

## Installing AZEK Evolutions Rail™

Installing Evolutions Rail™ Contemporary Style with Glass Infill .....	2
Installing Evolutions Rail™ Contemporary Style Stairs with Glass Infill.....	9
Notes .....	15

### Important Information

- Please read all instructions completely before starting any part of the installation.
- Evolutions Rail™ 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.
- Evolutions Rail may not be suitable for every application and it is the sole responsibility of the installer to be sure that Evolutions Rail 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](http://www.azek.com) or [www.timbertech.com](http://www.timbertech.com).
- Evolutions Rail 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 Evolutions Rail 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 Evolutions Rail'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](http://www.timbertech.com/installation) to view TimberTech installation videos.  
Consult your local building codes for guard and handrail requirements.

**Evolutions Rail™ Contemporary Rail Packs are available in 6' lengths.**

### Measuring Your Railing Area

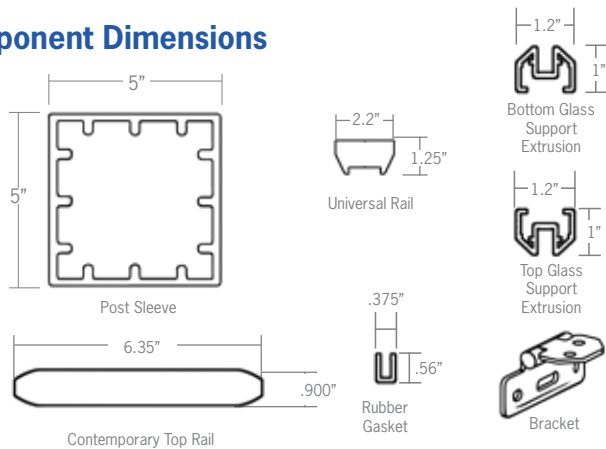
- Measurements are from center of post. Evolution Rails are produced to 6' to allow for finished end cuts and angles.
- Determine how many 6' Evolution Rails you need and check to be sure you have all the components (and quantities) listed in the chart shown to the right.

### Important Information



- 6' Evolution Rail is designed not to exceed 6' center of post to center of post, respectively
- Cut slowly, using a fine tooth saw blade to avoid chipping.
- For 42" railing, use 8' Post Sleeves.
- Evolutions Rail Contemporary Style is designed and tested solely for over the post applications with the top rail profile affixed to the top of the structural 4x4.
- This does not include applications where the 4x4 posts extend above or through the top rail profile.
- Evolutions Rail Contemporary requires a top rail profile (deck plank) to complete the system for a proper installation and code compliance.

