



# TIMBERTECH CLASSIC COMPOSITE SERIES AND RESERVE RAILING INSTALL GUIDE

Installing TimberTech Railing with Glass Infill.....3  
Installing TimberTech Stair Railing with Glass Infill.....11

TimberTech Reserve Rail can be installed with a continuous Top Rail in up to 16' lengths, measured from the center of the end posts. These applications require the use of a 4" Post Sleeve, 4" Post Skirt and a 4" x4" Post as an intermediate post, as well as unique fastening procedures. This Install Guide details these unique procedures.

#### IMPORTANT NOTES:

- Please read all instructions completely before starting any part of the installation. Always make sure to visit [www.TimberTech.com](http://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 Co. LLC 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 TimberTech 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.
- AZEK Co. LLC 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](http://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 for installation of TimberTech Classic Composite Series and TimberTech Reserve Rail Systems.
- **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 Railing 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.

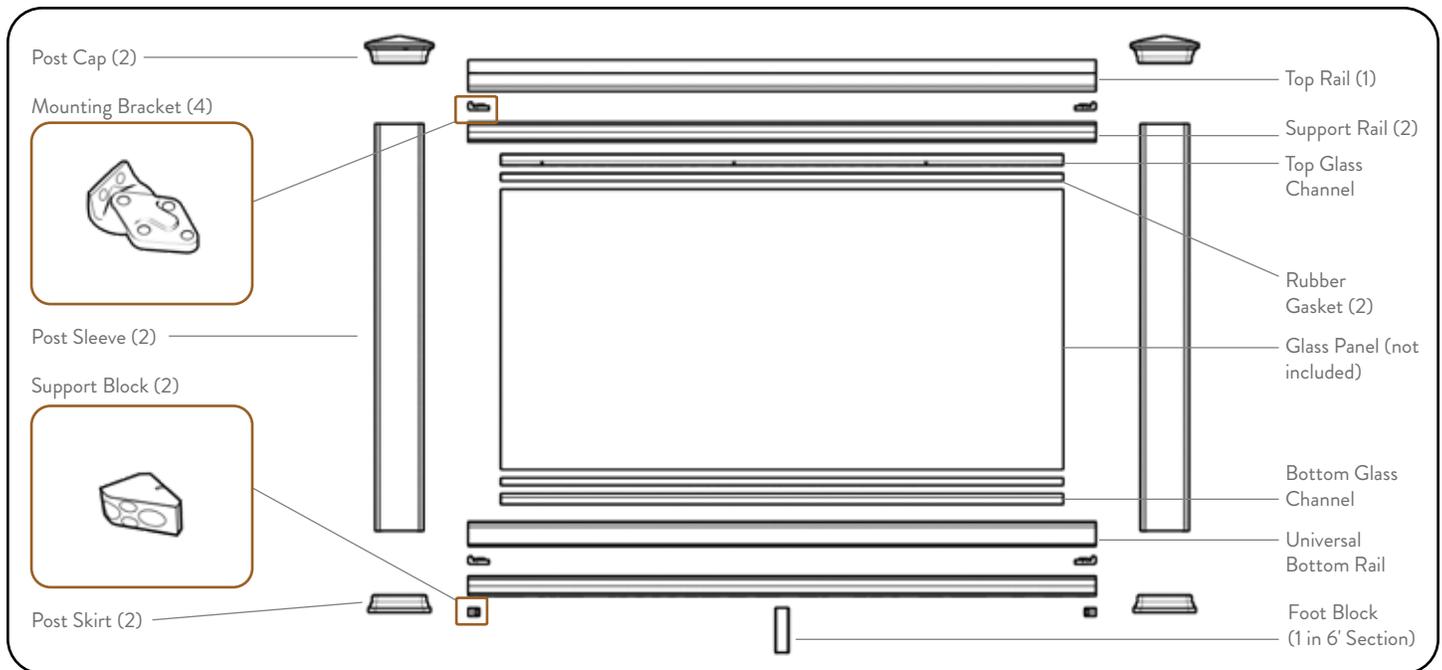


Find install videos, written instructions and a chat link at <https://www.timbertech.com/installation-help>.

**NOTE:** IF INSTALLING POST LIGHTING, WIRING MUST BE INSTALLED PRIOR TO SECURING POSTS TO DECK/STAIR SURFACE AND INSTALLING TOP RAILS.

It is the responsibility of the installer to meet all local code requirements and obtain all required building permits. The installer should determine and implement appropriate installation techniques for each installation situation. The AZEK Company or its reseller shall not be held responsible for improper or unsafe installations.

# INSTALLING RAILING WITH GLASS INFILL FOR CLASSIC COMPOSITE SERIES AND RESERVE RAIL



## ⚠️ IMPORTANT NOTES:

- TimberTech Railing for Glass Infill is available in 6' lengths.
- Visit <https://www.timbertech.com/installation-help> to view TimberTech installation videos.
- Consult your local building codes for guard and handrail requirements.
- TimberTech Railing 6' Rails are designed not to exceed 6' from center of post to center of post.
- For all other applications, consult a design professional or a TimberTech Railing representative for more information.
- 4x4 lumber posts must be installed plumb and level with each other.
- Cut slowly, using a thin kerf, finish saw blade to avoid chipping.
- Read instructions completely to get an understanding of how the product goes together and how each piece affects the other.
- For all applications, a structural post must be used inside our Post Sleeve.



This entire section of instructions is for installation of Classic Composite Series and Reserve Rail systems. Installation of the RESERVE RAIL system is identical to the Classic Composite Series, except it uses the RESERVE BOTTOM RAIL instead of the Universal Bottom Rail.

