



Installing AZEK RadianceRail[®]

Installing RadianceRail [®] with Glass Infill.....	2
Installing RadianceRail [®] Stairs with Glass Infill	9

Important Information

- Please read all instructions completely before starting any part of the installation.
- RadianceRail[®] should be installed using the same good building principles used to install wood, composite, or metal railing and in accordance with the local building codes and the installation guidelines included below.
- AZEK[®] Building Products accepts no liability or responsibility for the improper installation of this product.
- RadianceRail may not be suitable for every application and it is the sole responsibility of the installer to be sure that RadianceRail 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.
- AZEK[®] Building Products 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 TimberTech Customer Service at 800-307-7780, or visit our website at www.azek.com or www.timbertech.com.
- RadianceRail 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 for installation of RadianceRail only.
- **IMPORTANT:** Make sure the DRIVE TOOL/DRILL is configured or set to use the SCREW setting when driving and/or tightening all FASTENERS.
- **SAFETY:** Always wear goggles when handling, cutting, drilling and fastening materials.
- Failure to install this product in accordance with applicable building codes and RadianceRail's written Rail 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.

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

RadianceRail® Custom Rail Packs are available in 6' lengths.


Measuring Your Railing Area

- Measurements are from center to center of the posts. Rails are produced in 6' lengths to allow for finished end cuts and angles.
- Determine how many 6' RadianceRail sections you need and check to be sure you have all the components (and quantities) listed in the chart shown to the right.

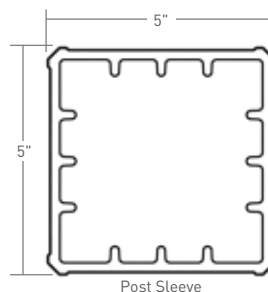
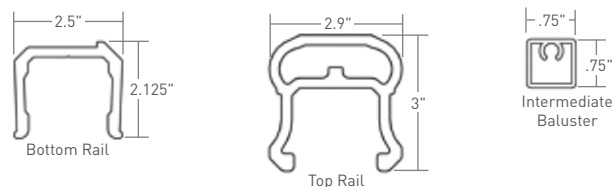
Important Information

- RadianceRail 6' rails are designed not to exceed 6' center of post to center of post.
- Cut slowly, using a fine tooth saw blade to avoid chipping.
- For 42" railing use 12' Post Sleeves.

Components Needed For Installing One RadianceRail Section

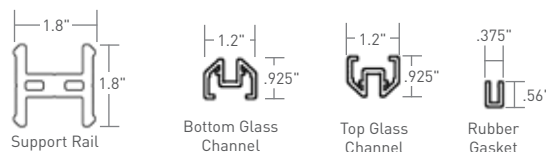
Components available separately for mix-and-match rail systems	RadianceRail Custom Rail Pack 1 - Top Rail 1 - Bottom Rail 2 - Support Rails Hardware Mounting Kit Support Block Mounting Templates 1 - Foot Block
Hardware included in Hardware Kits:	Hardware Mounting Kit 4 - Mounting Brackets 2 - Support Blocks 16 - #8 x 3/4" Screws 6 - #8 x 1 3/4" Screws 6 - #8 x 2 5/8" Screws (Stairs Only) 3 - #8 x 3" Screws 12 - #8 x 3" Green Screws T20 Driver Bit
Glass Hardware Pack:	1 - Top Glass Channel 1 - Bottom Glass Channel 2 - Rubber Gaskets 6 - #8 x 2 1/4" Screws 6 - #8 x 2" Screws 3 - #8 x 1" Screws
Additional Components Needed for Each System	 1/4" Tempered Glass must be sourced locally (See attached reference sheet). 2 - Post Caps 2 - Post Sleeves 2 - Post Skirts

