
1. Attach the panel to each of the 4 brackets using the provided self-drilling screw with a T-25 Bit.

Tip: Pre-drill with a 3/16" [4.5mm] drill bit.

NOTE:

- **Only one screw is needed to secure the bracket to the panel.**

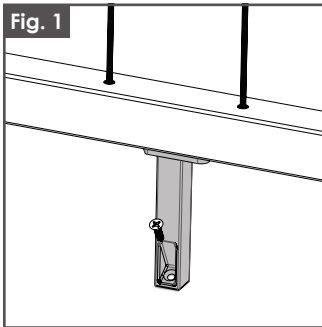
Fig. 1



Step 4. Attach I-Support To Deck

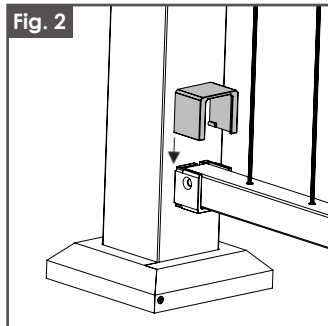
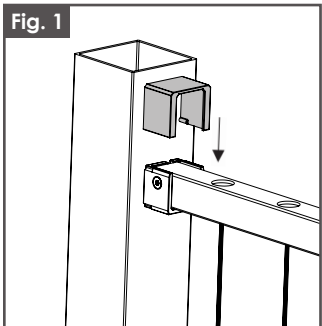
1. Fasten I-Support to deck surface with the supplied Phillips Head Wood Screw.

Tip: Pre-drill with a 1/16" [1.5mm] drill bit.



Step 5. Bracket Caps.

1. 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: TENSION CABLE

- Reference page 38 for tensioning steps.

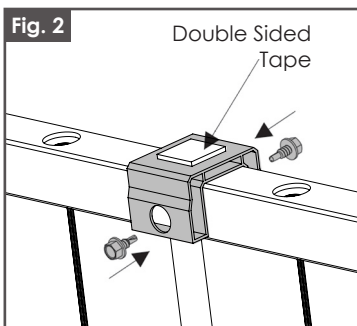
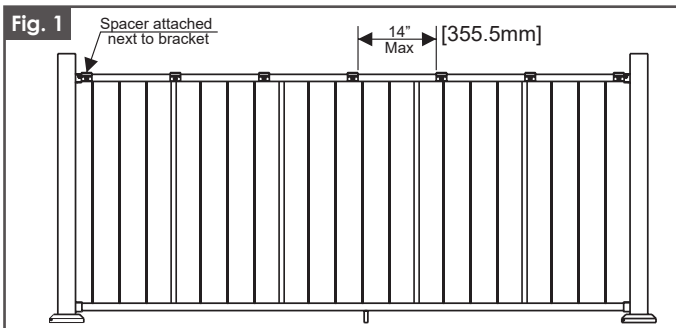
PROUD POST: ROUND ACCENT TOP RAIL (ATR)

Step 1. Round ATR Spacers

1. Attach Spacers using provided self-drilling screws with a 5/16" [8mm] nut driver, two screws per spacer. As shown in Fig. 2.
 - The Accent Top Rail Kit comes with 7 spacers in the 93.89" [2385mm] kit, 6 spacers in the 69.89" [1775mm] kit and 14 spacers in the 189.78" [4826mm] kit.
 - The spacers should be equally spaced along the length of the rail, with no more than 14" [279.5mm] spacing between them. As shown in Fig. 1.
 - The end spacers should be placed as close to the end brackets as possible.

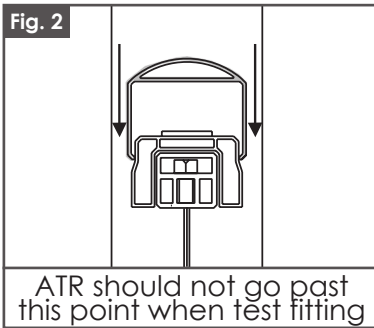
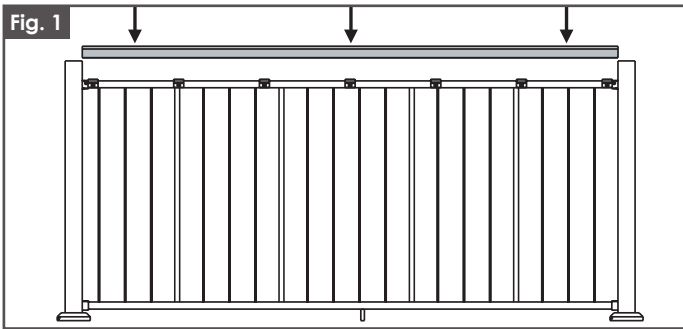
Note:

- **DO NOT REMOVE BACKING OF DOUBLE SIDED TAPE UNTIL YOU ARE READY TO PERMANENTLY ATTACH THE ATR.**



Step 2. Round ATR

1. Measure the distance from the inside edge of the 2 posts.
2. Cut the ATR to measured length.
3. 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. As shown in Fig. 2.
4. Remove the backing of all of the double-sided tape on the ATR spacers.
5. A Rubber Mallet might need to be used to install. If using a Rubber Mallet, use a cloth to protect the ATR from damage.



