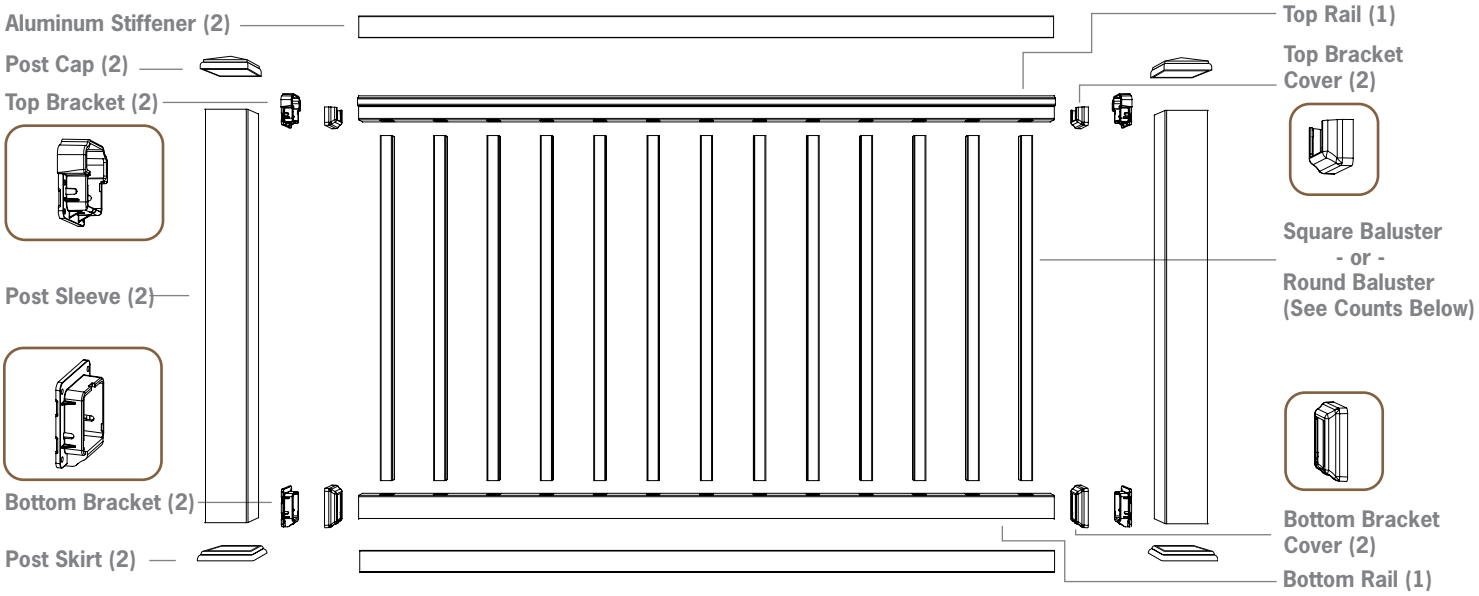
Reliance Rail™ CONTOUR Series Railing System

Visit www.timbertech.com/installation to view TimberTech installation videos.
Consult your local building codes for guard and handrail requirements.

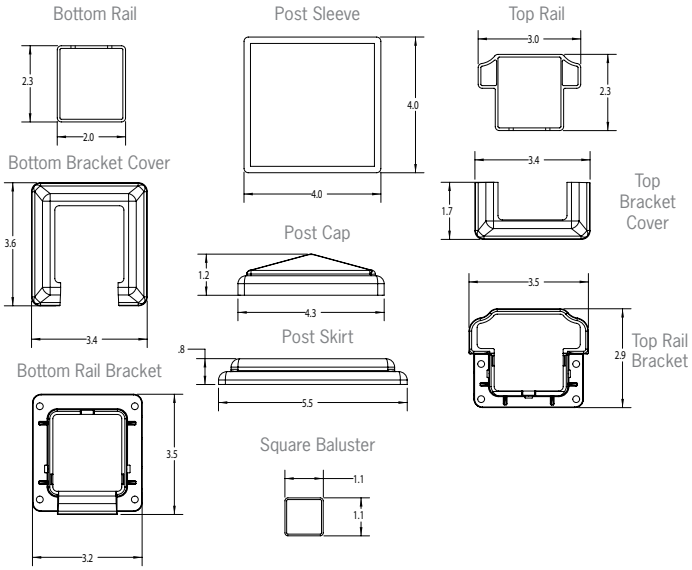
IMPORTANT INFORMATION

- Please read all instructions completely before starting any part of the installation. Always make sure to visit www.TimberTech.com to ensure you are viewing the most current installation instructions, care and cleaning, technical information and more.
- TimberTech Railing should be installed using the same good building principles used to install wood or composite railing and in accordance with the local building codes and the installation guidelines included below.
- AZEK Building Products LLC and its affiliates accepts no liability or responsibility for the improper installation of this product.
- TimberTech Railing may not be suitable for every application and it is the sole responsibility of the installer to be sure that the Railing is fit for the intended use. Since all installations are unique, it is also the installer's responsibility to determine specific requirements in regards to each Rail application.
- TimberTech Railing recommends that all applications be reviewed by a licensed architect,engineer or local building official before installation. If you have any questions or need further assistance, please call AZEK Customer Service at 877-ASK-AZEK (877-275-2935), or visit our website at www.TimberTech.com
- TimberTech Railing is tested as a whole system and should be used that way. It is not intended to be used in conjunction with other railing systems or fasteners.
- The following Installation Guidelines are applicable only for installation of Reliance Rail - Contour Series
- IMPORTANT: Make sure the DRIVE TOOL/DRILL is configured or set to use the SCREW setting when driving and/or tightening all FASTENERS. It is very Important not to overdrive fasteners. The use of Impact type drill drivers can increase the risk of overdriving fasteners.
- SAFETY: Always wear goggles when handling, cutting, drilling and fastening materials.
- Failure to install this product in accordance with applicable building codes and TimberTech's written Reliance Rail - Contour Series Install Guide may lead to personal injury, affect rail system performance and void the product warranty.
- The buildup or generation of static electricity is a naturally occurring phenomenon in many plastic based products such as carpeting, upholstery, and clothing, and can occur on alternative decking under certain environmental conditions. This static electricity can discharge once contact is made with hardware, railing, or other conductors of electricity

Parts Overview



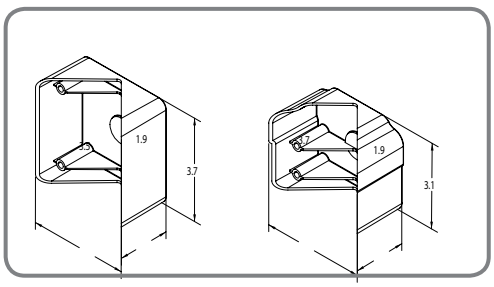
Component Dimensions



Components Needed For Installing One Reliance Contour Rail Section

	Level Rail Kit	Stair Rail Kit
Components available in Level and Stair Rail Kits	1 - Top Rail 1 - Bottom Rail 2- Aluminum Stiffeners 1 - Hardware Mounting Kit Square Balusters 14 - 6' Rail 19 - 8' Rail Round Balusters 15 - 6' Rail 20 - 8' Rail	1 - Top Rail 1 - Bottom Rail 2- Aluminum Stiffeners 1 - Stair Hardware Mounting Kit Square Balusters 12 - 6' Rail 16 - 8' Rail Round Balusters 12 - 6' Rail 16 - 8' Rail
Additional Components Needed for Each System (Sold Separately)	2 - Post Sleeves 2 - Post Caps 2 - Post Skirts	39" Post Sleeve and 54" Post Sleeve come in a kit with flat cap and skirt

Optional 45° Brackets



Tools Required

- Miter Saw (12" 80 to 100 tooth fine finish blade)
- Drill
- Drill Bits: 1/2" & 5/32"
- Tape Measure
- Safety Glasses
- Level
- Speed Square
- T25 Driver Bit
- 6" Drill Bit Extension

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Consult your local building codes for guard and handrail requirements.