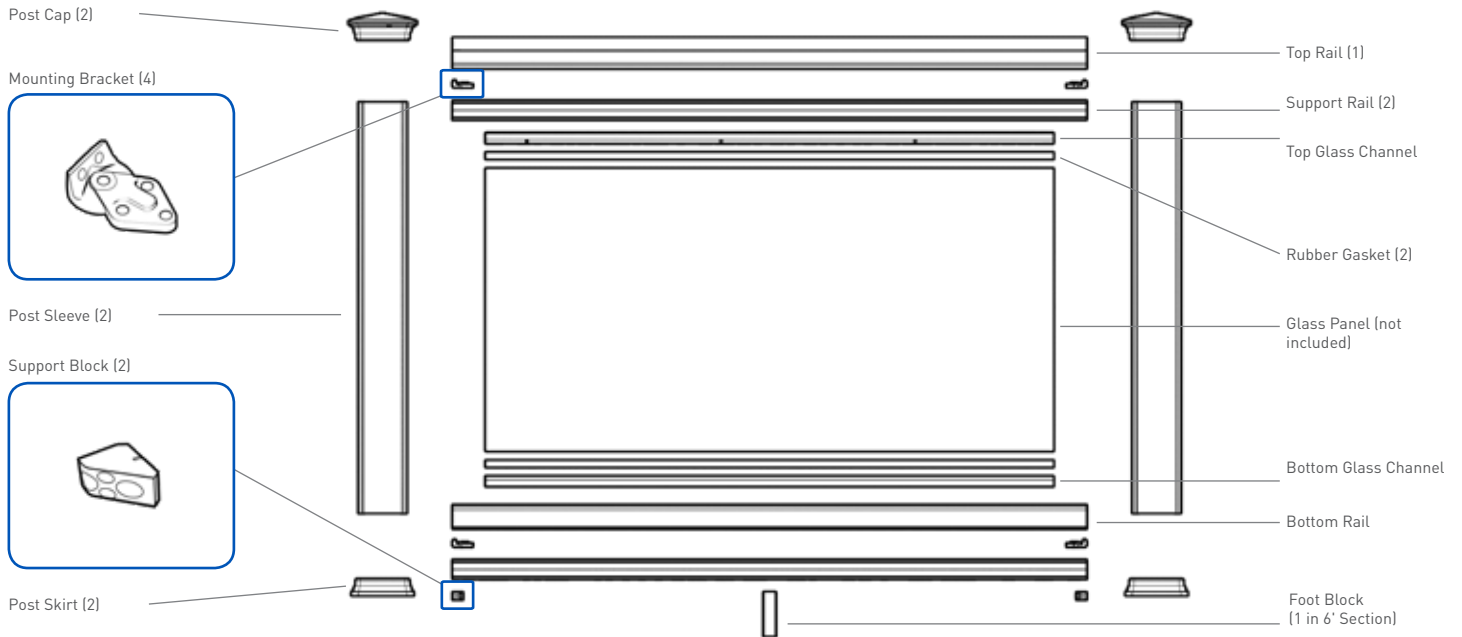
Component Dimensions



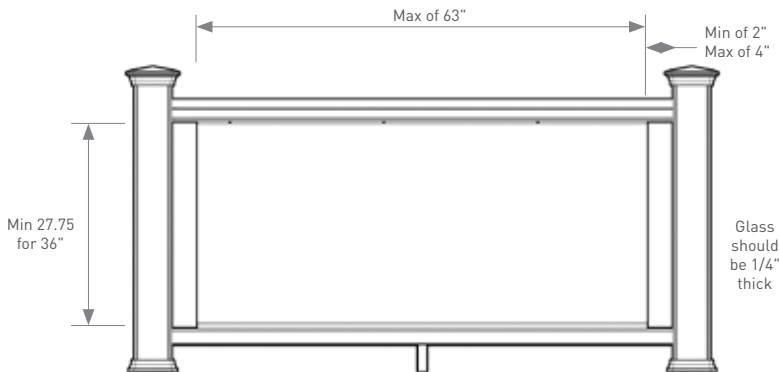
Tools Required

- Miter Saw
- Drill
- Measuring Tape
- 7/64" Drill Bit
- 3/16" Drill Bit
- Utility Knife

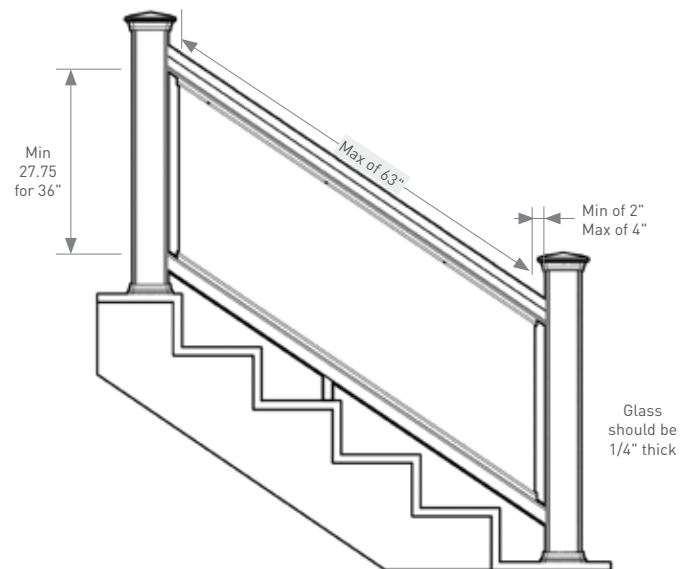




DIMENSIONAL CONSTRAINTS FOR STRAIGHT SECTION



DIMENSIONAL CONSTRAINTS FOR STAIR SECTION

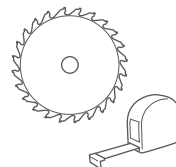
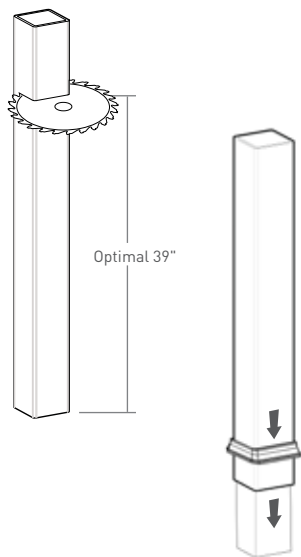


Installing RadianceRail® with Glass Infill

1

Install Post Sleeves

- Trim Post Sleeves to desired length.
- Slide Post Sleeve and Post Skirt over post (do not force).
- Ensure post are square and plumb.