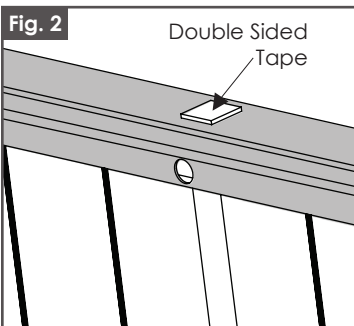
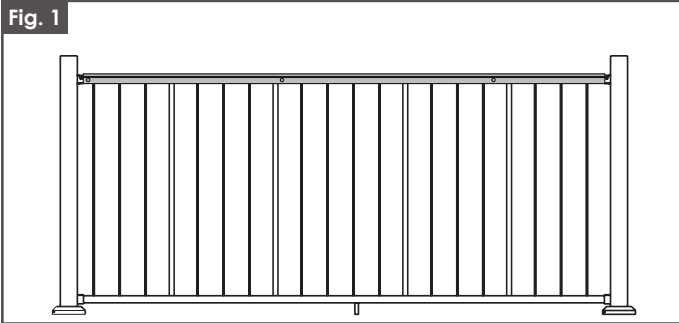
PROUD POST: FLAT ACCENT TOP RAIL (ATR)

Step 1. Flat ATR Spacers

1. Measure distance between brackets and cut ATR Spacer to length. The Spacer can be $1/4$ " [6.5mm] shorter than the distance between brackets.
2. If one of the screw holes was cut off during the sizing of the ATR Spacer, use a $5/8$ " [16mm] drill bit to add another hole 1" from the end of the ATR Spacer.
3. Attach the ATR Spacer using the provided self-drilling screws with a $5/16$ " [8mm] nut driver.
4. All screw holes must have a screw installed.

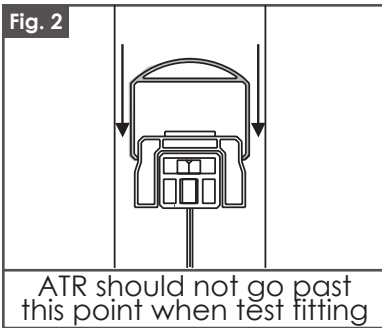
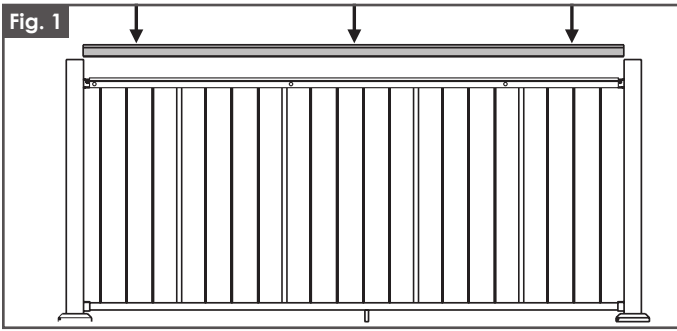
Note:

- **Flat ATR uses a full length ATR spacer.**
- **DO NOT REMOVE BACKING OF DOUBLE SIDED TAPE UNTIL YOU ARE READY TO PERMANENTLY ATTACH THE ATR.**



Step 2. Flat ATR Line And End

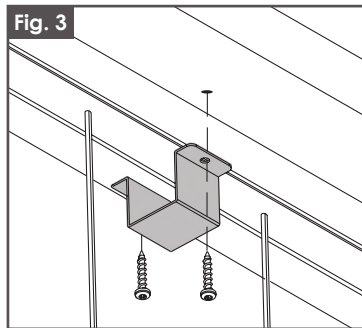
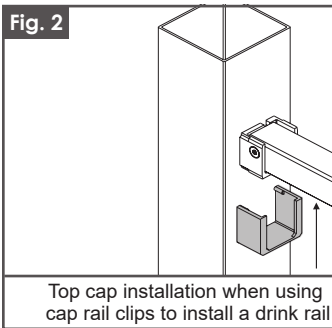
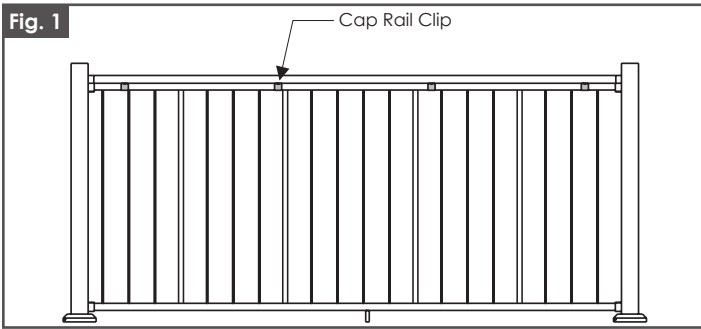
1. Measure the distance from the inside edge of the 2 posts.
2. Cut the ATR to measured length.
3. The ATR cannot block the inside edge of the post.
4. When test fitting the ATR, place on top of the spacers. Do not press the ATR down over the spacers. Removing the ATR from the spacers can damage the ATR and spacers. As shown in Fig. 2.
5. Remove the backing of all of the double-sided tape on the ATR spacers.
6. A Rubber Mallet might need to be used to install. If using a Rubber Mallet, use a cloth to protect the ATR from damage.