IMPORTANT NOTE:

- Prior to construction, check with your local regulatory agency for special code requirements in your area.
- Common railing height is 36" or 42".
- TimberTech Reliance Rail - Contour Series 8' and 6' Rails are designed not to exceed 8' and 6' from inside of post to inside of post, using 4" posts, respectively.
- For all other applications, consult a design professional or a TimberTech Railing representative for more information.
- Posts must be installed plumb and level with each other. This is specifically critical for Over-the-Post applications.
- Read instructions completely to get an understanding of how the product goes together and how each piece affects the other.
- Not compatible with Glass Infill Panels.
- 4x4 lumber posts or TimberTech Secure Mount Posts should be installed plumb.
- Cut slowly, using a fine tooth saw blade to avoid chipping.

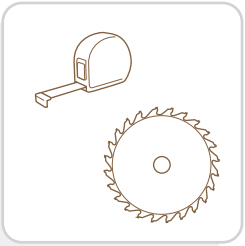
Reliance Rail™ CONTOUR Rail is available in 6' or 8' lengths.

Identifying Post Locations and Railing Section Lengths

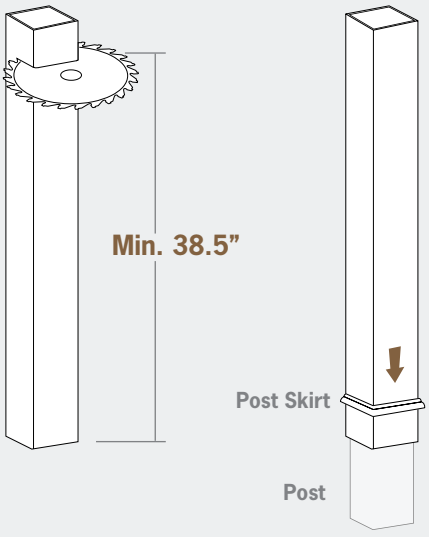
When designing and laying out your railing project- you must take the following into consideration:

- **Measurements are from inside of post to inside of post as noted in "Important Note" above. Rails are produced to 96" and 72". Although it is common to trim down rail lengths to fit within 96" or 72" from center-of-post to center-of-post measurement. Maximum finished rail length must not exceed 96" for 8 ft and 72" for 6 ft from inside of post to inside of post. Please allow for finished end cuts and angles when selecting rail length.**
- **Determine how many 6' or 8' Contour Rail sections you need and check to be sure you have all the components (and quantities) listed in the chart on page 2.**

1 INSTALL POST SLEEVES AND POST SKIRTS

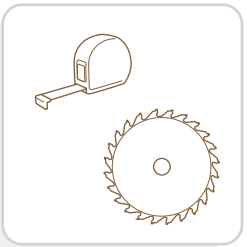


- **Ensure posts are level and plumb.**
- **Trim Post Sleeves to desired length if necessary.**
- **Slide Post Skirt over Post Sleeve. Slide Post Sleeve over the post (do not force). For best fit, shim Post Sleeve between sleeve and support post.**



IMPORTANT: Be sure to install Post Skirts before railing sections are installed. Installing Post Skirt over the post prior to sliding on post sleeve can reduce potential for scratches.

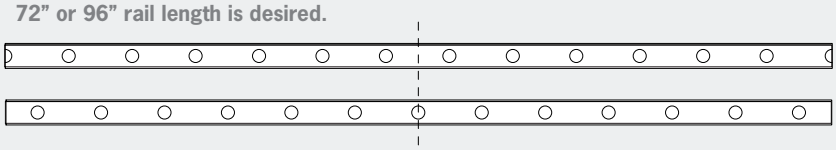
2 CUT TOP AND BOTTOM RAIL



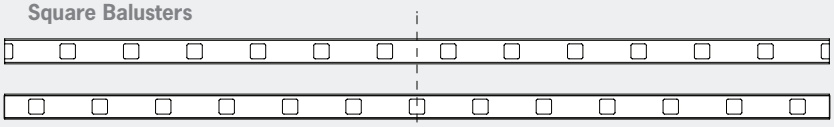
Determine whether the rail will be cut with a hole or Baluster in the center. Note: that the maximum distance between balusters or between baluster and post should not exceed 4".

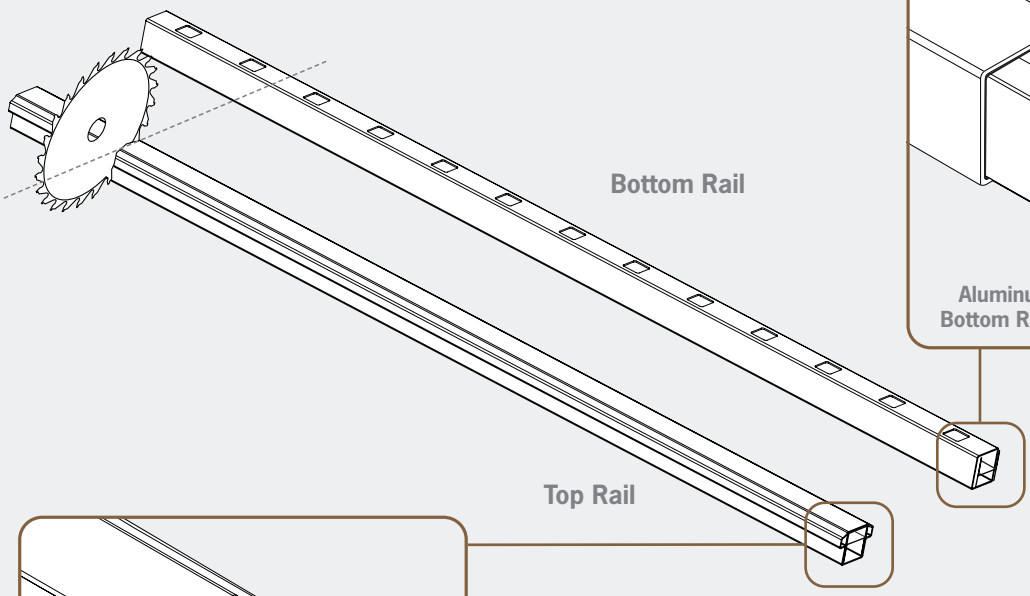
- If necessary, cut rails to desired length to ensure proper fit between posts. Ensure spacing between balusters or between last baluster and post does not exceed 4".
- Ensure the Aluminum Stiffener is in the Top Rail and Bottom Rail at proper orientation and flush with the end of the vinyl cover as shown below. Cut both Rails with the Aluminum Stiffener inside at the same time.