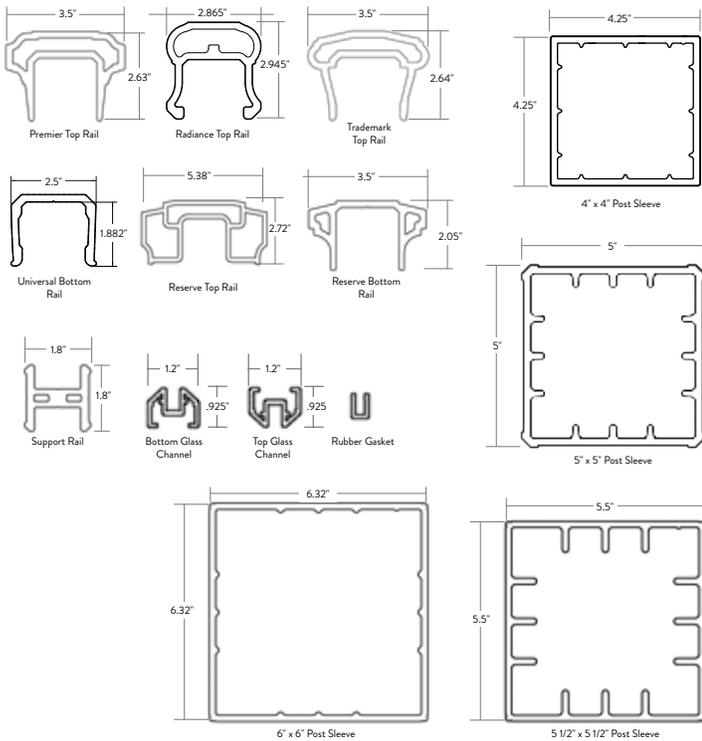
## TOOLS REQUIRED

- Miter Saw
- 7/64" Drill Bit
- Measuring Tape
- Drill
- 3/16" Drill Bit
- Caulk Gun

### MEASURING YOUR RAILING AREA

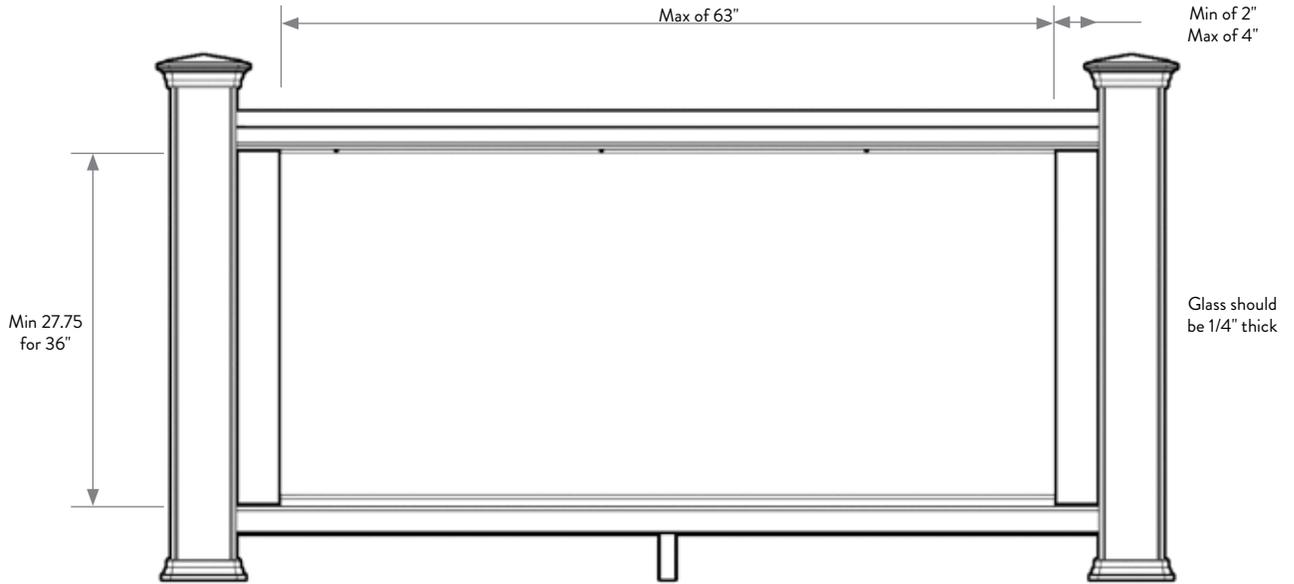
- Measurements are from center to center of the posts. Railing components are produced in 6' lengths to allow for finished end cuts and angles.
- Determine how many 6' TimberTech Rail Sections you need and check to be sure you have all the components (and quantities) listed in the chart shown.