PROUD POST: CAP RAIL CLIPS, POST CAP & POST BASE COVER

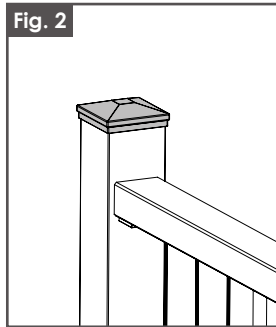
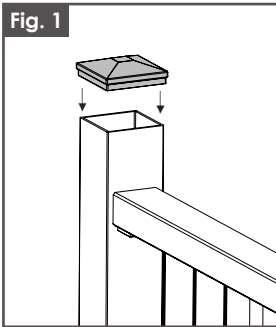
Step 1. Cap Rail Clips

1. Install top rail bracket covers that come with the Cap Rail Clips. As shown in Fig. 2.
2. 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.



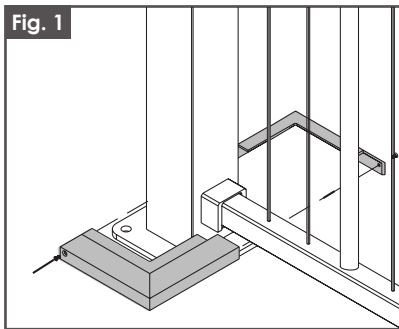
Step 2. AL¹³ HOME Post Caps

1. AL¹³ HOME Posts Caps are press fit into place.



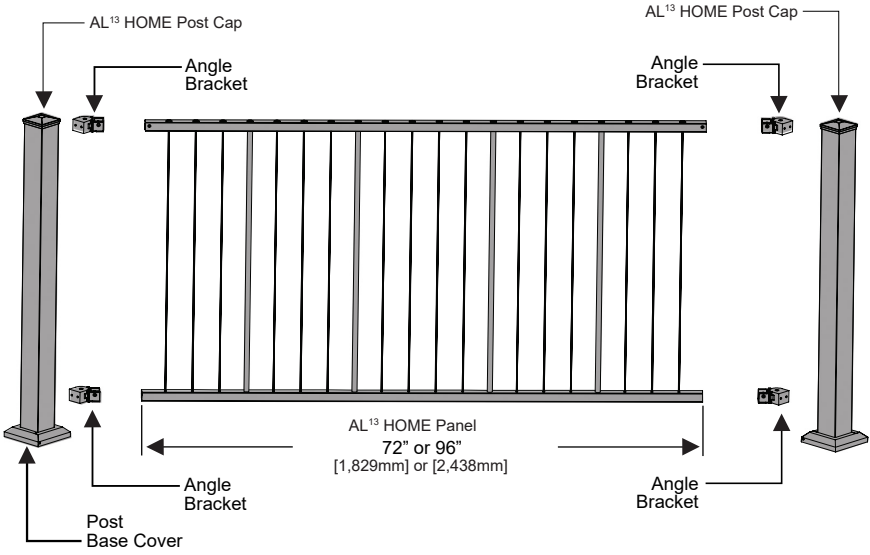
Step 3. Post Base Cover

1. Dis-assemble post base cover and install on post.
2. Use a broom or compressor to remove debris from railing and deck surface.



ANGLE BRACKET: BRACKET OPTIONS

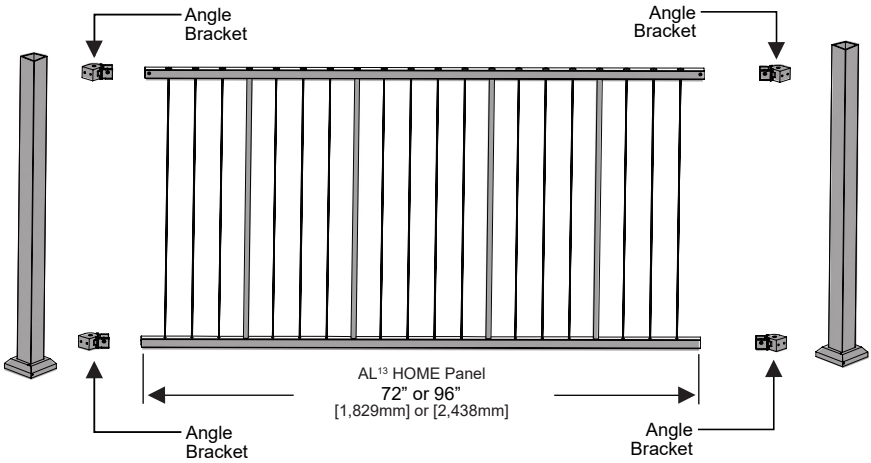
3" [76mm] Proud Post Angle Bracket



3" [76mm] Proud Post Configurations

AL ¹³ HOME Panel Height	AL ¹³ HOME Panel Only	
	Installed Panel Height	Required Post
32-1/2" [825.5mm]	36" [914mm]	39-1/2" [1,003.5mm]
40" [1,016mm]	42" [1,067mm]	45-1/2" [1,155.5mm]