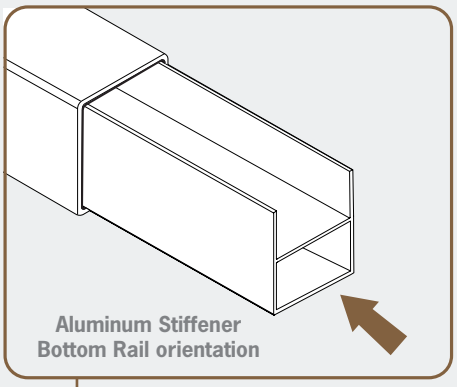
Round Balusters
Note: Round baluster rails must be cut down to ensure 4" maximum gap between last baluster and post, or additional balusters must be added to fill the gap if a full 72" or 96" rail length is desired.



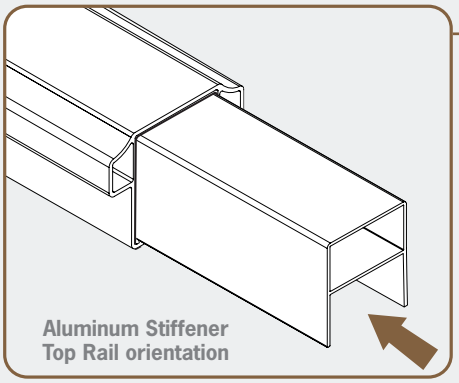
Square Balusters





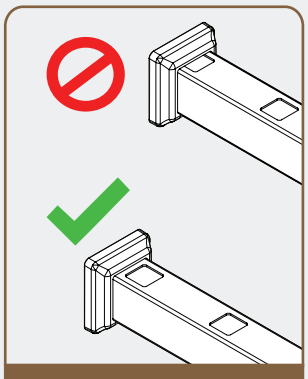


Aluminum Stiffener
Bottom Rail orientation



Aluminum Stiffener
Top Rail orientation

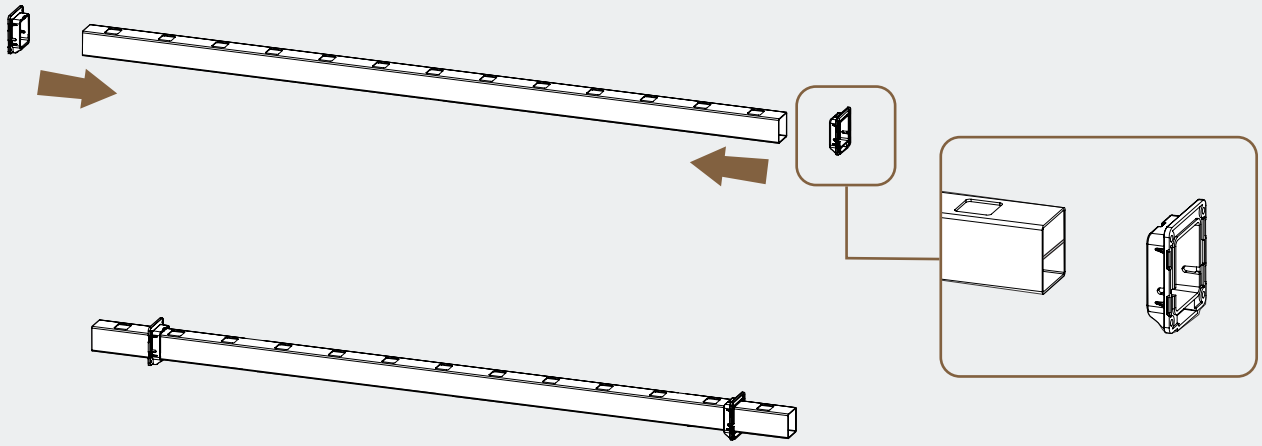
Installation Tips: Ensure proper spacing between first or last baluster and post. Minimum spacing should be at least 1.25" to provide room for bracket.



End cap should not partially cover over a baluster cut out.

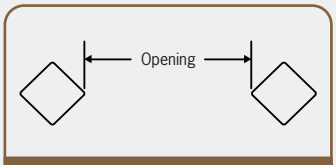
Make sure the Top and Bottom Rail are cut to the exact same length and baluster holes align.

3 SLIDE BOTTOM RAIL MOUNTING BRACKETS ONTO BOTTOM RAIL ENDS

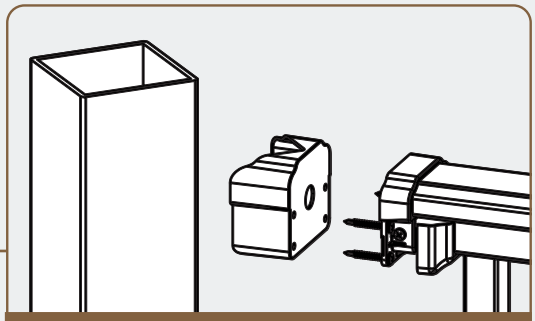


4 OPTIONAL STEP - INSTALL 45° BRACKET ADAPTERS

- 45° installation requires an additional Bracket to achieve the 45° angle. Note: All rails must be cut 5/8" shorter (5/16" from each end) than the opening between the post sleeves to allow for the 45° bracket.

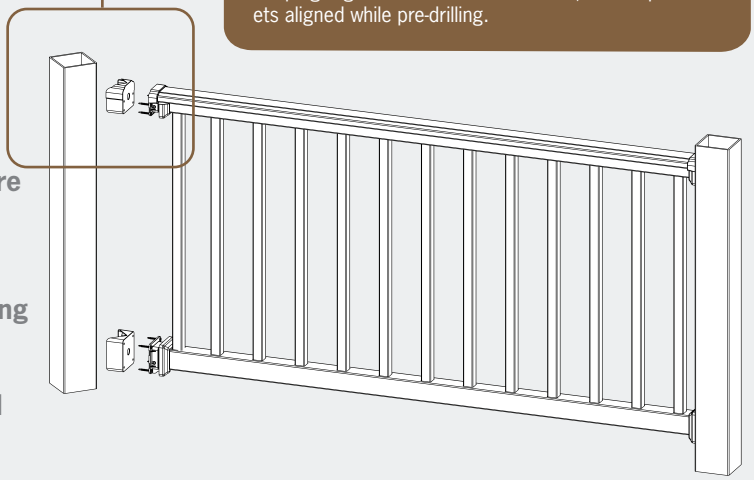


Measure Opening:
96" Max (8' Rail) - 72" Max (6' Rail)



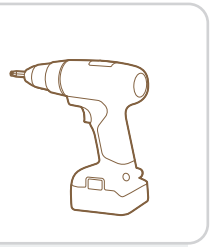
For 45° Mounting an additional bracket is required. Keeping together with screws inserted, will keep brackets aligned while pre-drilling.