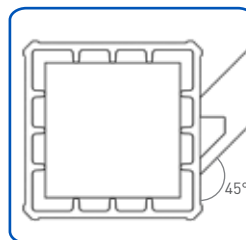
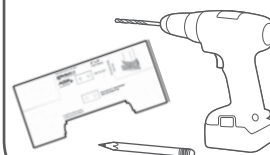
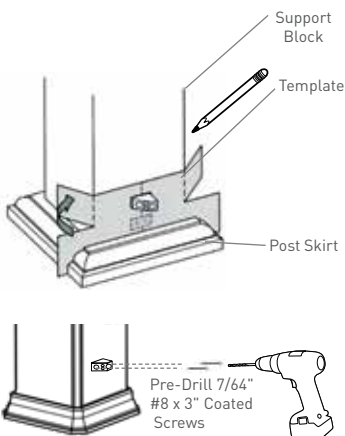
2

Install Lower Support Block

- Position template at bottom of Post Sleeve above Post Skirt.



If you do not have a the template, position the top of the Support Block 4" above the deck and 2-1/2" above the post skirt.



For angled rail installations - align angled face of Support Block parallel to rail section.

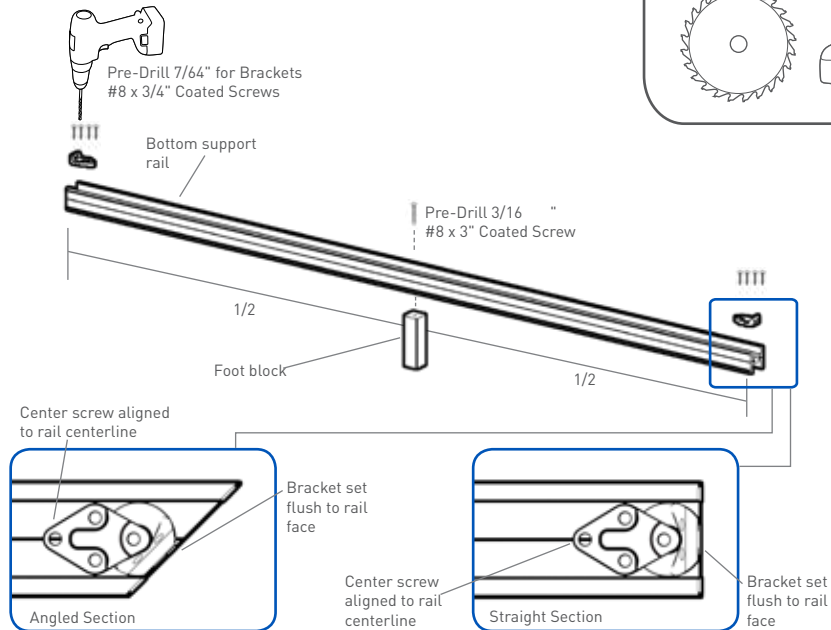
3

Cut and Assemble Bottom Support Rail

- Cut the Bottom Support Rail to length.



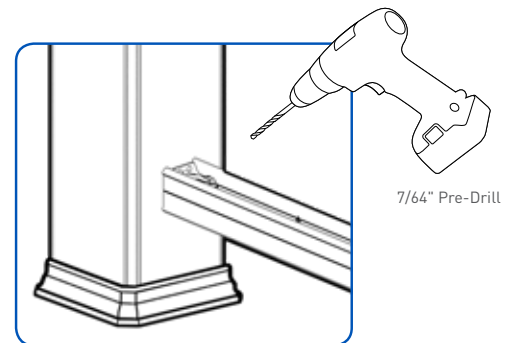
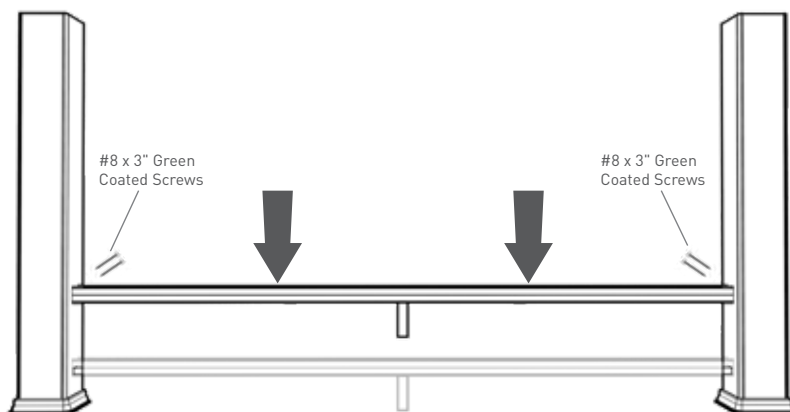
For sections up to 6': Place one Foot Block in the center of the rail