2" [51 mm] OTP Post Angle Bracket



2" [51 mm] Proud Post Configurations

AL ¹³ HOME Panel Height	AL ¹³ HOME Panel Only	
	Installed Panel Height*	Required Post
32-1/2" [825.5mm]	36" [914mm]	36" [914mm]
40" [1,016mm]	42" [1,067mm]	42" [1,067mm]

ANGLE BRACKET: BRACKET INSTALLATION

Step 1. Angle Bracket Hole Locations

- Installed panel heights include space between the deck surface and underside of bottom rail. AL¹³ HOME 32.5" [825.5mm] panels have a 3-1/2" [89mm] space. AL¹³ HOME 40" [1,016mm] panels have a 2' [51 mm] space.
- Dimension A is measured from the bottom surface of post base.

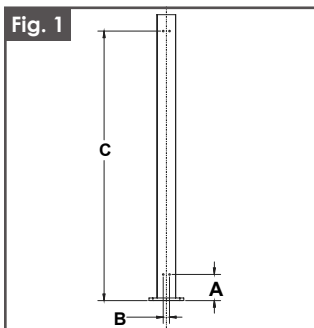


Fig. 2

Panel Height	
1	32-1/2" [825.5mm]
2	40" [1,016mm]

Pre-Drilling with a 3/16" [4.5mm] drill bit is required.

Pre-Drill Dimensions			
	A*	B	C
1	4-3/16" [106.5mm]	1" [25.5mm]	35-3/8" [899mm]
2	2-11/16" [68mm]	1" [25.5mm]	41-7/16" [1052mm]

Step 2. Pre-Drill and Install Angle Brackets

1. Mark the centerline of each post with a pencil.
2. Mark hole locations defined in the previous step with a pencil, then pre-drill with a 3/16" [4.5mm] drill bit, ensuring that the holes are spaced evenly from the centerline. As shown in Fig. 1.
3. Remove the bolt from the Angle Bracket Assembly.
4. Attach Angle Bracket Base piece to the posts with supplied T-25 thread-cutting screws. Use two screws per bracket. Use low speed setting on drill. The side of the base with two holes should be facing downwards.
5. Reassemble the Angle Brackets, but **DO NOT** install the Angle Bracket Cap at this time. As shown in Fig. 2.
6. Install Post Base Cover by sliding over the top of Post. As shown in Fig. 3.
7. Remove all metal shavings from deck, post base cover, post, and panel before bracket is screwed to post.

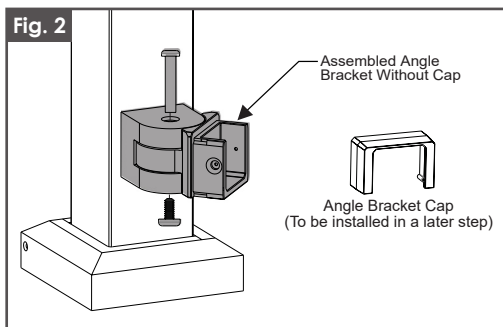
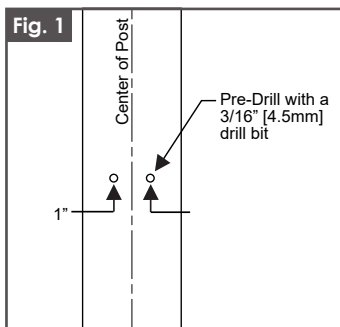
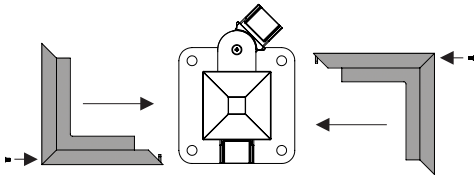


Fig. 3



Step 3. Determine Panel Length

1. Check to ensure that all posts are square and straight. Shim posts as required.
2. Ensure that the Angle Bracket Cups are approximately aligned.
3. With another person's help, measure the distance from the inside back of one cup to the inside back of the other cup. This will be the panel length. As shown in Fig. 2.