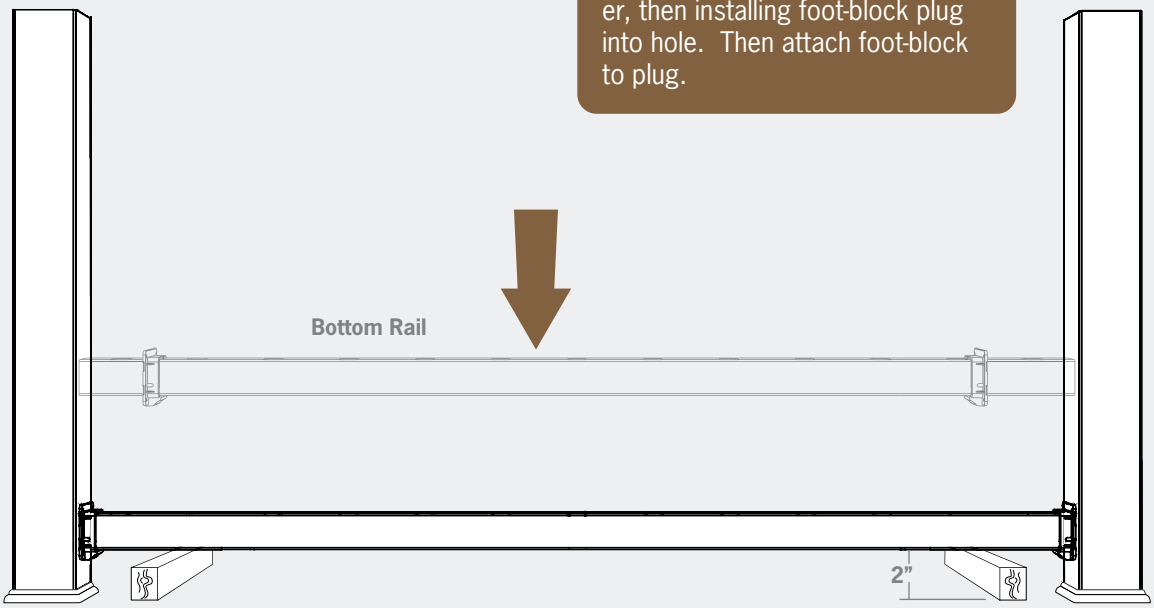
- Pre-assemble best or set bottom rail on 2" blocks.
- Be sure rail brackets are slid over rail ends.
- Place 45° brackets into postion on post at ends of rails.
- Place 3" screws through the rail bracket and 45° adapter bracket insuring that the holes are aligned (This will keep brackets together).
- Remove a screw and pre-drill through post sleeve and slightly into wood support post using a 5/32" bit on a 6" extension. Then, re-insert the 3" screw and drive until snug to post. Repeat for the other holes in the bracket until all brackets are securely installed.



5 INSTALL BOTTOM RAIL

Note: For rail spans >72", a foot-block is recommended to be added to the center of the span. Install foot-block prior to installing bottom rail by drilling 1/2" hole into underside of bottom rail through vinyl and aluminum stiffener, then installing foot-block plug into hole. Then attach foot-block to plug.

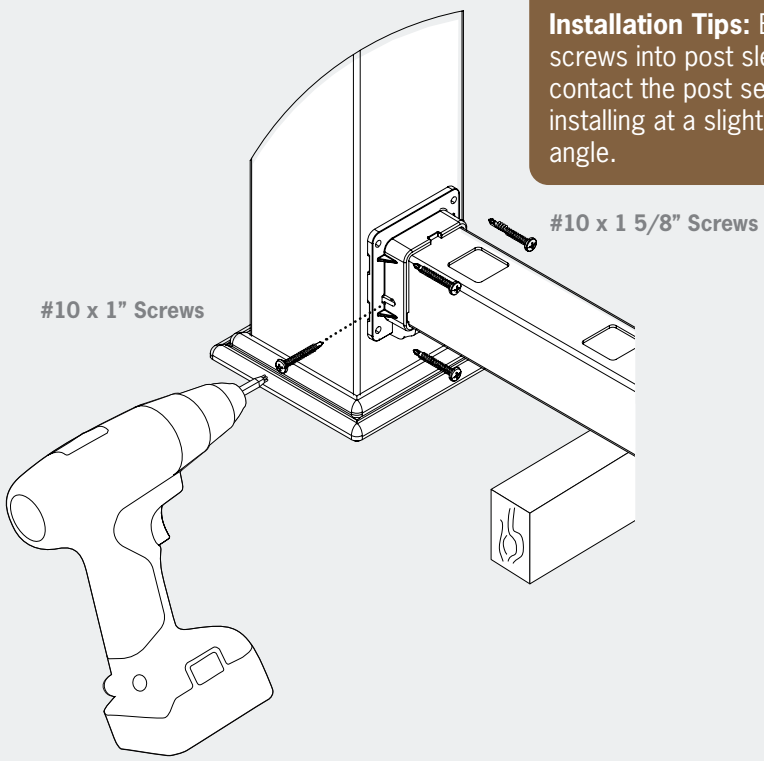




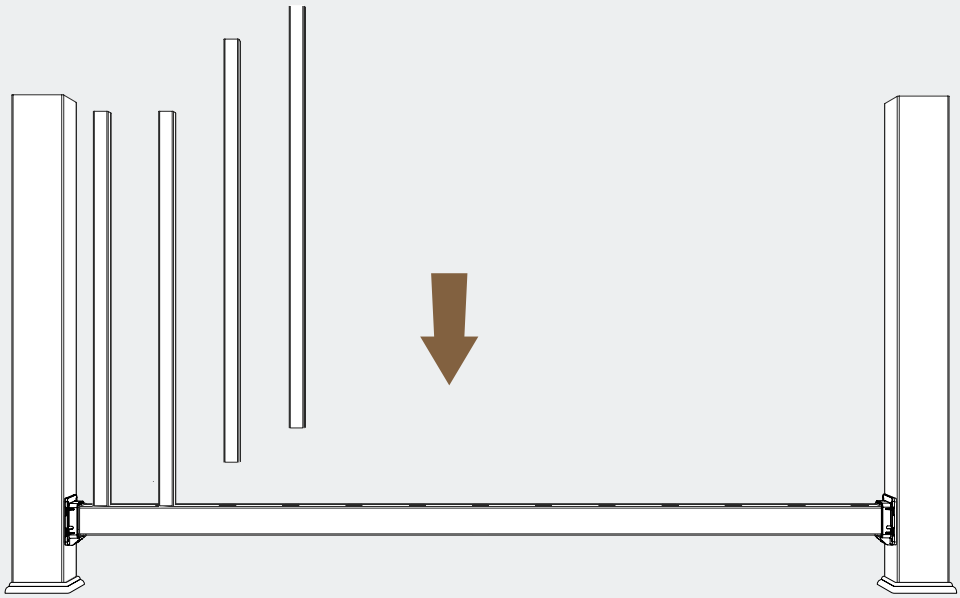
Installation Tips: Use a 2" tall block on each end to help support the rail during installation. Reliance Rail is designed with 2" clearance to achieve stated rail heights.

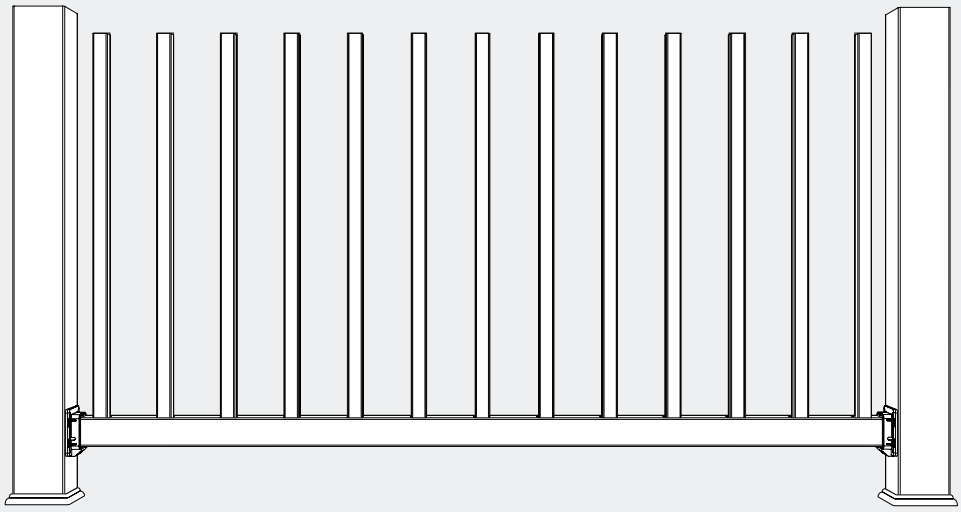
Installation Tips: Ensure screws into post sleeve contact the post securely by installing at a slight inward angle.