### COMPONENT DIMENSIONS

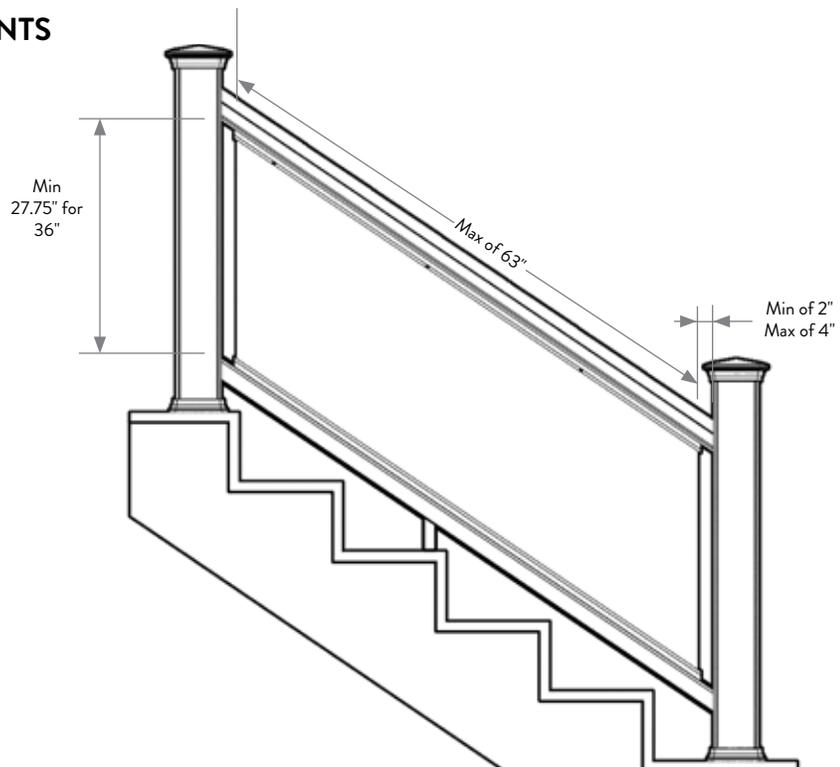


<b>COMPONENTS NEEDED FOR INSTALLING ONE TIMBERTECH RAIL SECTION</b> (TOP RAIL NOT INCLUDED IN CLASSIC COMPOSITE SERIES)	
<b>Components available separately for mix-and-match rail systems</b>	<div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small; margin-right: 5px;">TimberTech Custom Rail Pack</div> <div> <p style="font-size: x-small;">(Top Rail Sold Separately)</p> <p>1 - <b>Universal Bottom Rail</b> (with Classic Composite Series)</p> <p>2 - <b>Support Rails</b></p> <p><b>Hardware Mounting Kit</b></p> <p><b>Support Block Mounting Templates</b></p> <p>1 - <b>Foot Block</b></p> </div> </div>
<b>Hardware included in Hardware Kits:</b>	<ul style="list-style-type: none"> <li>4 - <b>Mounting Brackets</b></li> <li>2 - <b>Support Blocks</b></li> <li>16 - <b>#8 x 3/4" Screws</b></li> <li>6 - <b>#8 x 1 5/8" Screws</b></li> <li>6 - <b>#8 x 2 5/8" Screws (Stairs Only)</b></li> <li>6 - <b>#8 x 3" Screws</b></li> <li>12 - <b>#8 x 3" Semi-threaded Screws</b></li> <li><b>T20 Driver Bit</b></li> </ul>
<b>Glass Hardware Pack</b>	<ul style="list-style-type: none"> <li>1 - <b>Top Glass Channel</b></li> <li>1 - <b>Bottom Glass Channel</b></li> <li>2 - <b>Rubber Gaskets</b></li> <li>6 - <b>#8 x 2 1/4" Screws</b></li> <li>6 - <b>#8 x 3" Screws</b></li> <li>3 - <b>#8 x 1" Screws</b></li> </ul>
<b>Additional Components Needed for Each System</b> (Sold Separately)	<div style="display: flex; align-items: flex-start;"> <div style="margin-right: 10px;"> </div> <div style="font-size: x-small;"> <p>1/4" Tempered Glass must be sourced locally (See attached reference sheet).</p> <ul style="list-style-type: none"> <li>1 - <b>Top Rail</b></li> <li>2 - <b>Post Caps</b></li> <li>2 - <b>Post Sleeves</b></li> <li>2 - <b>Post Skirts</b></li> </ul> </div> </div>

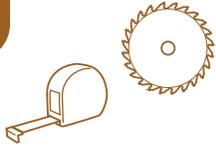
**DIMENSIONAL CONSTRAINTS FOR STRAIGHT SECTION**



**DIMENSIONAL CONSTRAINTS FOR STAIR SECTION**



1



## INSTALL POST SLEEVES

- Trim Post Sleeves to desired length.
- Slide Post Sleeves and Post Skirt over post (do not force). Post sleeve will be slightly larger than the post.
- Ensure posts are square and plumb. Shim as needed to plumb.

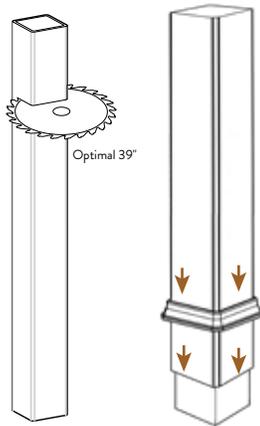
### IMPORTANT NOTES:

Be sure to cut Post Sleeves such that finished rail height is at least 36" high for a 36" rail application and 42" high for a 42" application.

For all rail installations, post and post covers must be plumb and aligned with one another.

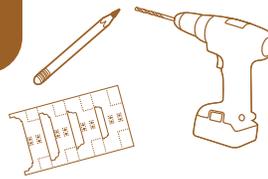
For Over-the-Post applications, it is critical that Posts be of a consistent height (e.g. the tops of all post sleeves are level and on plane with each other).

**TIP:** To ensure that the tops of all post sleeves are level, you may use a traditional 8 ft. level or a string line to establish a common level across all post sleeves and cut at that level. Alternatively, you may use a laser level to "shoot" a level mark on each post sleeve and then cut at that mark.



39" above deck surface is optimal for 36" railing heights.

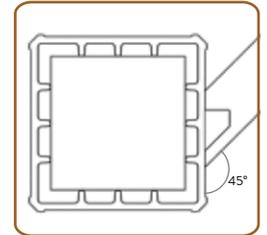
2



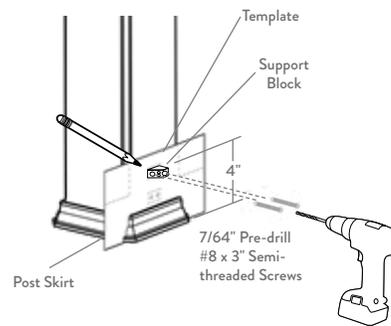
## INSTALL LOWER SUPPORT BLOCKS

- Position template at bottom of post sleeve above post skirt.

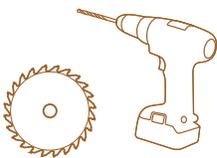
If you do not have the template, position the top of the Support Block 4" above the deck.



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



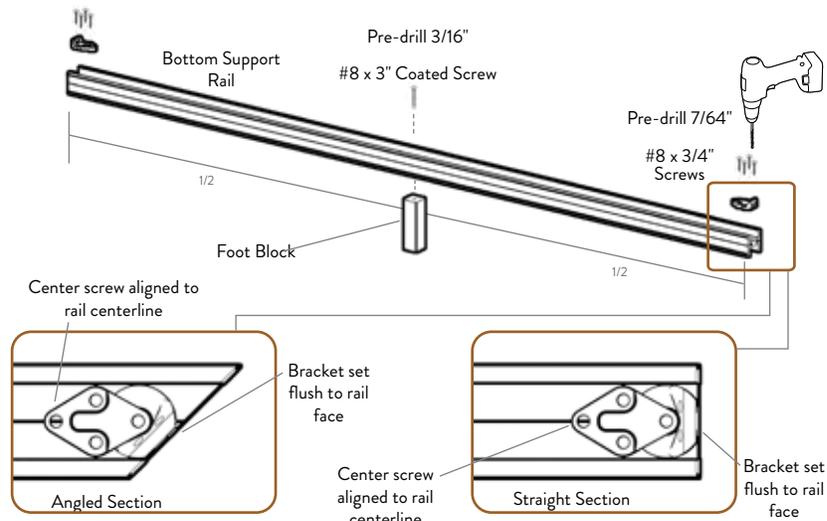
3



## CUT AND ASSEMBLE BOTTOM SUPPORT RAIL

- Cut the Bottom Support Rail to length.
- Add support blocks as required.
- Attach brackets.