### Component Dimensions

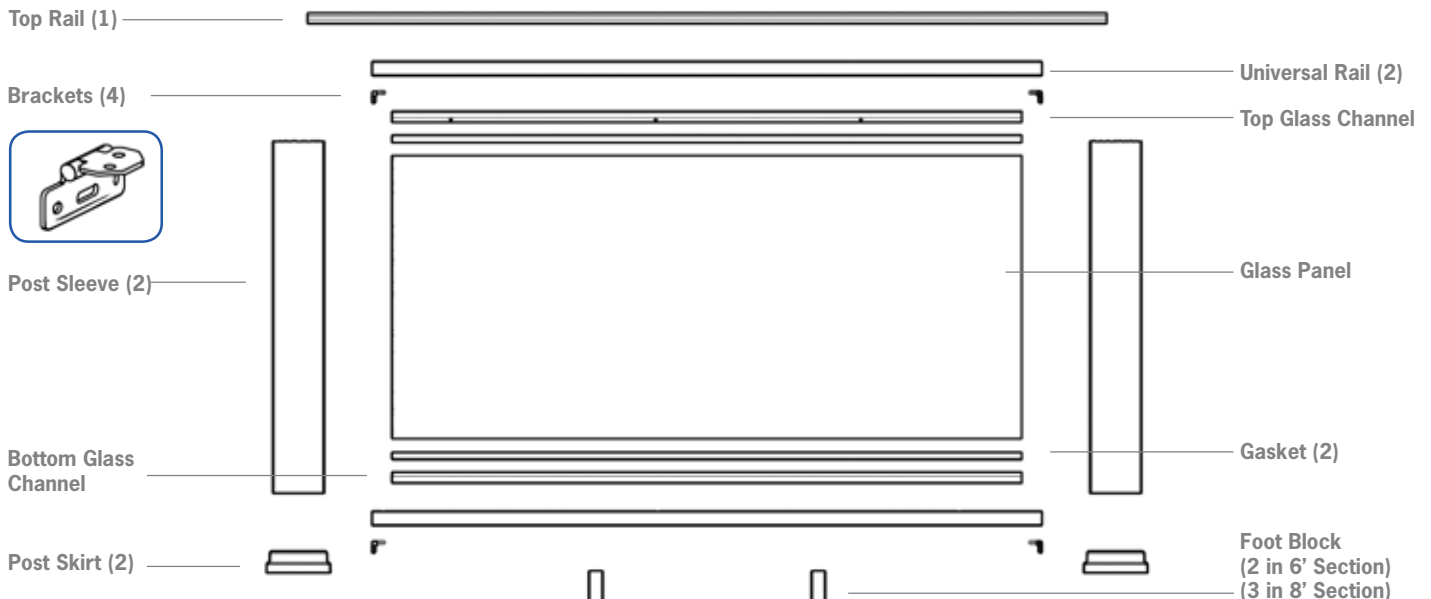


### Components Needed For Installing One Contemporary Style Rail Section

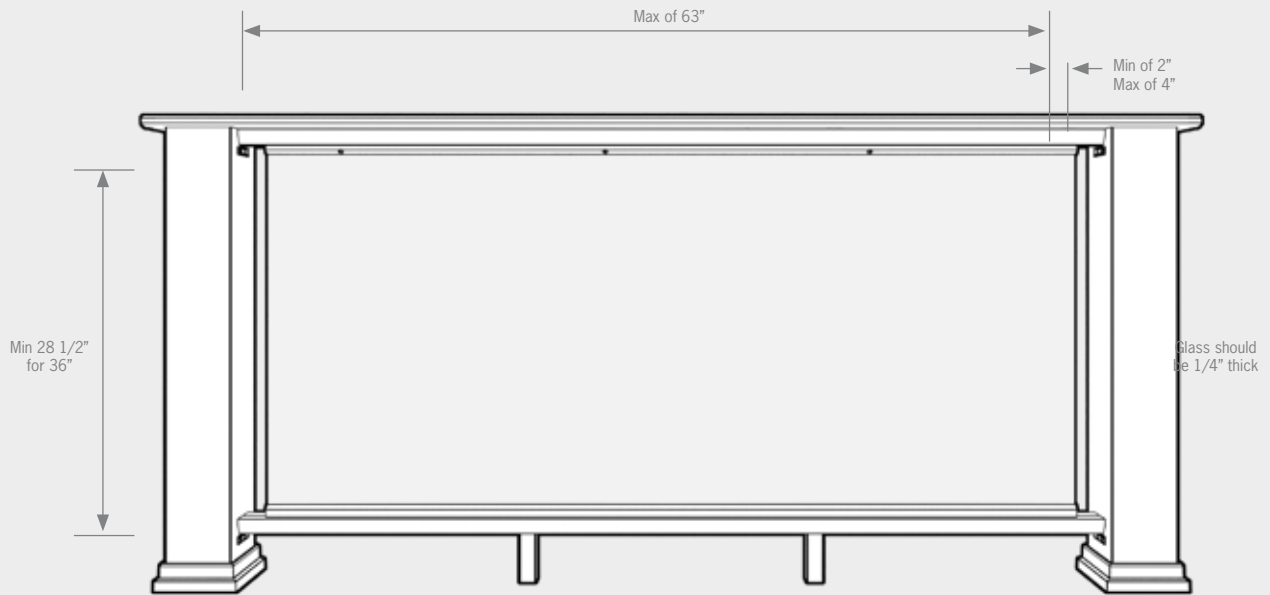
Components available separately for mix-and-match rail systems	Contemporary Rail Pack	2 - Universal Rails Hardware Kit 8 - Top Rail Screws Foot Blocks - 2 in 6' Pack - 3 in 8' Pack
Hardware needed to complete 6' and 8' rail sections	Hardware Mounting Kit: 4 - Hinged Brackets 11 - #10 x 2" Screws 8 - #10 x 7/8" Screws 4 - #10 x 1.5" Screws 1 - T25 Torx 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 Sleeves 2 - Post Skirts 1 - Contemporary Top Rail Timbertech TOPLoc Face Fasteners	