4

Install Bottom Support Rail

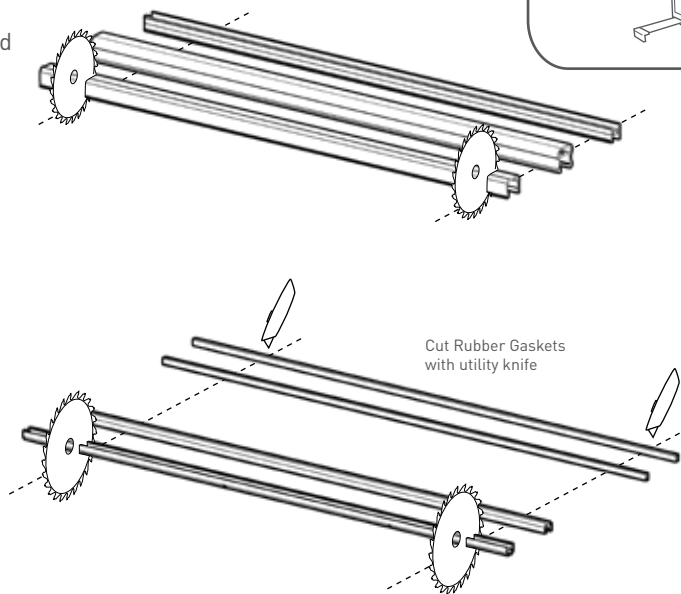
- Position rail assembly onto Support Blocks.



5

Trim Rails, Extrusions and Gaskets

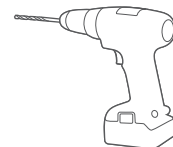
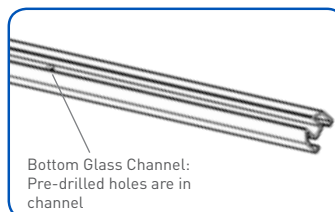
- Measure distance between the posts at the Bottom Support Rail.
- Transfer measurement to Top Rail, Bottom Rail, and Top Support Rail, and cut to length.
- Measure and cut Top and Bottom Glass Channels, and Rubber Gaskets to appropriate length.



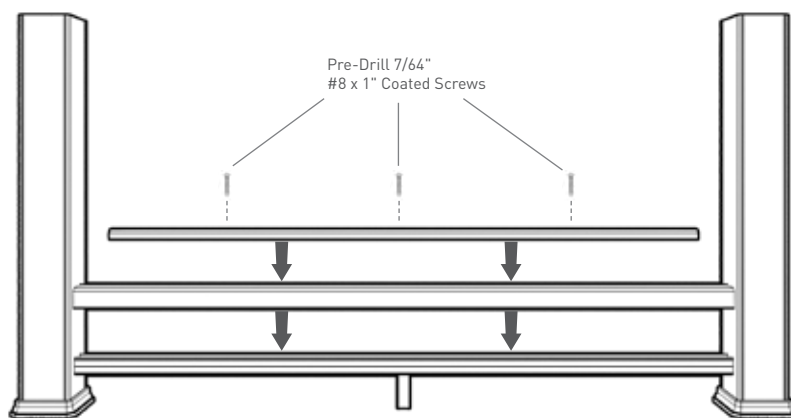
6

Assemble Lower Rail Section

- Place Bottom Rail over Bottom Support Rail.
- Install Bottom Glass Channel utilizing pre-drilled holes.



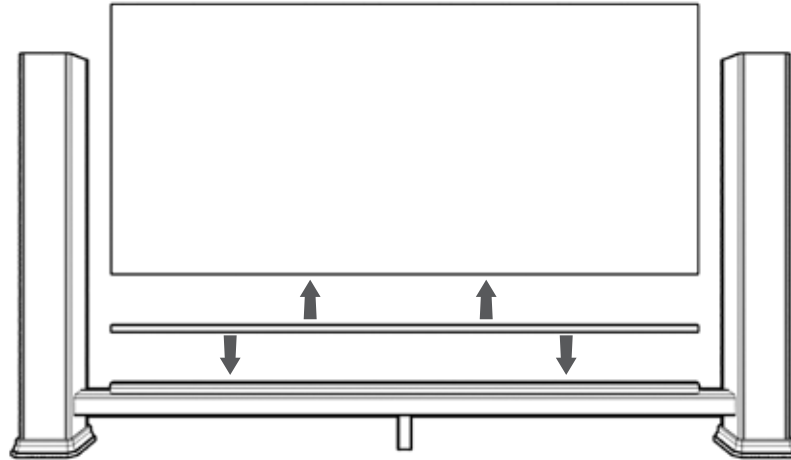
Position Bottom Rail with lip facing outside of deck, over bottom Support Rail.



7

Attach Lower Gasket and Install Glass Panel

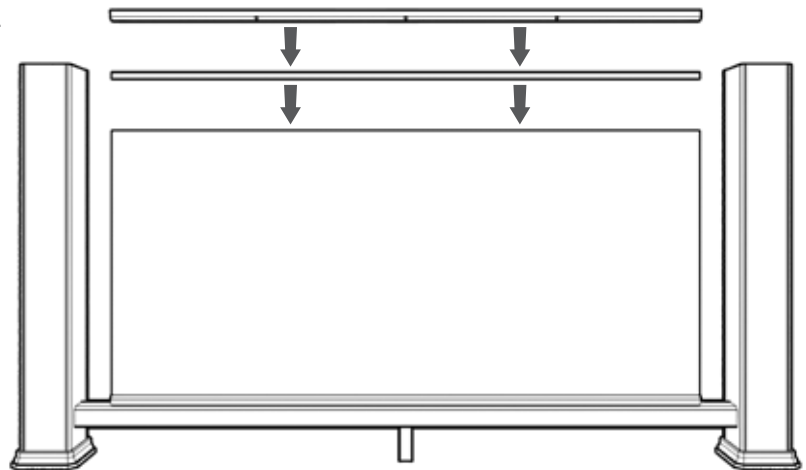
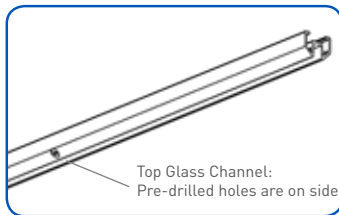
- Apply Rubber Gasket to bottom of Glass Panel first.
- Set panel/gasket assembly into Bottom Glass Channel.