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

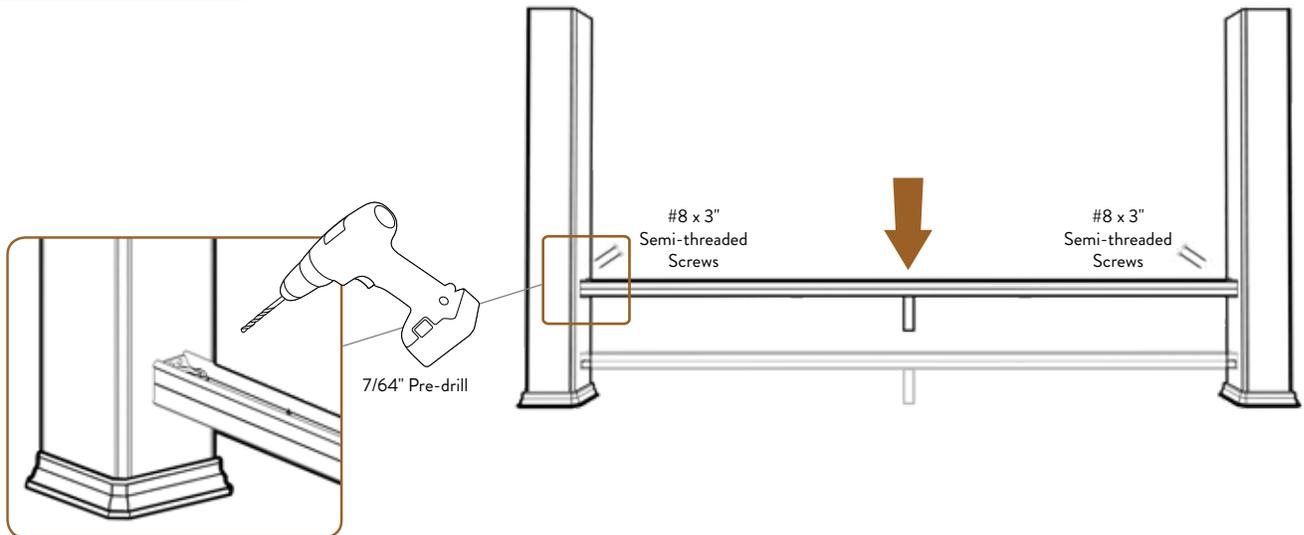


4

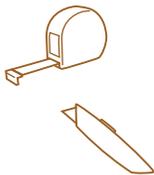


### INSTALL BOTTOM SUPPORT RAIL

- Position Bottom Support Rail assembly onto Support Blocks.
- Pre-drill holes into post sleeves only.
- Attach brackets with green coated screws.