### Tools Required

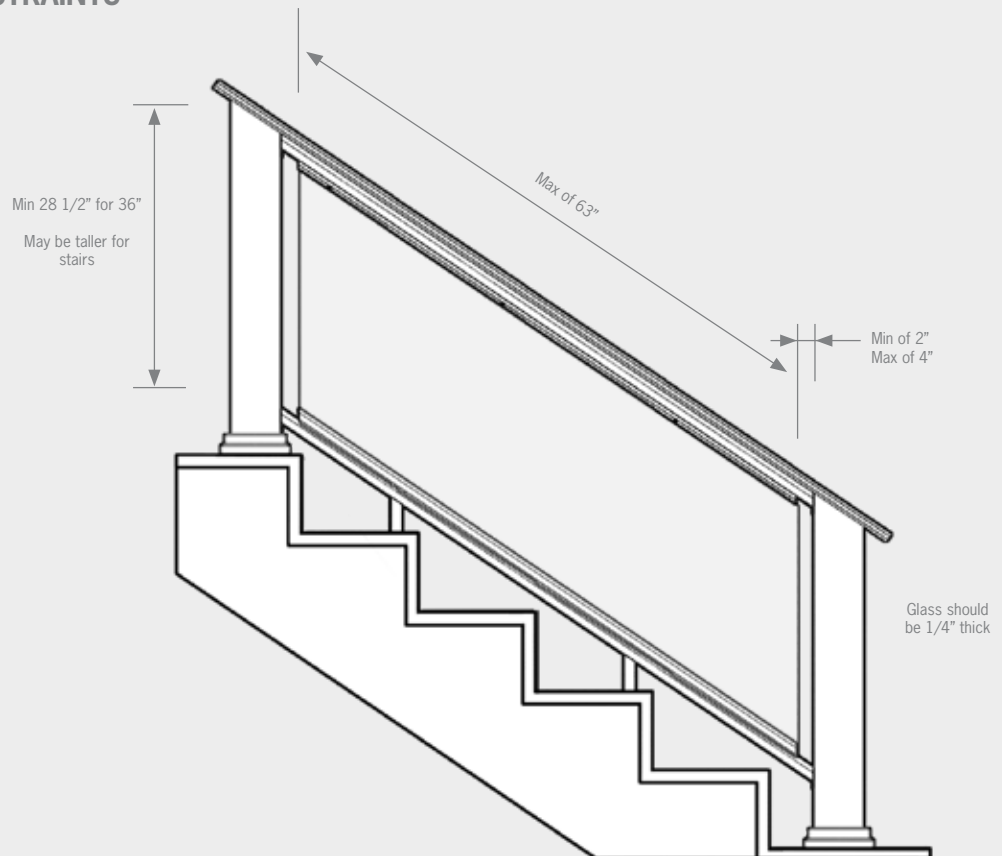
- Miter Saw
- Drill
- Drill Bits: 7/64", 9/64", 3/16", & 1/2"
- Tape Measure



### DIMENSIONAL CONSTRAINTS FOR STRAIGHT SECTION



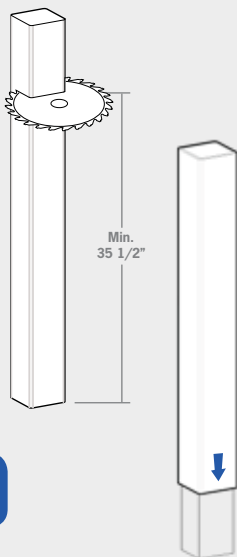
### DIMENSIONAL CONSTRAINTS FOR STAIR SECTION



### 1

#### CUT POSTS AND TEMPORARILY INSTALL POST SLEEVES

- Posts must be positioned no more than 8' on center, and must be plumb.
- Trim 4x4 Post to a min of 35 1/2" (for 36") and 41 1/4" (for 42) above finished deck surface.
- Slide uncut Post Sleeves over 4x4 posts. Do not force.

