## Reliance Rail<sup>™</sup> CONTOUR Series Railing System

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

# RAILING BY AZEKS

## 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**



#### **Optional 45° Brackets**



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Components Needed For Installing One Reliance Contour Rail Section				
Components available in Level and Stair Rail Kits	Level Rail Kit	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	Stair Rail Kit	1 - Top Rail 1 - Bottom Rail 2- Aluminum Stiffeners 1 - Stair Hardware Mounting Kit Square Balusters 12- 6' Rail 16- 8' Rail 16 - 8' Rail 16 - 8' Rail
Additional Components Needed for Each Sys- tem (Sold Separately)		2 - Post Covers 2 - Post Caps 2 - Post Skirts	f	39" Post Sleeve and 54" Post Sleeve come in a kit with lat cap and skirt

## **Tools Required**

- Miter Saw (12" 80- to 100-tooth fine-finish blade)
- Drill

#### • Drill Bits: 1/2" & 5/32" • Level

- Tape Measure
- Safety Glasses
- Speed Square

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- T25 Driver Bit
- 6" Drill Bit Extension



### 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 exceeed 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<sup>™</sup> 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.



**Round Balusters** 

72" or 96" rail length is desired.



#### CUT TOP AND BOTTOM RAIL

- 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 Stiffner inside at the same time.

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".

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



#### 0 0 $\cap$ Ο Ο 0 0 Ο 0 0 0 0 0 0 0 0 0 0 0 0 **Square Balusters** Ľ

**Bottom Rail** 

**Top Rail** 

Aluminum Stiffener Too Rail orientation

Installation Tips: Ensure proper spacing between first or last

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



Aluminum Stiffener Bottom Rail orientation

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

## **Reliance Rail™ CONTOUR Series Railing System**

R A I L I N G

3 SLIDE BOTTOM RAIL MOUNTING BRACKETS ONTO BOTTOM RAIL ENDS

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\*OPTIONAL STEP - INSTALL 45° BRACKET ADAPTERS

- 45° installation requires an addtional Bracket to achieve the desired angle.
- Install each adapter using 4 (#10 3" T25) screws, then attach standard bracket to adapter as you would to the post.
- Follow the same installation procedure outlined for the Top and Bottom Rails.





## **Reliance Rail™ CONTOUR Series Railing System**





**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. Using either stretch wrap or a strap, secure the rail assembly towards the ends to keep the section together. Make sure to stay within the rail brackets to avoid interference. 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.





## **Reliance Rail™ CONTOUR Series Railing System**





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.







## **Reliance Rail™ CONTOUR Series Stair Railing System**

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## **Reliance Rail™ CONTOUR Series Stair Railing System**



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#### 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 base referenced in Step 2.





#### INSTALL BOTTOM RAIL

- Position bottom rail 1/4" over stair tread and adjust rail height as needed 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-driling 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 footblock is recommended to be added to the center of the span.





## Reliance Rail<sup>™</sup> CONTOUR Series Stair Railing System



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# INSERT BALLUSTERS

• 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 section can be done after measuring and cutting rails, similar to the level section.





INSTALL TOP RAIL AND FASTEN MOUNTING BRACKETS

- Install Top Rail onto the Ballusters.
- Ensure The open section of the A-shaped Aluminum Stiffener in the Top Rail is facing towards the deck surface (see Fig 1).

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)

- 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 afer pre-driling 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.



## **Reliance Rail™ CONTOUR Series Stair Railing System**





INSTALL BRACKET COVERS

• Bracket Covers fit around rail and snap on to the brackets.









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.