5

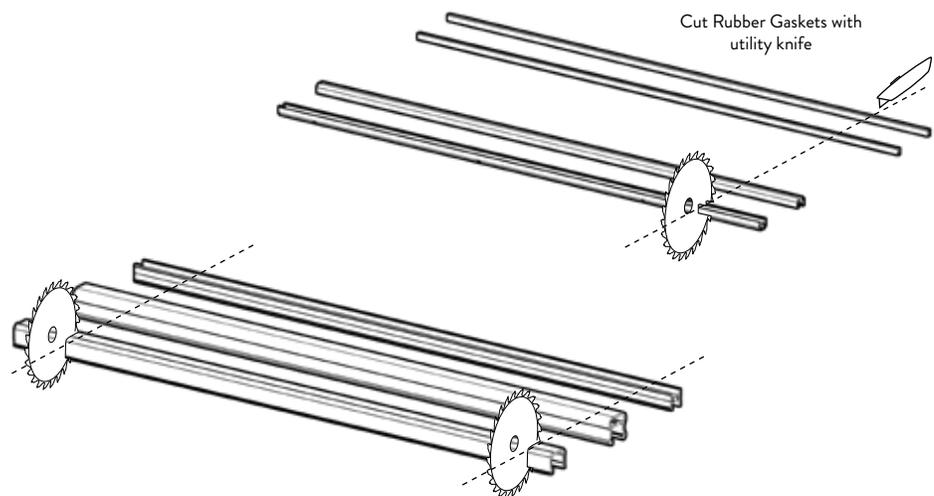


### TRIM RAILS, EXTRUSIONS, AND GASKETS

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



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

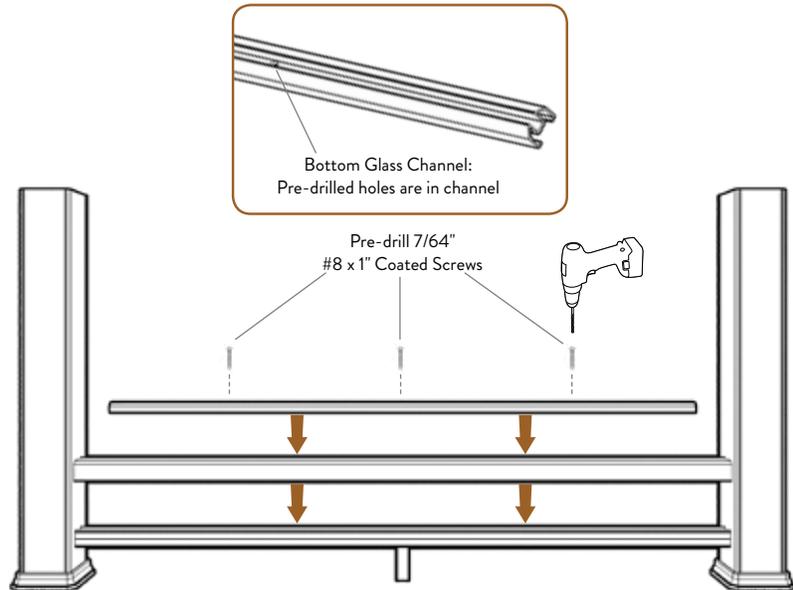


6



### ASSEMBLE LOWER RAIL SECTION

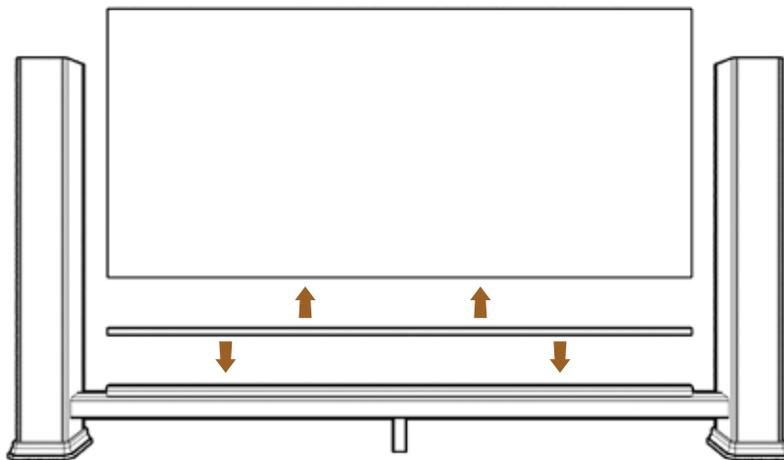
- Place Universal Bottom Rail over Bottom Support Rail.
- Install Bottom Glass Channel utilizing pre-drilled holes.



7

### ATTACH LOWER GASKET AND INSTALL GLASS PANEL

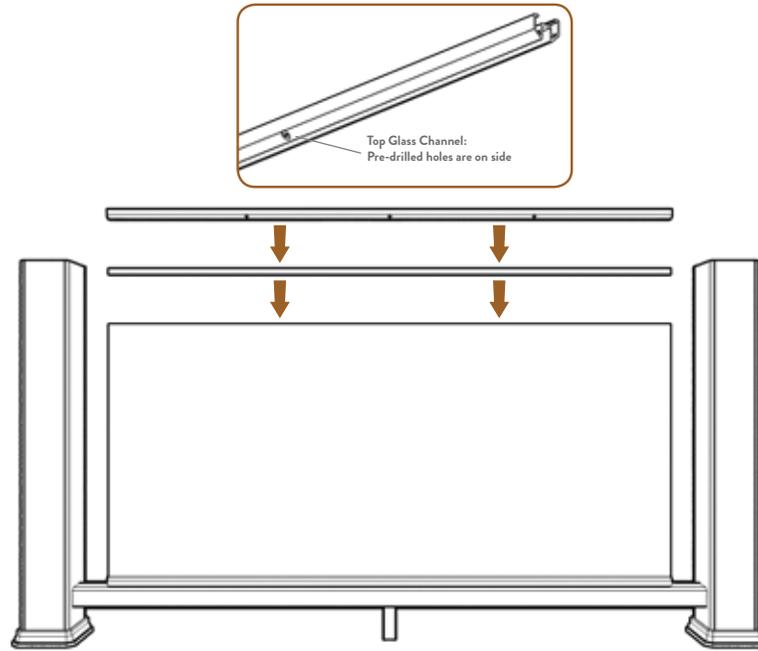
- Apply Rubber Gasket to bottom of Glass Panel first.
- Set panel/gasket assembly into Bottom Glass Channel.



8

**INSTALL TOP GASKET AND TOP GLASS CHANNEL**

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

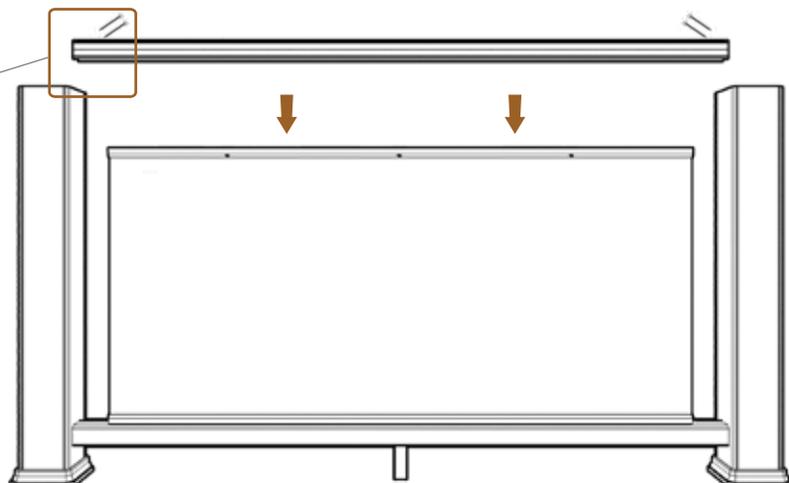
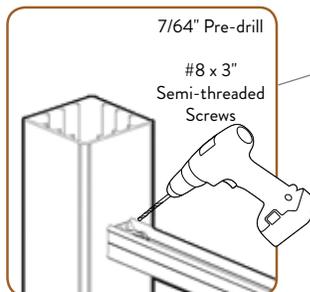
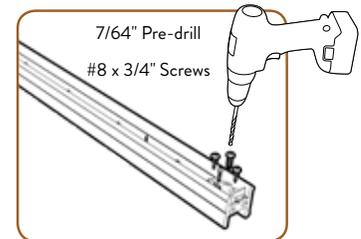