- **Center Bottom Brackets within Post Sleeves and ensure Brackets are level and square.**
- **Fasten Brackets to post using 4 (#10 1 5/8" T25) screws.**
- **Pre-Drill 5/32" hole through the Bottom Bracket into the Bottom Rail and through the Aluminum Stiffener**
- **Fasten Bracket to Bottom Rail using 2 (#10 1" T25) screws.**

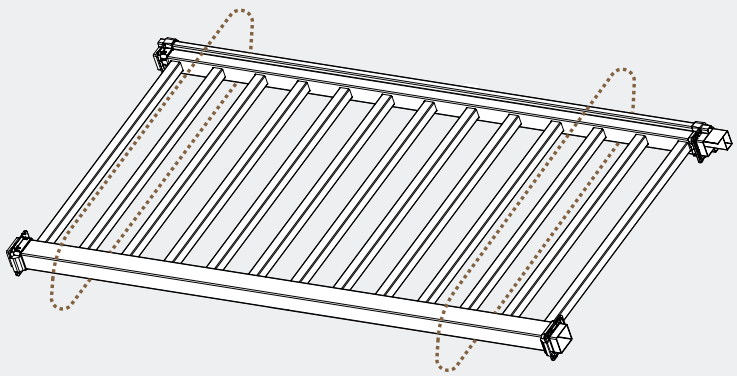


6 INSTALL BALUSTERS



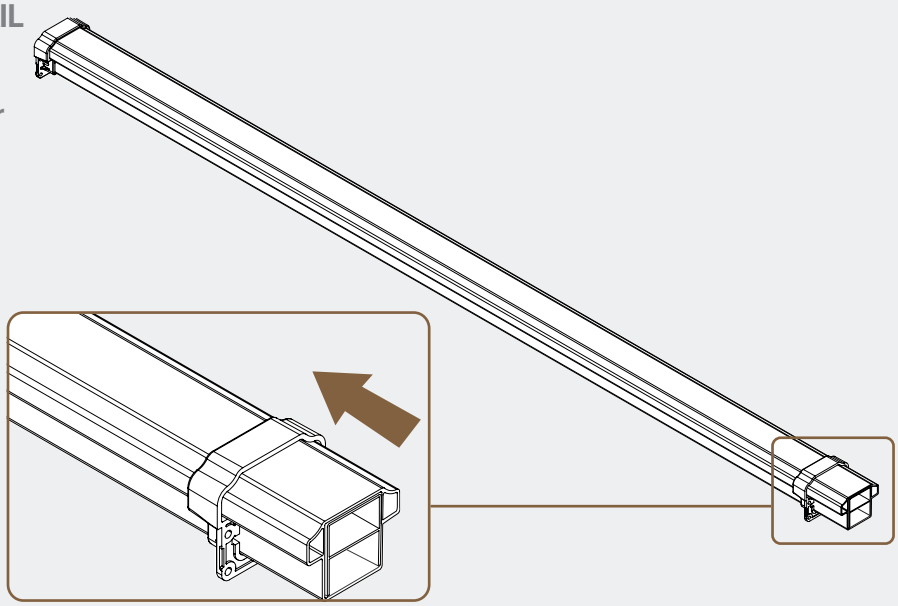


Installation Tips (Straight Section): Find a flat, non-marking work surface. Assemble the balusters to the top and bottom rails with the aluminum reinforcement in place, ensuring that the balusters are properly set within both rails. While squeezing top a bottom rails together, pick up section and carry to desired location. Set the assembly on wood blocks, verify that the top rail height is acceptable, center the rail brackets within the post sleeve, and install the brackets into the posts with screws.



7 SLIDE TOP RAIL MOUNTING BRACKETS ONTO TOP RAIL

- Be sure that Aluminum Stiffener rail is slid into Top Rail at the proper orientation.
- Silde Mounting Brackets on to each side of the Top Rail
- For installing 45° Mounting Brackets see Page 5.



8 INSTALL TOP RAIL AND FASTEN MOUNTING BRACKETS

- Install Top Rail onto the Balusters
- Ensure the open section of the A-shaped Aluminum Stiffener in the Top Rail is facing towards the deck surface. See (Fig 1)
- Ensure Top Rail is at the required height from deck surface.
- Check that the Balusters are plumb.
- Center Top Brackets within Post Sleeve. Ensure Brackets are level and square.
- Fasten Brackets to post using (#10 1 5/8" T25) screws.
- Fasten Brackets to Top Rail using (#10 1" T25) screws, after pre-drilling with 5/32" drill bit into the Aluminum Stiffener.

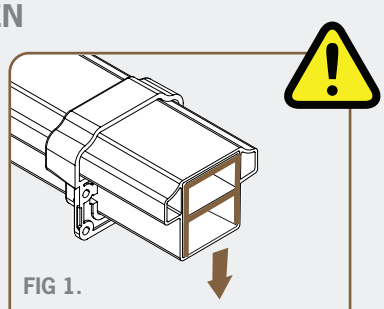
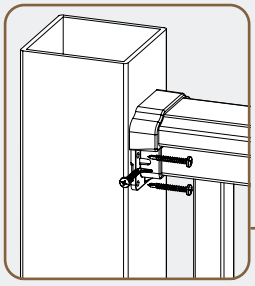
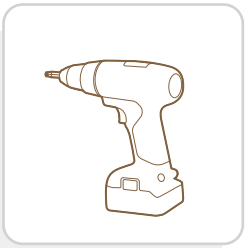
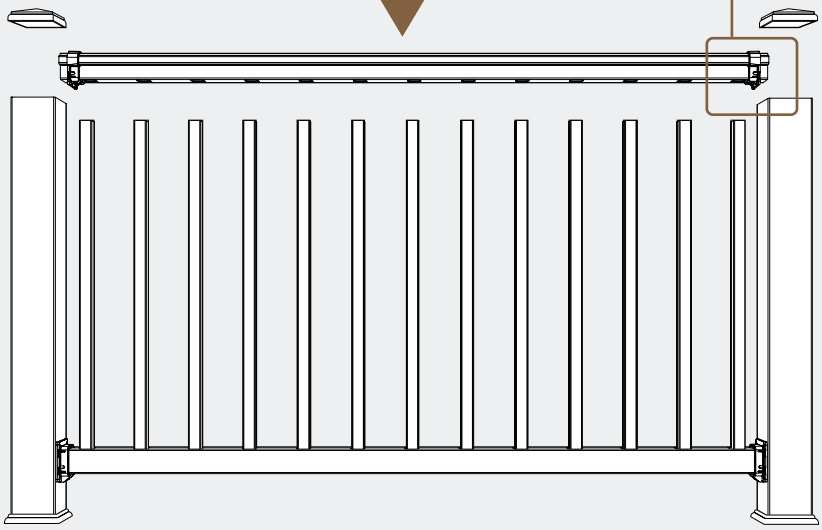


FIG 1.