8

Install Top Gasket and Top Glass Channel

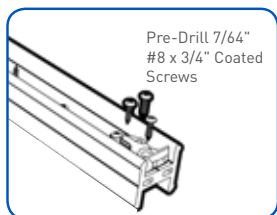
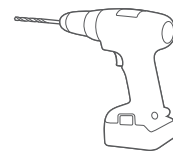
- Place Rubber Gasket on top of glass panel.
- Fit Top Glass Channel onto glass panel assembly.



9

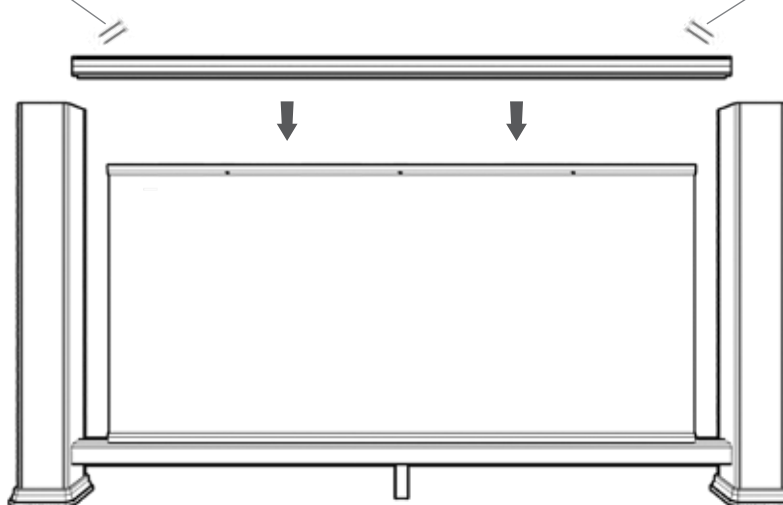
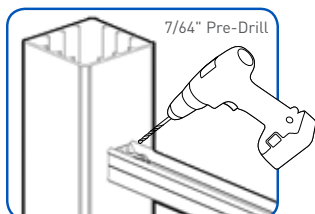
Install Top Support Rail

- Align top Support Rail to center of Posts.
- Attach Brackets to Top Rail Support



#8 x 3" Green Coated Screws

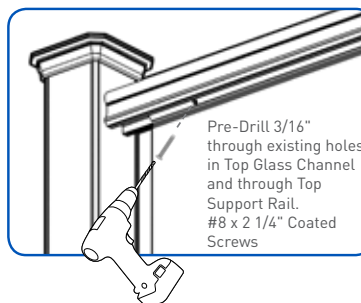
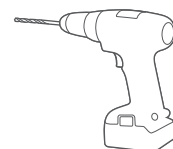
#8 x 3" Green Coated Screws



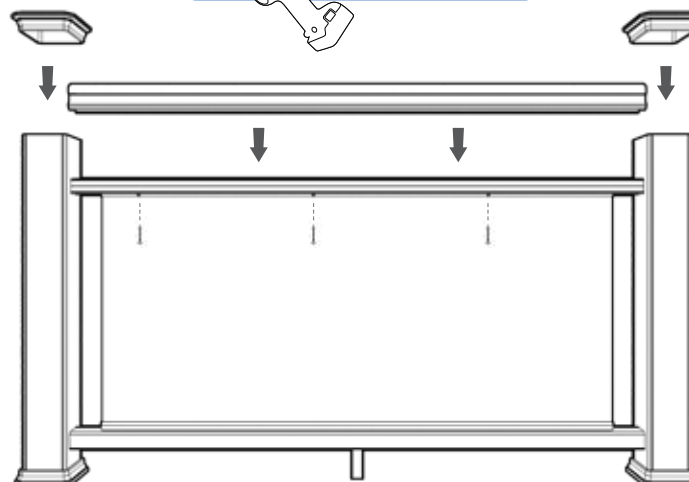
10

Install Top Rail and Post Caps

- Attach Post Caps using exterior grade caulk applied to the underside of the Cap.



Caution: Screws must be 2 1/4" to attach the Top Rail on straight/angle rail sections.



Installing RadianceRail[®] Stairs with Glass Infill

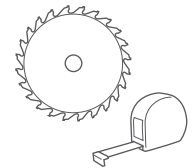
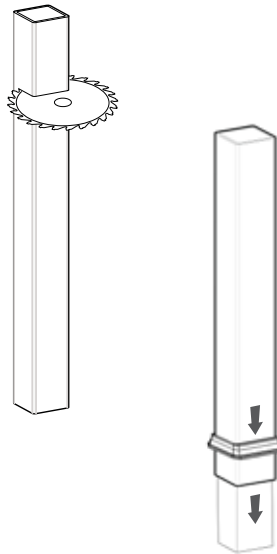


Consult your local building codes for guard and handrail requirements.