9



**INSTALL TOP SUPPORT RAIL**

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

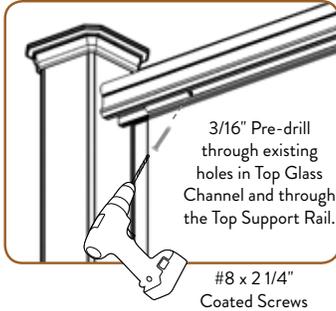


10

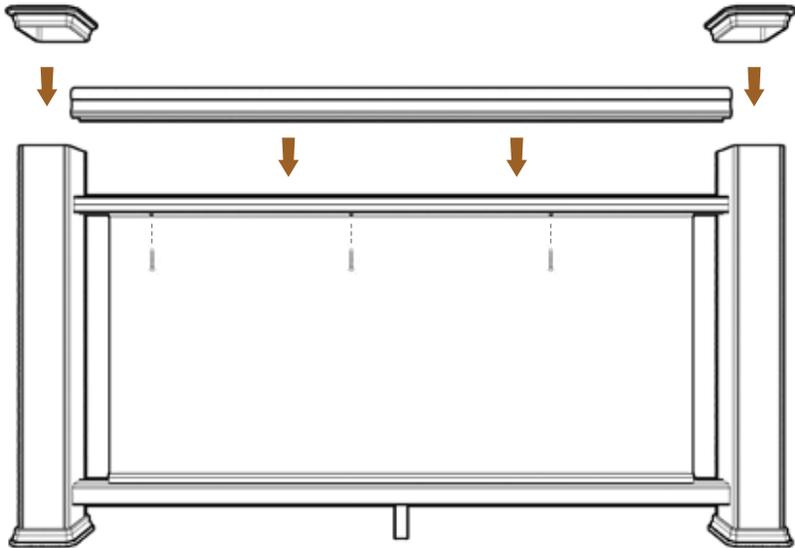


### INSTALL TOP RAIL AND POST CAPS

- Attach Post Caps using exterior grade caulk applied to the underside of the Cap.
- Attach Top Rail using 2 1/4" coated screws driving screws up through Top Glass Channel into Top Rail.



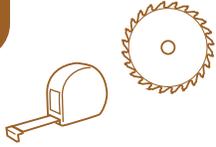
Caution: Screws must be 2 1/4" to attach the Top Rail on the Straight Rail sections.





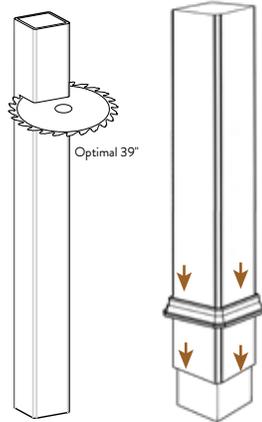
Consult your local building codes for guard and handrail requirements.

1



### INSTALL POST SLEEVES

- Trim Post Sleeves to desired length.
- Slide Post Sleeves and Post Skirt over post (do not force). Post sleeve will be slightly larger than the post.
- Ensure posts are square and plumb. Shim as needed to plumb.



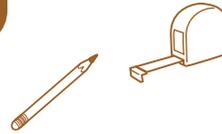
#### IMPORTANT NOTES:

Be sure to cut Post Sleeves such that finished rail height is at least 36" high for a 36" rail application and 42" high for a 42" application.

For all rail installations, post and post covers must be plumb and aligned with one another.

For Over-the-Post applications, it is critical that Posts be of a consistent height (e.g. the tops of all post sleeves are level and on plane with each other).

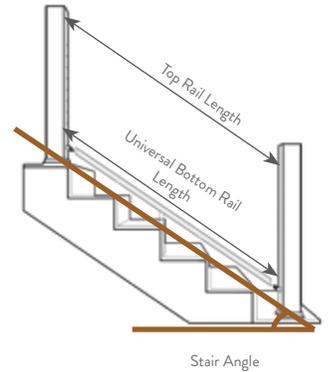
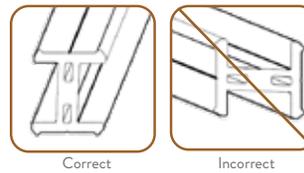
2



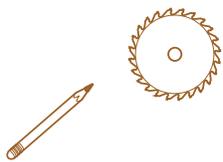
### MEASURE SUPPORT RAILS

- Determine measurements and angle as shown.
- Trim both the Top Support Rail and the Bottom Support Rail to those dimensions.
- Test fit rails to check for accuracy.

Support Rails are rotated 90° for stair rail applications.

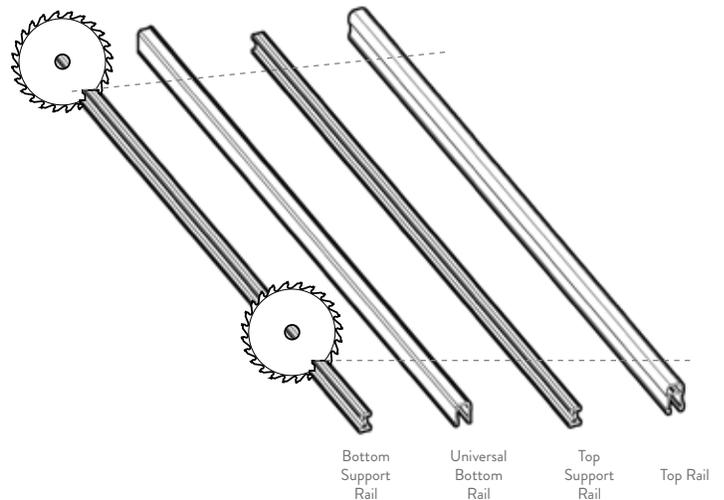


3



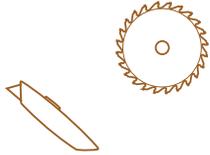
### TRIM RAILS

- 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.



This entire section of instructions is for installation of Classic Composite Series and Reserve Rail systems. Installation of the RESERVE RAIL system is identical to the Classic Composite Series, except it uses the RESERVE BOTTOM RAIL instead of the Universal Bottom Rail.