Fig. 1

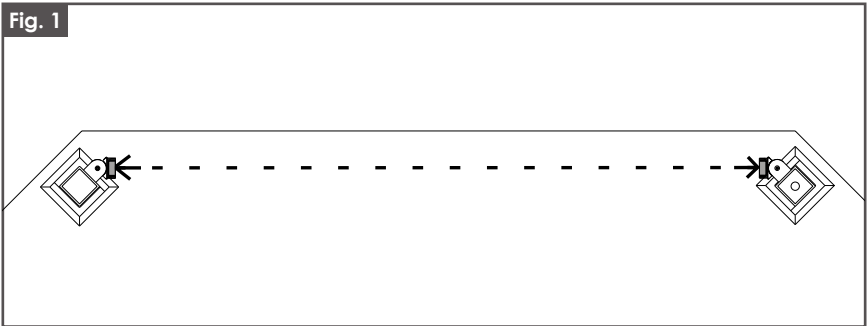
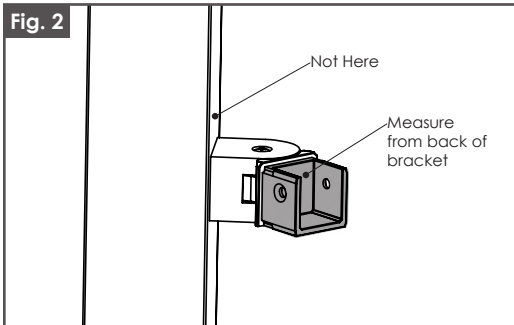


Fig. 2



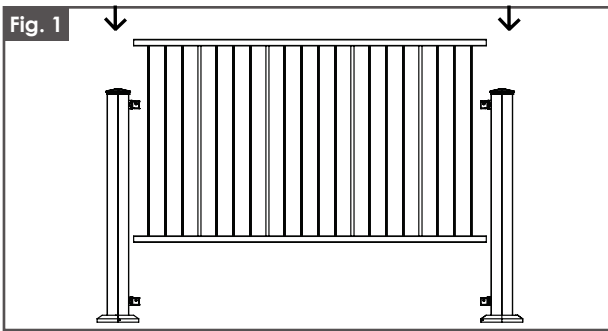
ANGLE BRACKET: CUTTING DOWN PANELS

- Reference page 8 for panel cutting steps.

ANGLE BRACKET: INSTALL PANEL

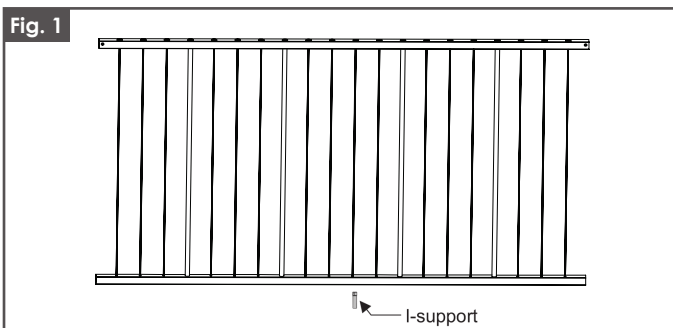
Step 1. Test Fit Panel

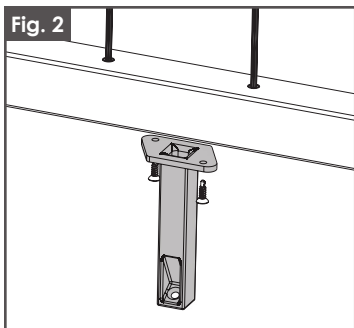
1. Insert cut panel to ensure proper fit.



Step 2. Install I-Support On Panel

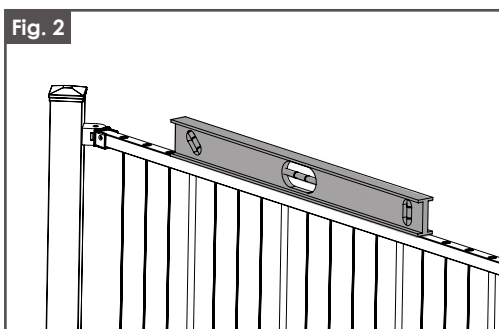
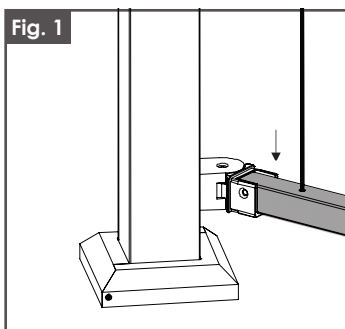
1. Install I-Support to underside of bottom rail with the 2 supplied Phillips Head self-drilling screws. As shown in Fig. 2.





Step 3. Install Panel

1. Use level to ensure 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.



Step 4. Apply Screws

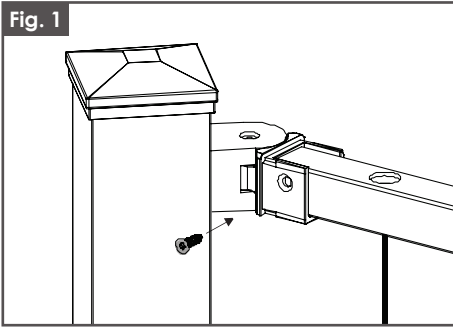
1. Attach the panel to each of the 4 brackets using the provided self-drilling screw with a T-25 Bit.