1

Install Top Support Rail

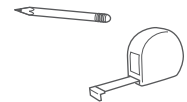
- Trim Post Covers to desired length.
- Slide Post Cover and Post Skirt over post (do not force).
- Ensure Posts are square and plumb.



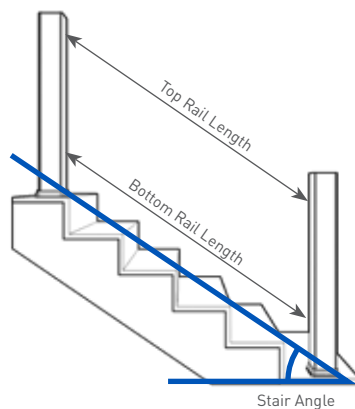
2

Measure Angle and Distance Between Posts

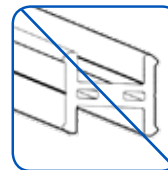
- Determine measurements and angle as shown. Transfer measurements to Top and Bottom Support Rails.



Support Rails are rotated 90° for stair rail applications.



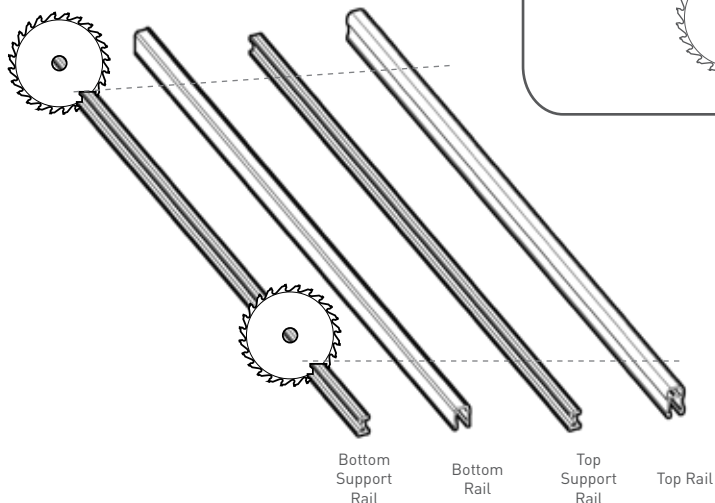
Right



Wrong

3 Trim Rails

- First trim both Top and Bottom Support Rails to dimensions from Step 2. TEST FIT for accuracy.
- Transfer measurement from Bottom and Top Support Rails to Bottom and Top Rails.
- Trim all Rails to measured lengths at appropriate angle.

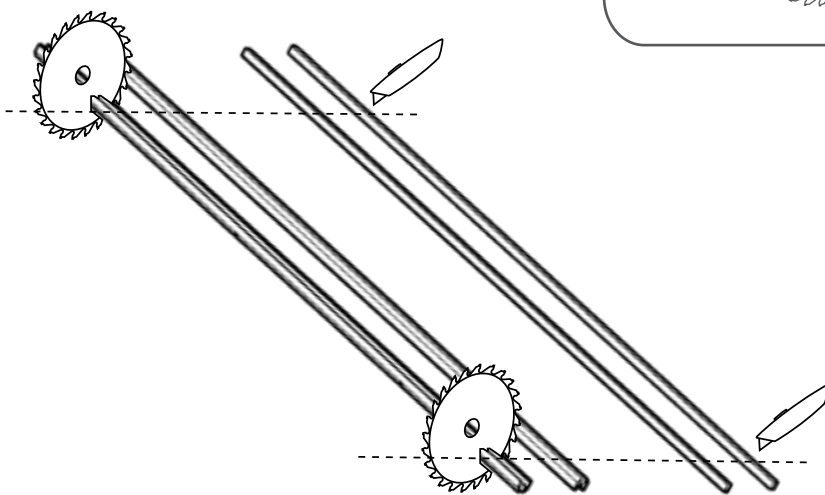


4 Trim Glass Channels and Gaskets

- Using lengths in Step 3 as a reference, measure and cut Top and Bottom Glass Channels, as well as both Rubber Gaskets at appropriate angle.



Glass Channels must be at least 4" shorter than rail.



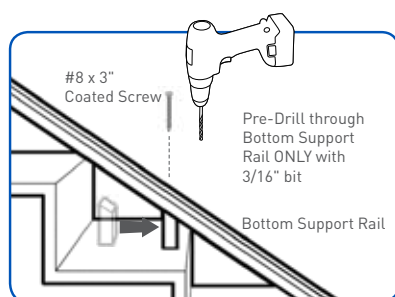
5

Install Bottom Support Rail

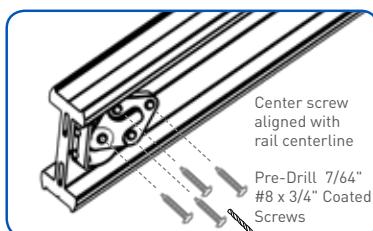


Brackets must be on the side of the rail facing the stairs.