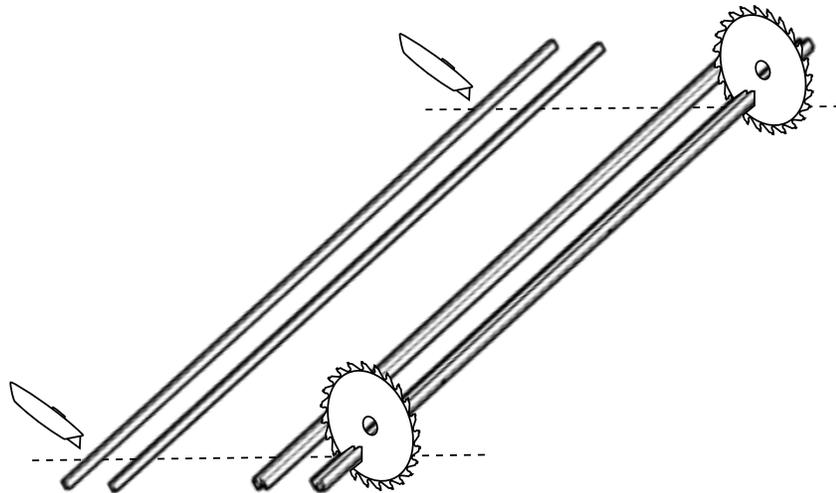
4



**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.

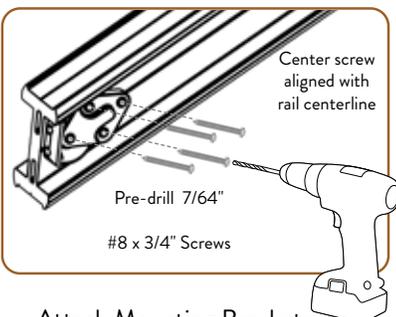
**!** Glass Channels must be at least 4" shorter than rail.



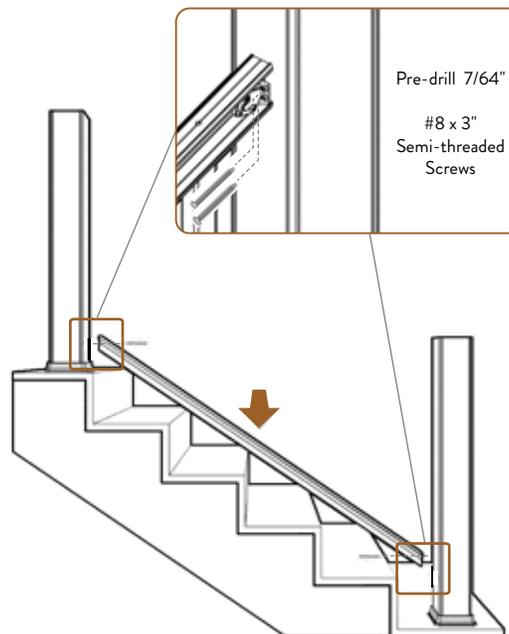
5



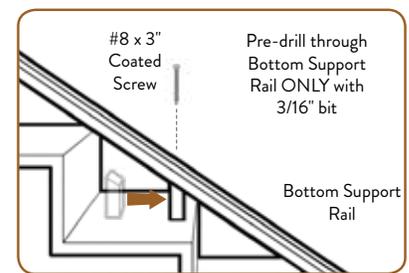
**INSTALL BOTTOM SUPPORT RAIL**



- Attach Mounting Brackets to Top AND Bottom Support Rails.



- Position Bottom Support Rail on the center of the posts and secure Mounting Brackets to posts.



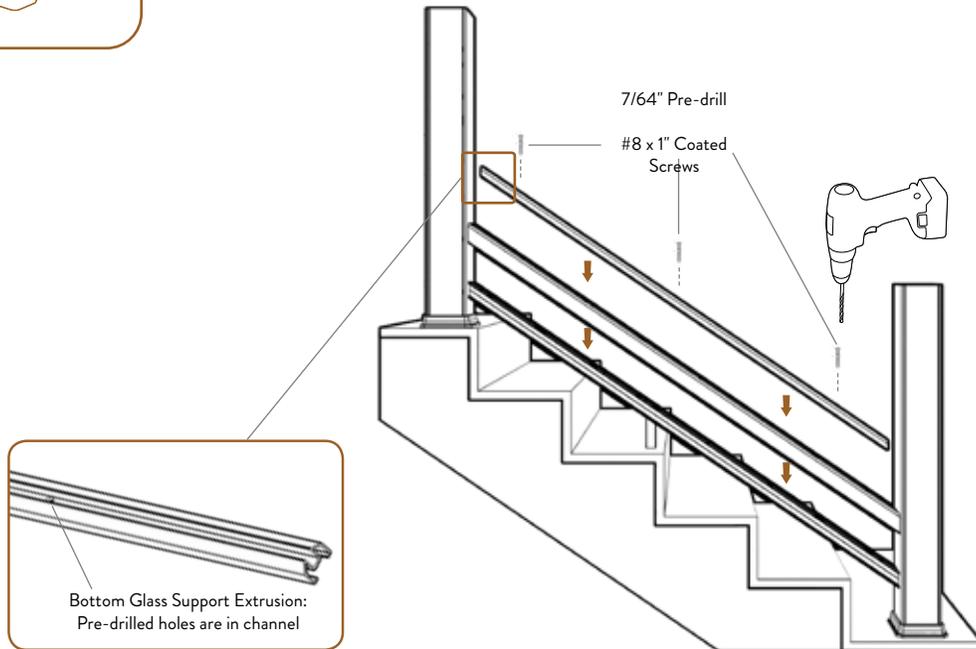
- Trim Foot Block and wedge under Support Rail & Attach.