The open section of the A-shaped Aluminum Stiffener needs to face down toward the deck surface this is for the Top Rail only.

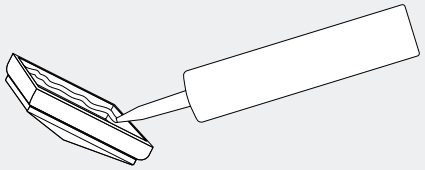




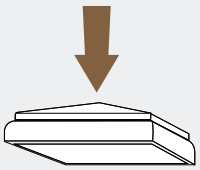


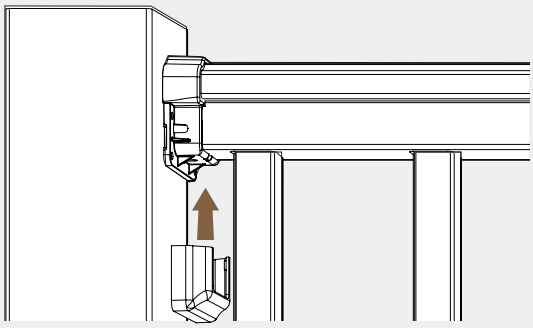
9 INSTALL POST CAPS AND BRACKET COVERS

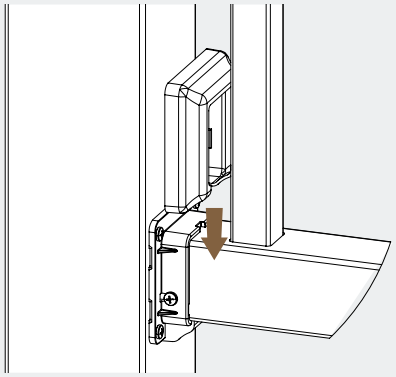
- Install Post Caps onto Posts
- Install the Top Rail Bracket Covers.
- Install the Bottom Rail Bracket Covers.

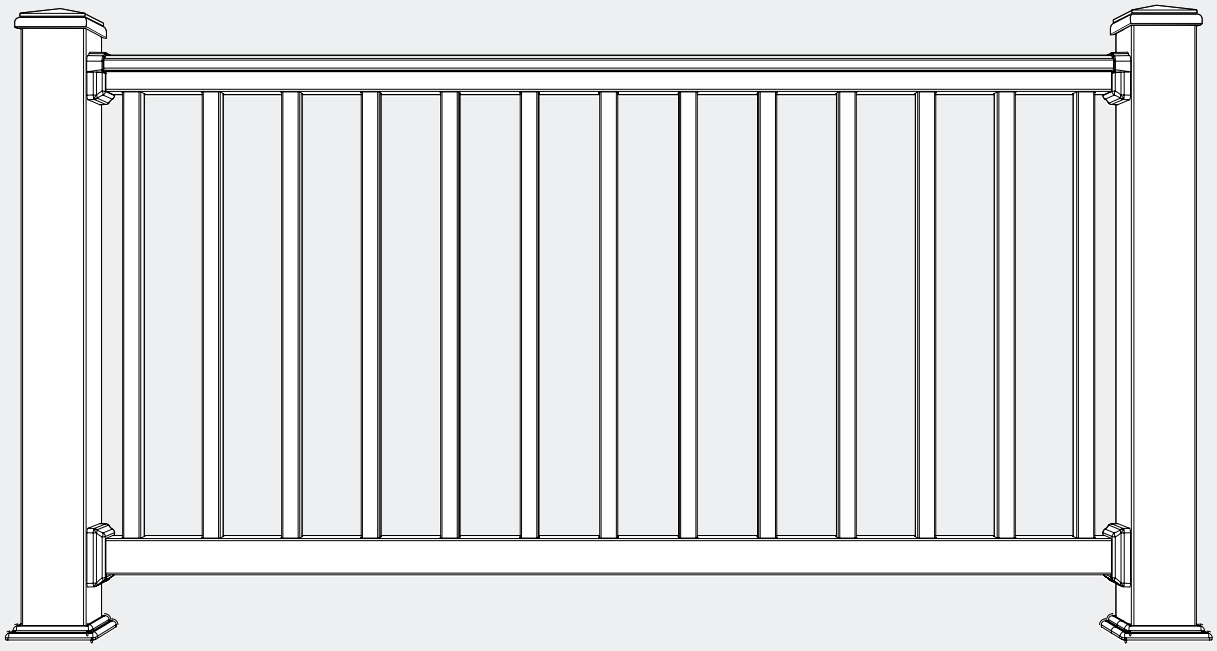


Installation Tips: Apply silicone inside of cap. Do not apply to post and then slide cap on. Do not add silicone to any other parts that it is not intended for.





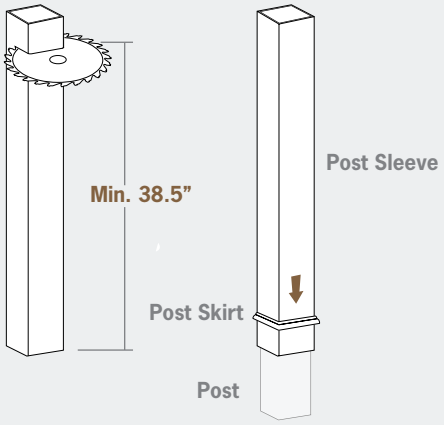




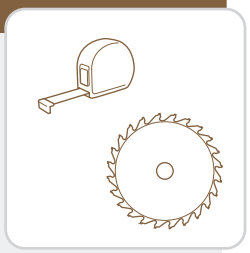
Consult your local building codes for guard and handrail requirements. Contour stair rail and brackets are built at a nominal 35° degrees and may require adjusting of the bracket within the range of 33° to 37° degrees.

1 INSTALL POST SLEEVES AND POST SKIRTS

- Ensure posts are level and plumb.
- Trim Post Sleeves to desired length if necessary.
- Slide Post Skirt over Post Sleeve. Slide Post Sleeve over the post (do not force). For best fit, shim Post Sleeve between sleeve and support post.



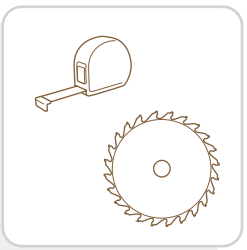
Min height of the post at the top of the stair section is 38.5”. The post at the bottom of the stair section should be taller than 42”.

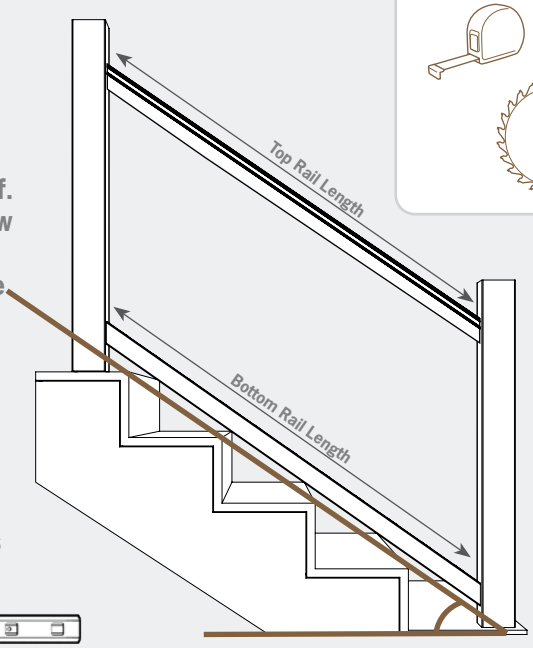


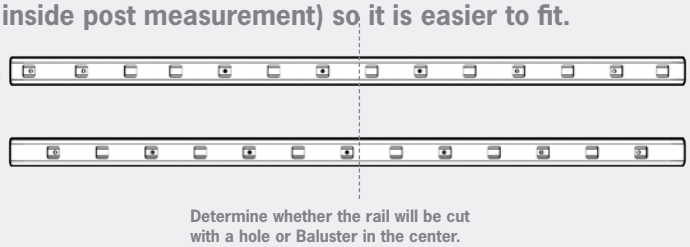
IMPORTANT: Be sure to install Post Skirts before railing sections are installed. Installing Post Skirt over the post prior to sliding on post sleeve can reduce potential for scratches.