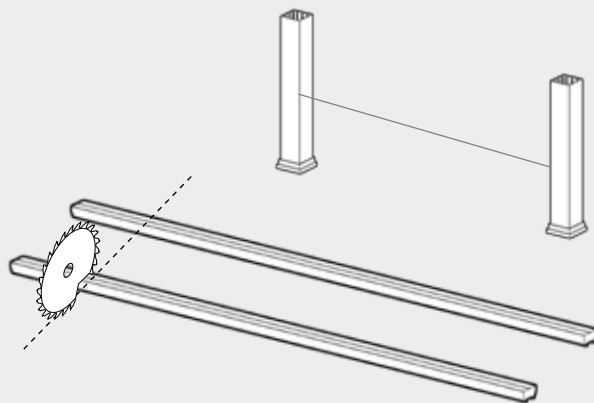


**!** Do not cut Post Sleeves in this step.

### 2

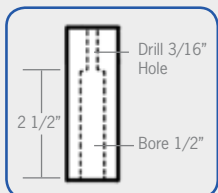
#### MEASURE AND CUT SUPPORT RAILS

- Measure between posts and cut Universal Rails.

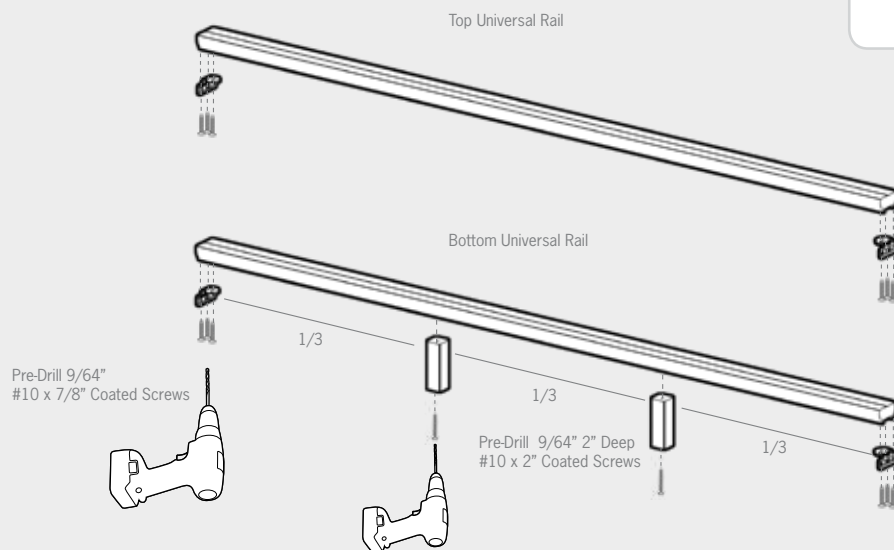


### 3

#### ATTACH HINGE BRACKETS TO UNIVERSAL RAILS AND FOOT BLOCKS TO BOTTOM UNIVERSAL RAILS



Foot Block Preparation

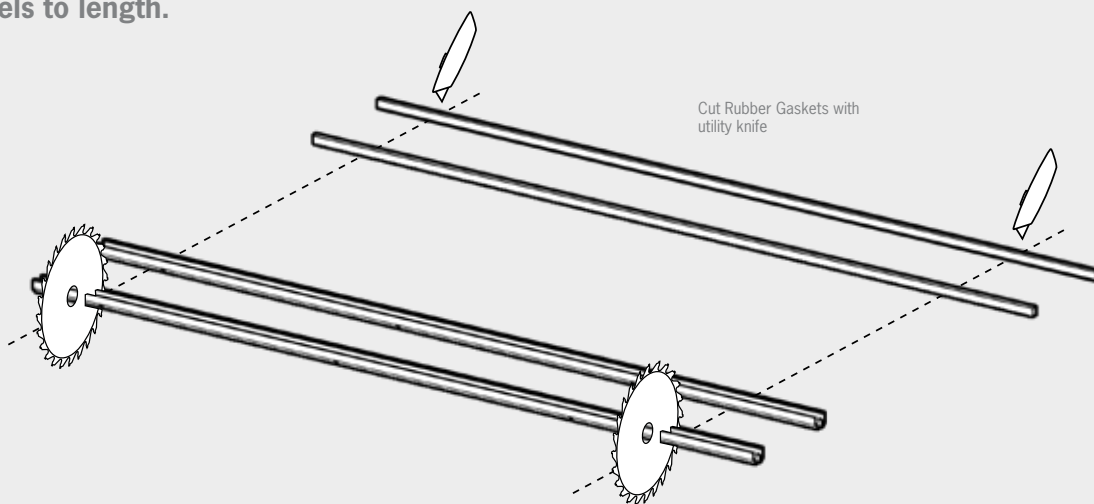
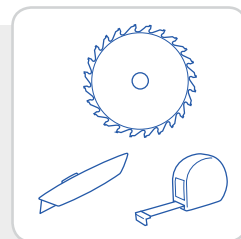