Tip: Pre-drill with a 3/16" [4.5mm] drill bit.

Note:

- **It is recommended that all panels are attached with provided screws on the same side of the bracket when using a line post. As shown in Fig.1.**
- **Only one screw is needed to secure the bracket to the panel.**

Fig. 1

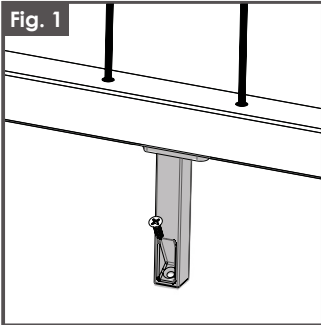


Step 5. Attach I-Support To Deck

1. Fasten I-Support to deck surface with the supplied Phillips Head Wood Screw.

Tip: Pre-drill with a 1/16" [1.5mm] drill bit.

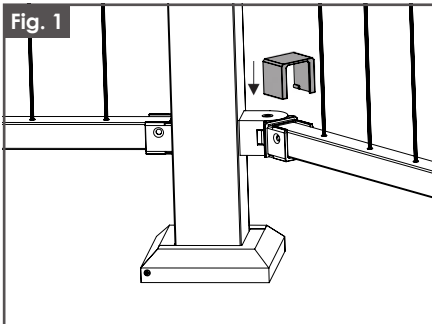
Fig. 1



Step 6. Install Bracket Cover

1. Bracket Caps snap down over Bracket Cups.
2. Use a broom or compressor to remove debris from railing and deck surface.

Fig. 1



ANGLE BRACKET: TENSIONING CABLE

- Reference page 38 for tensioning steps.

ANGLE BRACKET: ROUND & FLAT ACCENT TOP RAIL (ATR)

- Reference page 12 for OTP Round ATR steps and page 23 for Proud Post Round ATR steps.
- Reference page 16 for OTP Flat ATR steps and page 25 for Proud Post Flat ATR steps.

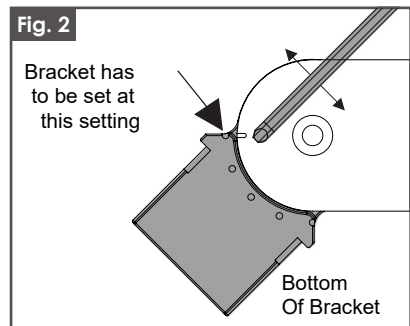
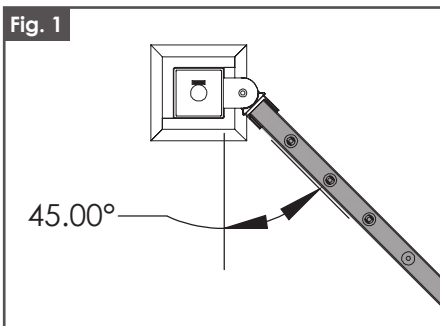
ANGLE BRACKET: ROUND & FLAT ATR MITER SPlice

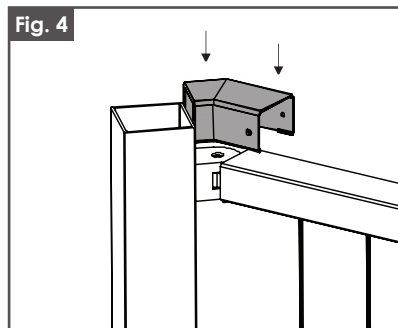
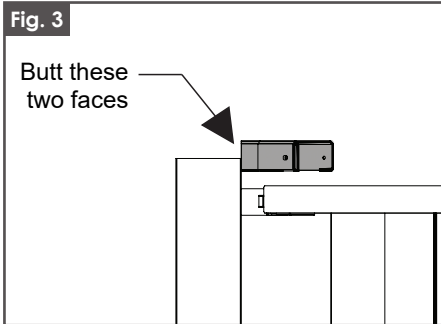
Step 1. ATR Angle Splice (Proud Post)

1. Use 3/32" [2.5mm] hex wrench to tighten set screw and lock Angle Bracket at 45° degree position. As shown in Fig. 1, 2.
2. Place Angle Splice on top of ATR butting up the end face of the splice to the face of the 3" [76mm] post. As shown in Fig 3, 4.
3. A Rubber Mallet might need to be used to install. If using a Rubber Mallet, use a cloth to protect the ATR from damage.
4. Secure Angle Splice with two #6-20 x 1/2" [12.5mm] self-drilling screws.