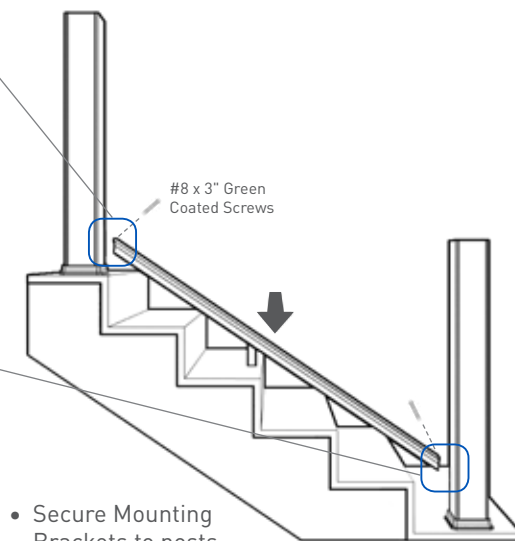
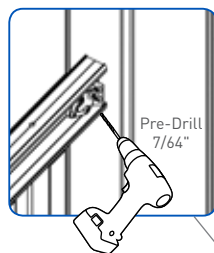
For sections up to 6': Place one Foot Block in the center of the rail



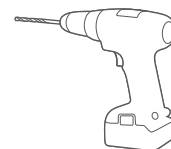
- Wedge Foot Block under Support Rail & attach.



- Attach Mounting Brackets to Top AND Bottom Support Rails.



- Secure Mounting Brackets to posts.



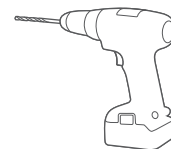
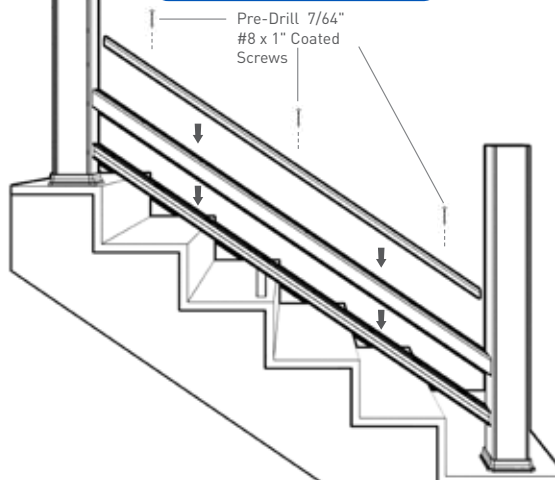
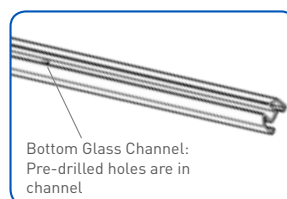
6

Assemble Lower Rail Section

- Place Bottom Rail over Bottom Support Rail.
- Install Bottom Glass Channel utilizing pre-drilled holes.



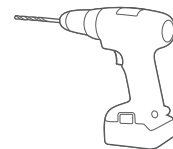
Position Bottom Rail with lip facing outside of deck, over bottom Support Rail.



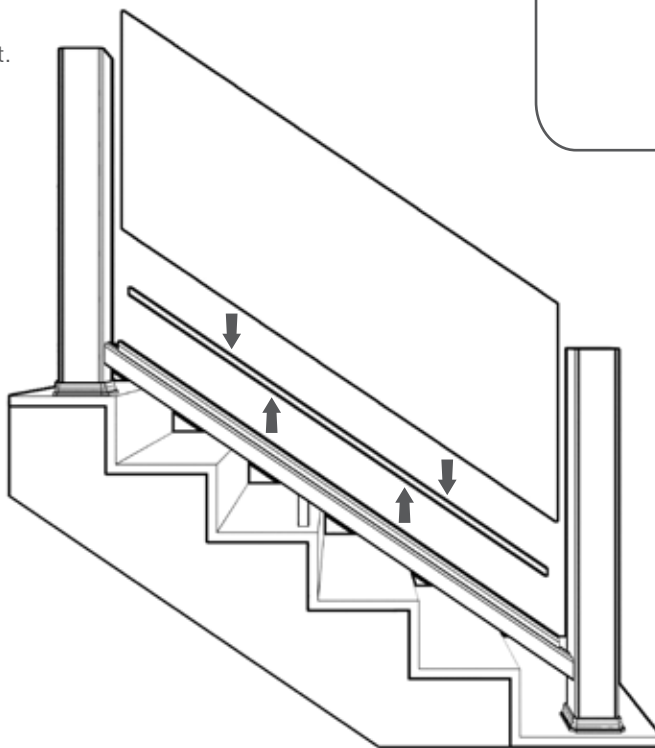
7

Attach Lower Gasket and Install Glass Panel

- Apply Rubber Gasket to bottom of Glass Panel first.
- Set panel/gasket assembly into Bottom Glass Channel.



Glass Channels must be at least 4" shorter than rail.