**For sections up to 6':** Space two Foot Blocks approximately at 1/3 intervals on the rail

**4**

**TRIM GASKETS AND  
GLASS CHANNELS**

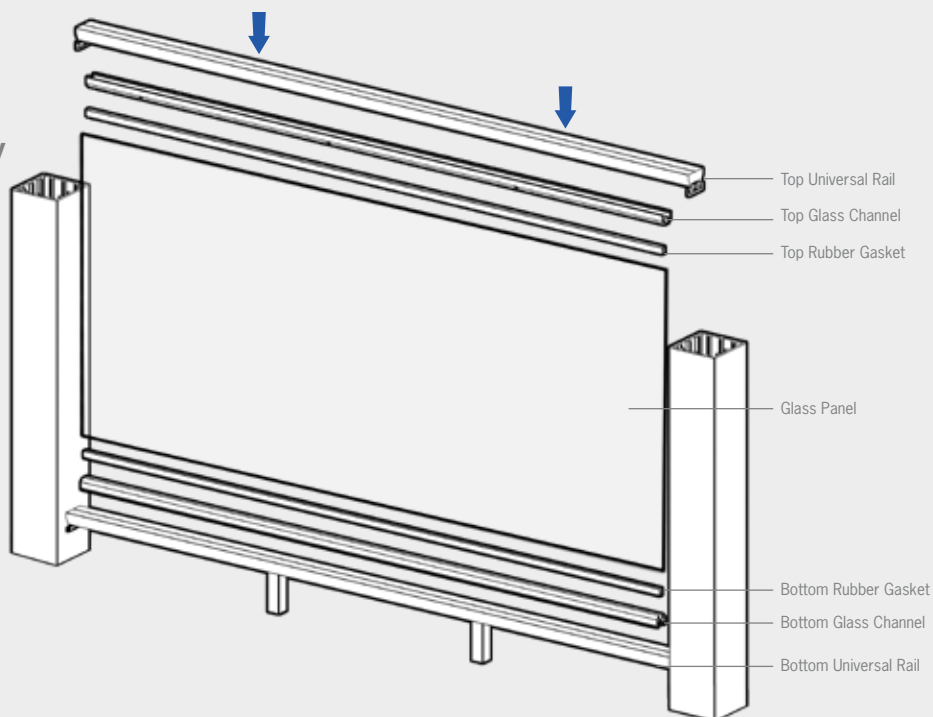
- Using Top Support Rail length as reference, cut Gaskets and Glass Channels to length.



**5**

**TEMPORARILY  
ASSEMBLE INFILL**

- To find height of Post Sleeve cuts, temporarily fit together infill as shown. Do NOT screw anything together.



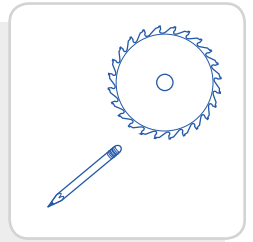
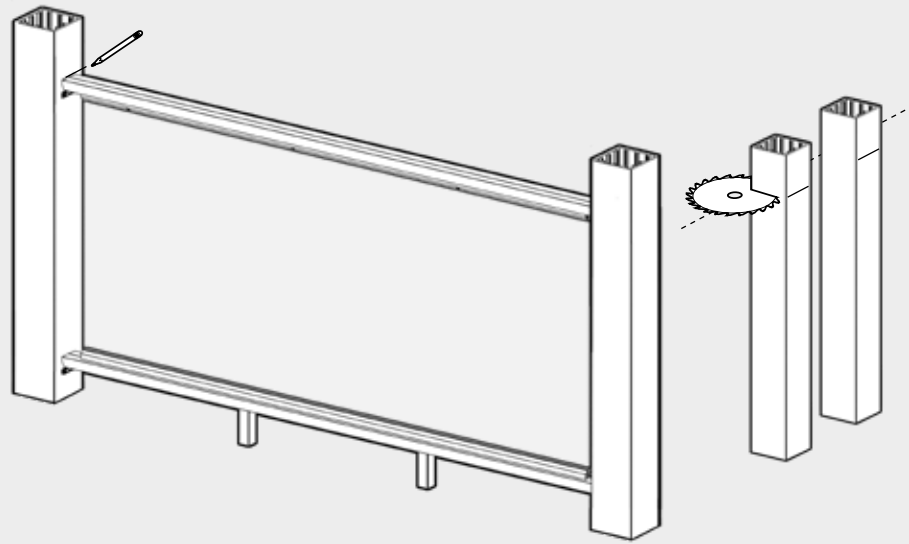
# 6

## MARK AND CUT POST SLEEVES

- Mark the top of the Top Universal Rail on the Post Sleeves.