Note:

- **Angle Splice only works if brackets are angled at the 45° degree setting.**



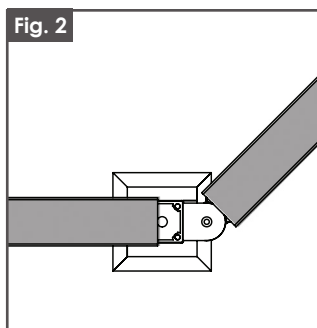
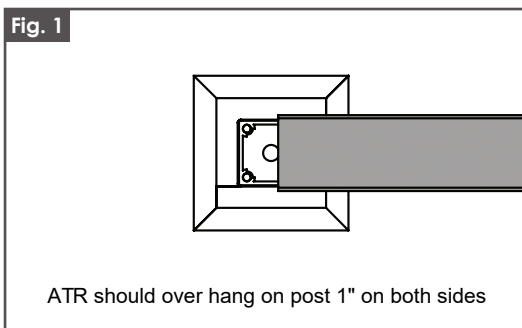


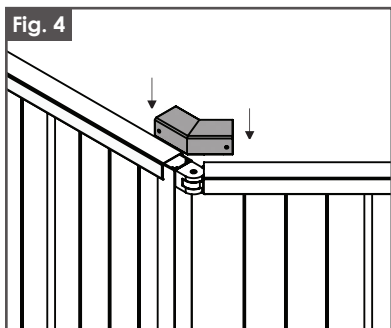
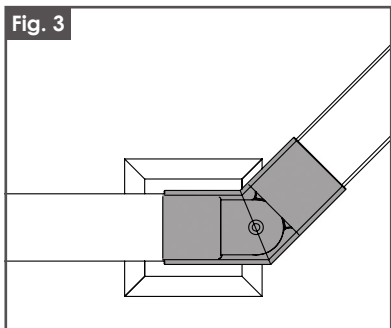
Step 2. ATR Angle Splice (OTP)

1. Install ATRs and Spacers opposite of the Angle Bracket first.
2. Measure from the inside of the post and add 2" [51 mm] to the over all length.
3. Install ATRs and Spacers on the Angle side measuring from the end of the Bracket Cup adding 2-1/2" [63.5mm] to the overall length.
4. Once both ATRs are installed center Angle Splice over Angle Bracket.
5. Secure Angle Splice on ATRs with a Rubber Mallet.

Note:

- **ATR should overhang Post 1" [25.5mm] on each side.**



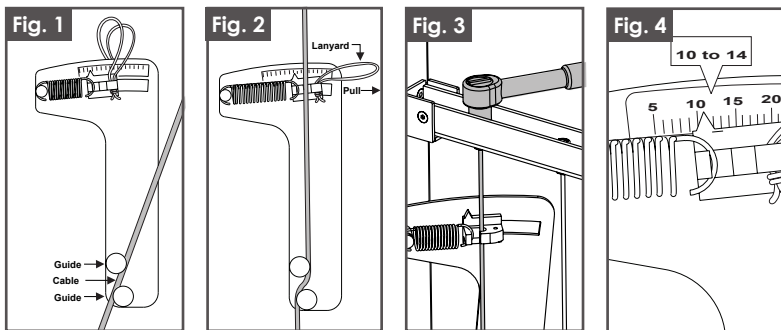


TENSIONING CABLE

Step 1. Tensioning the AL¹³ HOME Vertical Cable Panel

DO NOT OVER TIGHTEN CABLES

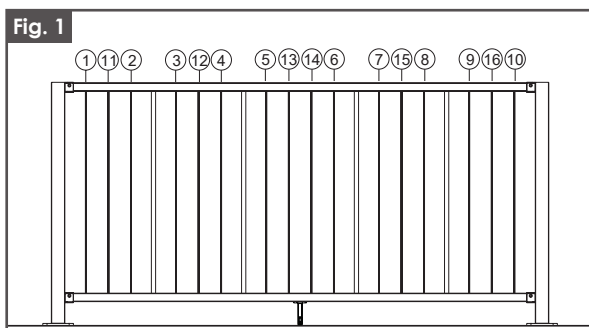
1. Use a Fortress Cable Tension Gauge to accurately tension the cables.
2. A properly tensioned cable should be tensioned until the indicator reads between 10 and 14.
3. The AL¹³ HOME Vertical Cable System uses 1/8" [3mm] diameter cable.
4. See images below for information on how to load cable into the tension gauge:
 - Position cable between lower guides. As shown in Fig. 1.
 - Pull the lanyard and extend the spring until the cable is engaged with the hook in the indicator slide. As shown in Fig.2.
 - Use a 1/2" [13mm] Socket Wrench to tighten the cable. As shown in Fig. 3.
 - Tighten cable until the indicator arrow is between 10 and 14 on the tension gauge. As shown in Fig. 4.



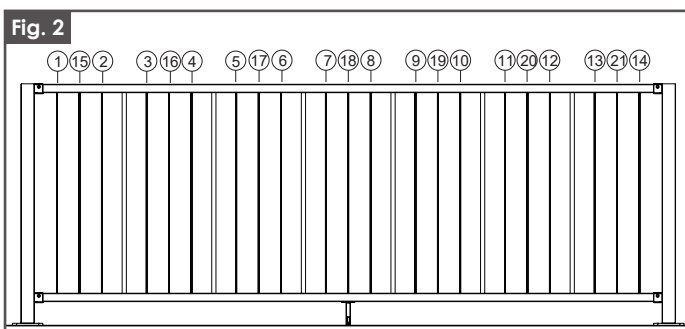
Step 2. Cable Tensioning Sequence

1. Remove the slack from the cables using the socket wrench. Once the slack is removed, only tension the cables one turn at a time in the sequence shown to maintain even tensioning across the panel.
2. Once cables are tensioned to the proper range on the tension gauge, you may now move onto the next steps.