2 CUT TOP AND BOTTOM RAIL

- Lay a piece of wood or plywood (1/4” - 3/4” recommended) as a spacer to set the bottom rail on top of. Ensure that the placement of the bottom rail does not allow a 6” sphere to pass between the bottom rail and the stair tread at any point. Mark the cutting line on the rails at the post sleeve using a pencil.
- Ensure the aluminum stiffener is placed in top and bottom rails in the proper orientation. Both top and bottom rails may be cut with the aluminum stiffener in place. Blow out any dust and chips after cutting.
- Cut Top and Bottom Rail slightly shorter than pencil marks (inside to inside post measurement) so it is easier to fit.



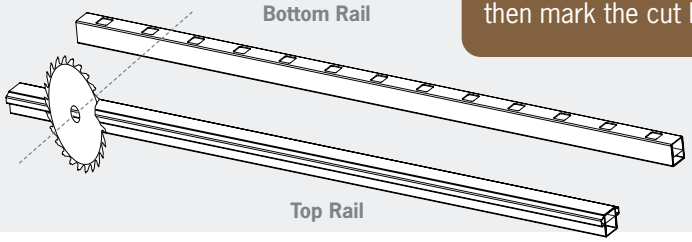




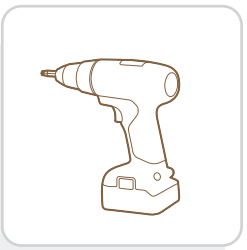
Determine whether the rail will be cut with a hole or Baluster in the center.

Installation Tip: Prior to cutting, use a soft clamp to lock the bottom rail in place against the post and then mark the cut lines.

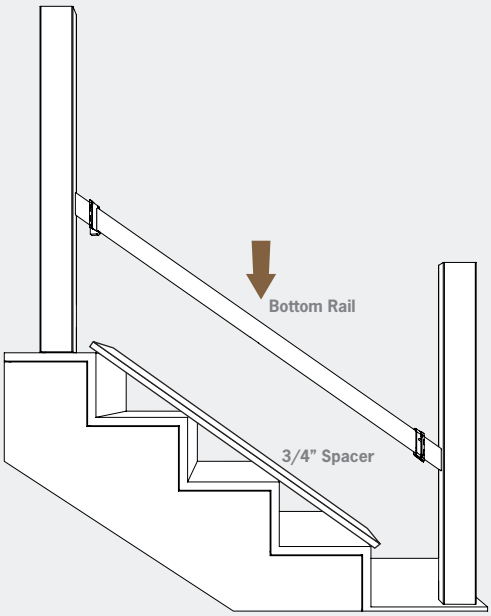
IMPORTANT: Lay Bottom Rail along stair tread. Position Rail to maximize space between the last cut hole and the Post at each end.



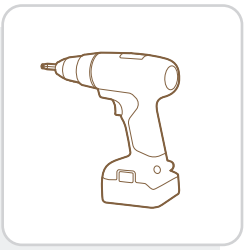
3 SLIDE ON MOUNTING BRACKETS



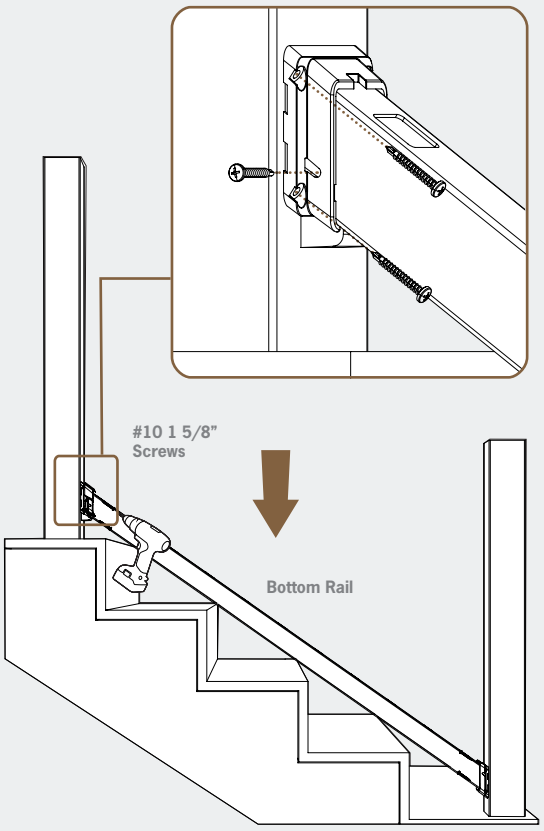
- Slide the Mounting Brackets onto each end of the Bottom Rail.
- Reposition Bottom Rail on nose of stairs or slightly elevated, using the spacer referenced in Step 2.



4 INSTALL BOTTOM RAIL



- Position bottom rail 1/4" - 3/4" above stair tread nosing and check to ensure that a 6" sphere cannot pass between the stair tread and the Bottom Rail.
- Center Bottom Brackets within Post Sleeves.
- Fasten Brackets to post using (#10 1 5/8" T25) screws after pre-drilling with 5/32" drill bit.
- Fasten Brackets to Bottom Rail using (#10 1" T25) screws, after pre-drilling with 5/32" drill bit into the Aluminum Stiffener.



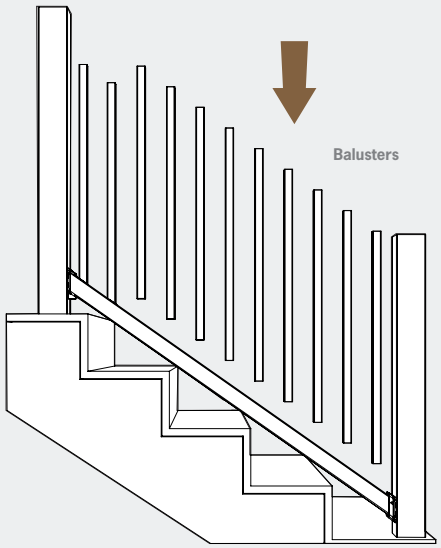
Note: For rail spans >72", a foot-block is recommended to be added to the center of the span.

5 INSERT BALUSTERS INTO ROUTED HOLES

- Place one baluster in each of the routed holes along the Bottom Rail.

Note: Baluster lengths: 36" system uses 32" balusters, and 42" system uses 38" balusters.

Note: Pre-assembly of the stair section can be done after measuring and cutting rails, similar to the level section.