Post Sleeves should be flush with the Top Universal Rails.

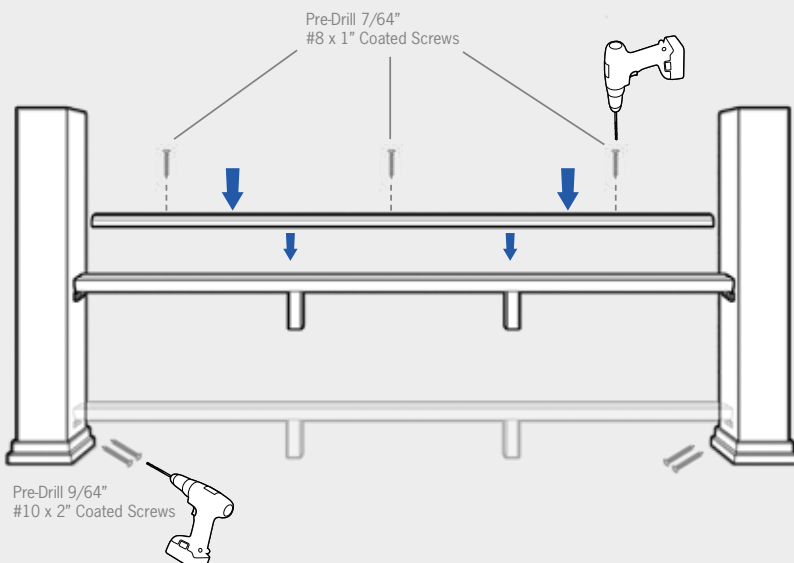
- Slide Post Sleeves off posts and cut to appropriate length.



# 7

## INSTALL BOTTOM UNIVERSAL RAIL AND BOTTOM GLASS CHANNEL

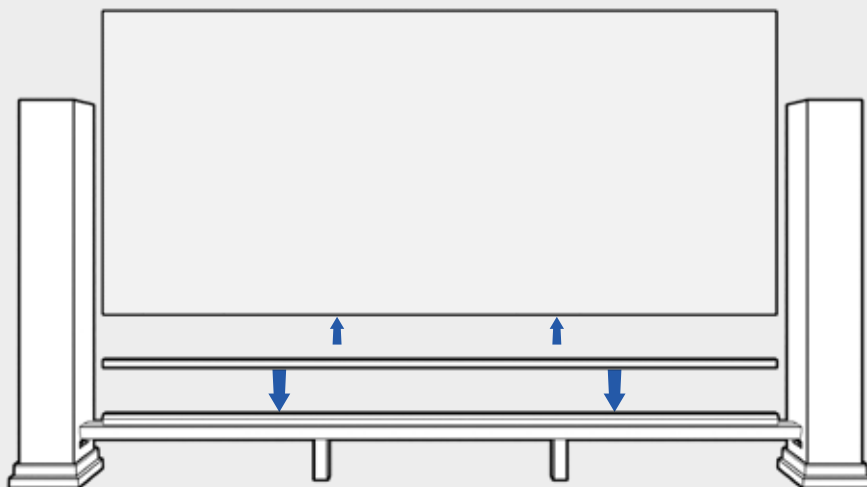
- Replace Post Sleeves and Skirts.
- Install Bottom Universal Rail by Pre-Drilling through Brackets with 9/64" bit and attaching with provided screws.
- Install Bottom Glass Channel. Pre-Drill through existing holes and attach with screws.