6



**ASSEMBLE LOWER RAIL SECTION**

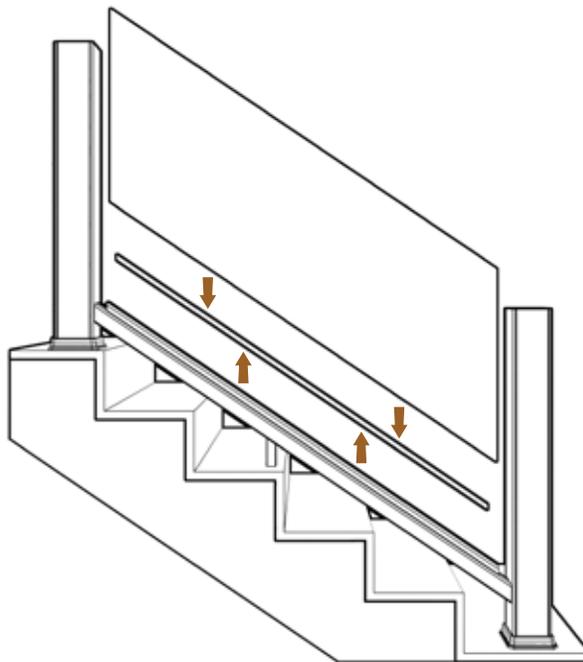
- Place Universal Bottom Rail over Bottom Support Rail.
- Install Bottom Glass Channel utilizing pre-drilled holes.



7

**ATTACH LOWER GASKET AND INSTALL GLASS PANEL**

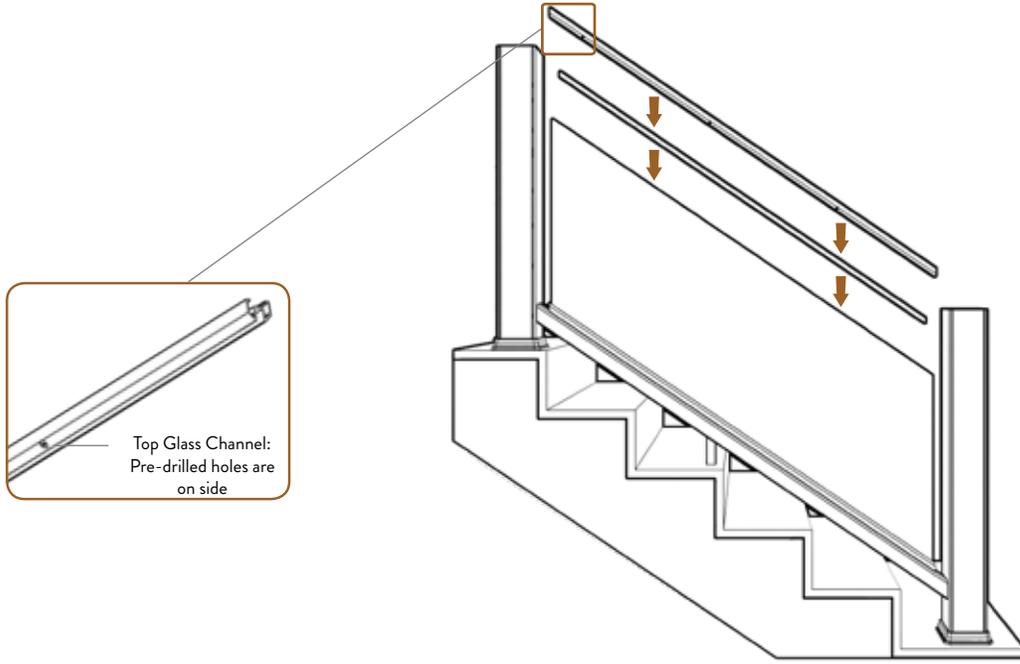
- Apply Rubber Gasket to bottom of Glass Panel first.
- Set panel/gasket assembly into Bottom Glass Channel.



**8**

**INSTALL TOP GASKET AND TOP GLASS CHANNEL**

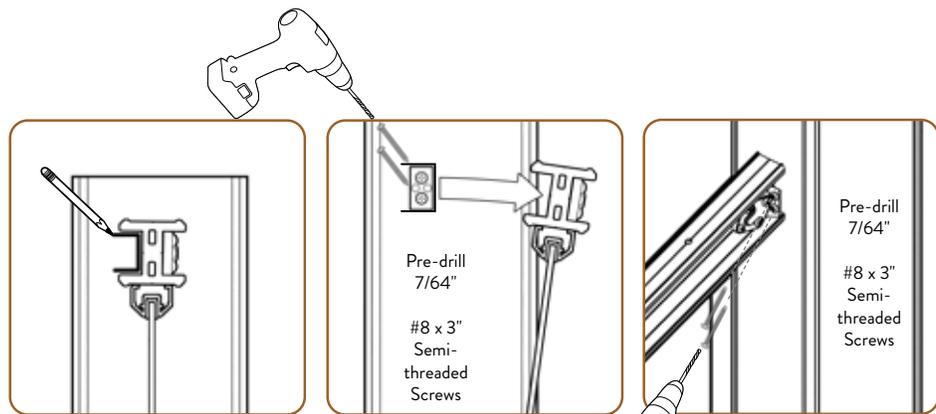
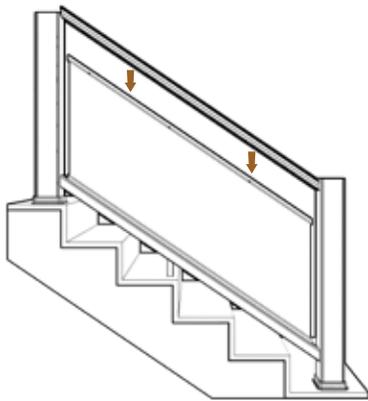
- Place Rubber Gasket on top of glass panel.
- Fit Top Glass Channel onto glass panel assembly.



**9**



**INSTALL TOP SUPPORT RAIL**



- Mark Ends of Top Support Rail.

- Rotate Rail assembly out of way to fasten Support Block

- Secure Mounting Brackets to Posts.

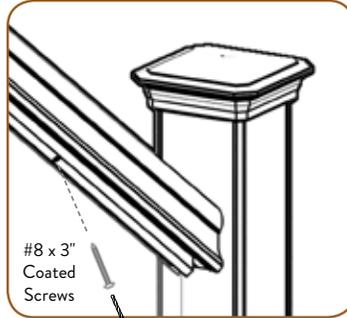
**10**



**INSTALL TOP RAIL AND POST CAPS**

- Attach Top Rail using 3" coated screws driving screws up through Top Glass Channel into Top Rail
- Attach Post caps using exterior grade caulk applied to the underside of the cap.

3/16" Pre-drill through existing holes in Top Glass Channel.



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