6 INSTALL TOP RAIL AND FASTEN MOUNTING BRACKETS

- Install Top Rail onto the Balusters
- Ensure The open section of the A-shaped Aluminum Stiffener in the Top Rail is facing towards the deck surface. See (Fig 1)
- Ensure Top Rail is at the required height from the front nose of the stair tread and check that the Balusters are plumb.
- Center Top Brackets within Post Sleeve and clamp using soft clamp to ensure bracket will not shift upward. Mark hole locations where screws will attach bracket to post. Pre-drill using 5/32" drill bit.
- Fasten Brackets to post using 4 (#10 1 5/8" T25) screws, after pre-drilling with 5/32" drill bit. Loosely Install top screws first, followed by bottom screws, then tighten all screws in bracket, being sure to not overdrive screws.
- Fasten Brackets to Top Rail using 2 (#10 1" T25) screws, after pre-drilling with 5/32" drill bit into the Aluminum Stiffener.

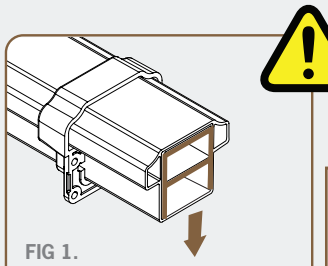
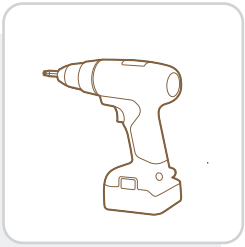
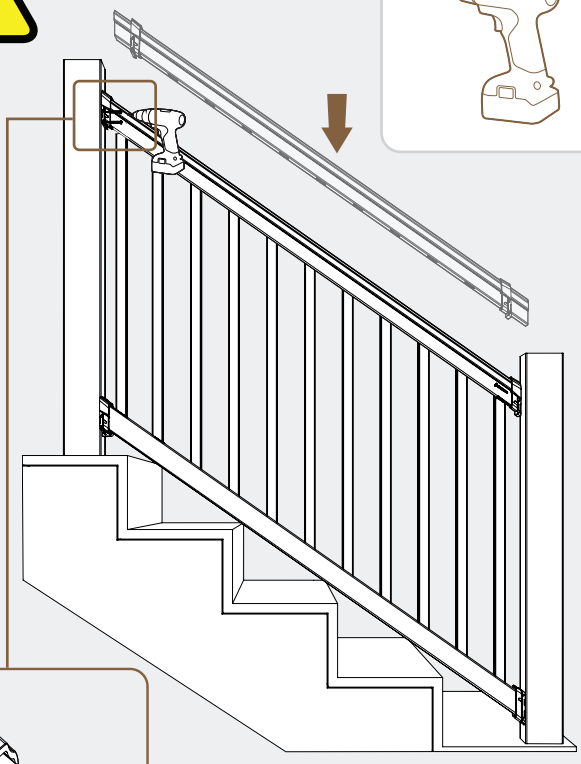
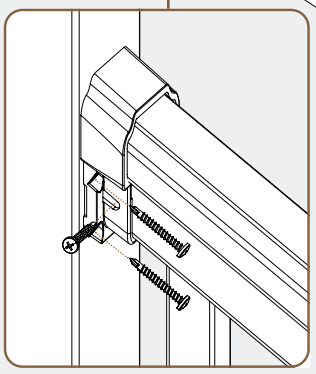


FIG 1.

The open section of the A-shaped Aluminum Stiffener needs to face down toward the deck surface this is for the Top Rail only. (Fig1)



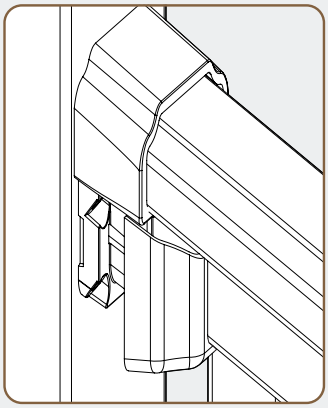


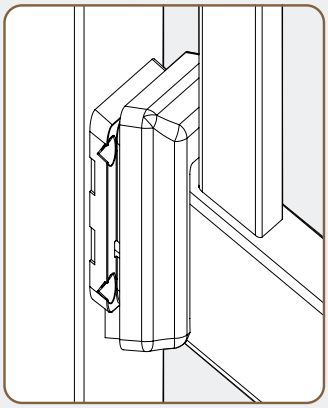


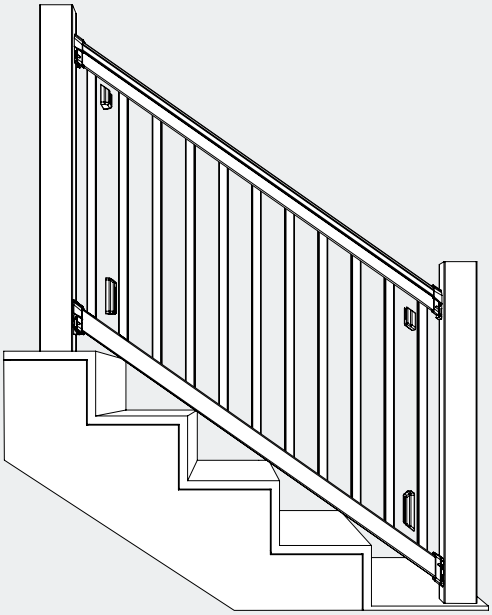
Installation Tip: Prior to cutting, use a soft clamp to lock the top rail in place against the post and then mark the cut lines.

7 INSTALL BRACKET COVERS

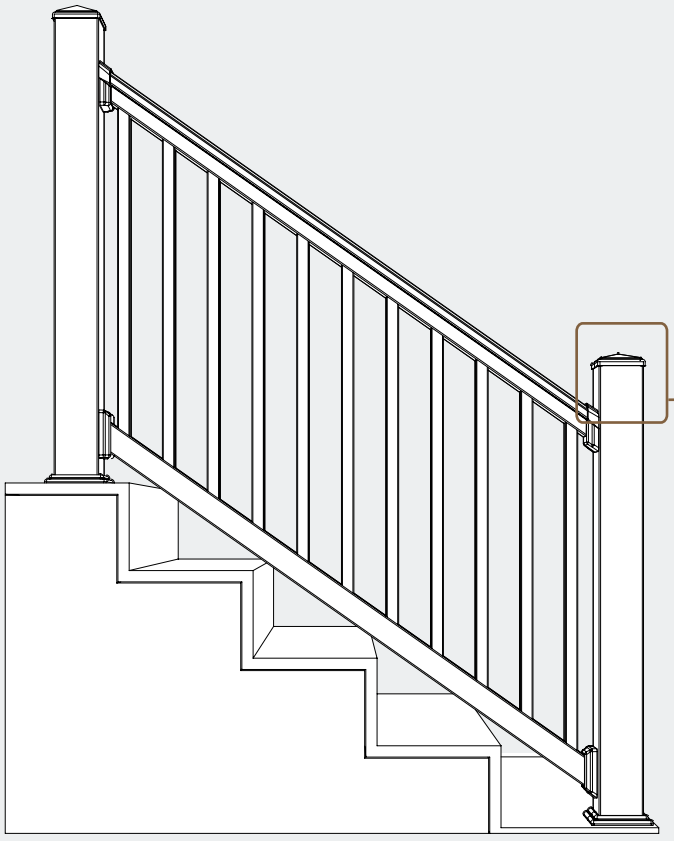
- Bracket Covers fit around rail and snap on to the brackets







8 ATTACH POST CAPS



Installation Tips: Apply silicone inside of cap. Do not apply to post and then slide cap on. Do not add silicone to any other parts that it is not intended for.