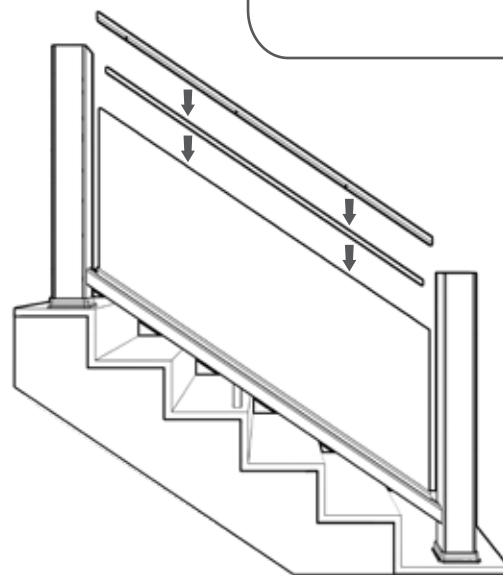
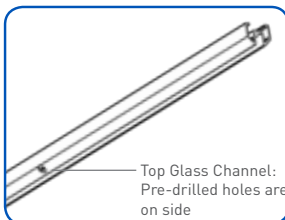
8

Install Top Gasket and Top Glass Channel

- Place Rubber Gasket on top of glass panel.
- Fit Top Glass Channel onto glass panel assembly.

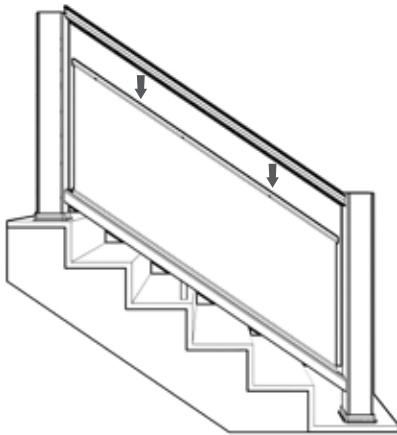
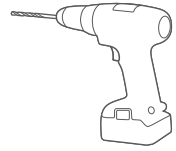


Glass Channels must be at least 4" shorter than rail.

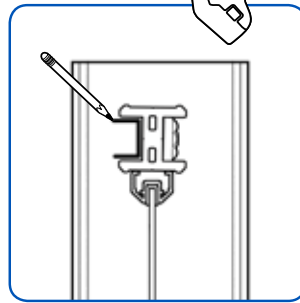


9

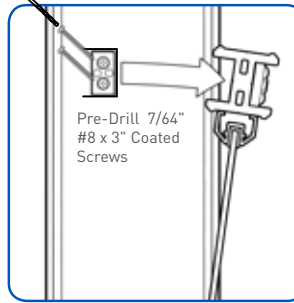
Install Top Support Rail



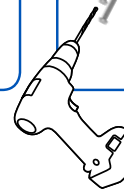
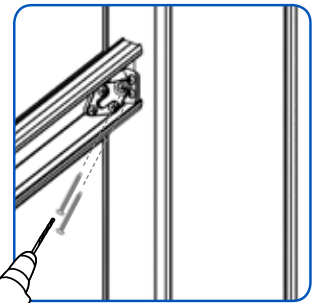
- Mark Ends of Top Support Rail.



- Rotate Rail assembly out of way to fasten Support Block.



- Secure Mounting Brackets to Posts.

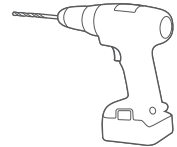
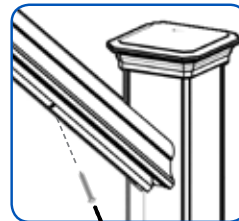


Pre-Drill 7/64"
#8 x 3" Coated
Screws

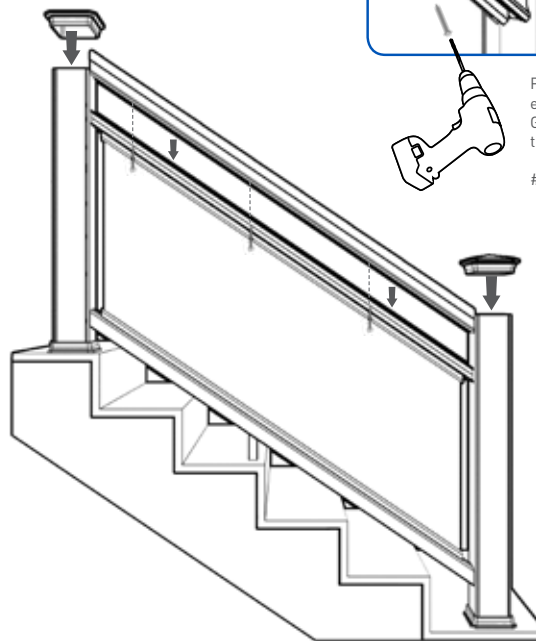
10

Install Top Rail and Post Caps

- Attach Post Caps using exterior grade caulk applied to the underside of the Post Cap.



Screws must be 3" to attach the Top Rail on the stair sections.



Pre-Drill 3/16" through
existing holes in Top
Glass Channel and
through Top Support Rail.
#8 x 3" Coated
Screws



5215 Old Orchard Road, Suite 725
Skokie, Illinois 60077
AZEK.com | TimberTech.com