6' Rail Sequence



8' Rail Sequence



CARE & MAINTENANCE

Care And Maintenance Of Fortress Railing Products Powder-Coated Products And Surfaces:

- Immediately after installation of your Fortress Railing Products, clean powder-coated products and surfaces with a solution of warm water and non-abrasive, pH neutral detergent solution. Surfaces should be thoroughly rinsed after cleaning to remove all residues. All surfaces should be cleaned using a soft cloth or sponge.
- Ensure construction materials such as concrete, plaster, and paint splashes are removed immediately before they have a chance to dry. Failure to remove these materials may cause damage to the powder-coated surfaces.
- The frequency of cleaning depends in part on the standard of appearance and also the requirements to remove deposits that may cause damage to the powder coating after prolonged exposure. Fortress recommends cleaning in three to four monthly intervals all products and powder-coated surfaces. In areas where higher traffic, increased atmospheric substances, or other effects may occur, the time period between cleanings should be increased to monthly intervals.
- **WARNING: Do not use strong solvents such as thinners, or solutions containing chlorinated hydrocarbons, esters, or ketones. Abrasive cleaners or cutting compounds should not be used.**

WARRANTY

Fortress Railing Products warrants its Fortress AL¹³ HOME Aluminum Railing Products and accessories to be free from manufacturing defects in materials and workmanship to the original consumer purchaser for a limited lifetime period. In addition to manufacturing defects, this limited warranty covers cracking, peeling, and blistering of the finish and extensive corrosion of the AL¹³ HOME Aluminum Railing Products. Corrosion is termed extensive when there are multiple rust-through perforation instances on the same piece of product.

This warranty does not cover damages caused by abnormal or improper use, improper product application, accident, alteration, welding, neglect, abuse, vandalism, lawn care equipment damage, abrasion, harsh chemicals, pool chemicals or chemicals for ice removal, air pollutants, improper service of installation or lack of service, building settlement, or damage caused by flood, fire or acts of god. Surface corrosion from scratches, nicks, and dents are not covered. For product located within 1 mile or less from the coast line, this limited warranty is for a period of 7 years from the date of purchase. AL¹³ HOME aluminum railing products that have had direct contact with salt water are excluded from this warranty.

The homeowner or contractor must submit a warranty claim online at <https://www.Fortressrailing.Com/Warranties/> and click on the "submit a warranty claim" button. Required documentation includes: proof of purchase, 4-6 photos of the product and jobsite, manufacturing date code and/or lot tag, which is included with all Fortress Railing Products. The original consumer purchaser will be notified by fortress railing products as to whether this warranty claim is approved or denied.

Conditions And Exclusions Of This Warranty

THIS WARRANTY IS NOT TRANSFERABLE. THE AMOUNT OF YOUR RESTITUTION WILL NOT INCLUDE LABOR TO REMOVE EXISTING COMPONENTS OR INSTALL THE REPLACEMENT COMPONENTS, SHIPPING CHARGES, SALES TAX, OR ANY OTHER CHARGES, NOR IS FORTRESS RAILING PRODUCTS REQUIRED TO PROVIDE SUCH LABOR OR SERVICE.

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES. FORTRESS RAILING PRODUCTS MAKES NO OTHER EXPRESS WARRANTIES AND DOES NOT AUTHORIZE ANY OTHER PERSON OR AGENT TO MAKE ANY OTHER EXPRESS WARRANTIES. FORTRESS RAILING PRODUCTS NEITHER ASSUMES NOR AUTHORIZES ANY OTHER LIABILITY OR OBLIGATION IN WARRANTY, INCLUDING WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THIS PRODUCT. IN NO EVENT SHALL FORTRESS RAILING PRODUCTS BE LIABLE FOR ANY CONSEQUENTIAL, SPECIAL, OR INCIDENTAL DAMAGES ARISING OUT OF OR CONNECTED WITH THE PURCHASE OF OR THE USE OF THIS PRODUCT FOR ANY BREACH OF WARRANTY.

This agreement shall be governed by and construed in accordance with the laws of the state of Texas, without regards to its conflict of laws. Any legal action arising out of the agreement shall be litigated and enforced under the laws of the state of Texas. In addition, you agree to submit to the jurisdiction of the courts of the state of Texas, and that any legal action pursued by you shall be within the exclusive jurisdiction of the courts in the state of Texas, U.S.A.

SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE. THIS WARRANTY IS APPLICABLE ONLY TO SYSTEMS INSTALLED WITHIN THE CONTINENTAL UNITED STATES AND CANADA.



JOIN THE REVOLUTION.

FortressBP.com | 866.323.4766