**8**

## INSTALL GASKET AND GLASS PANEL

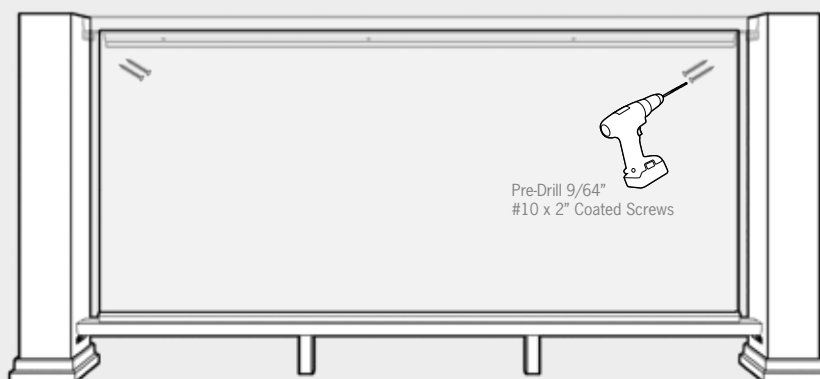
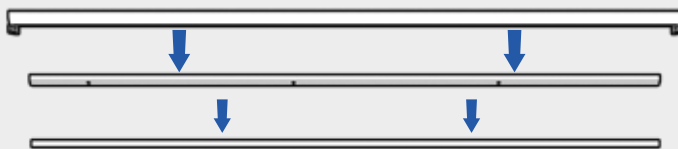
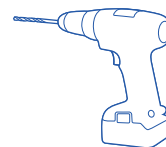
- Fit Bottom Gasket onto bottom of glass panel and fit assembly into channel in Bottom Glass Channel.



**9**

## INSTALL TOP GASKET, TOP GLASS CHANNEL, AND TOP UNIVERSAL RAIL

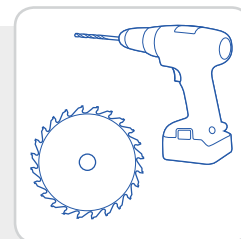
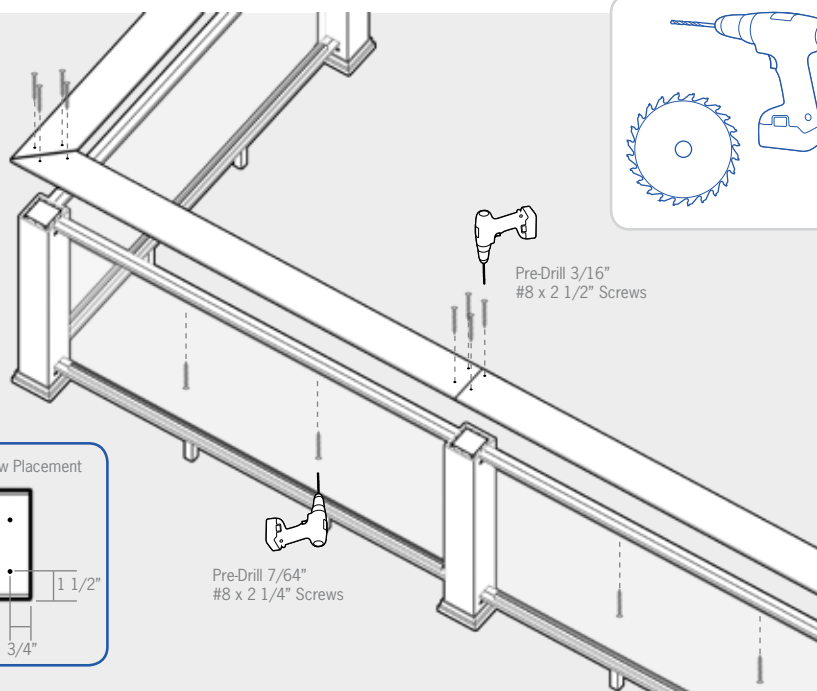
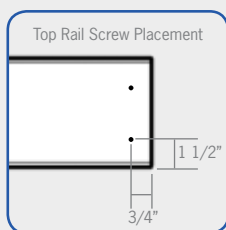
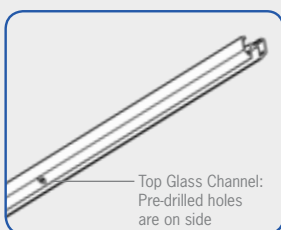
- Fit Gasket onto top of glass panel, followed by the Top Glass Channel.
- Place Top Universal Rail over glass panel assembly and secure.
- Secure Channel.



# 10

## INSTALL TOP RAIL

- Cut Top Rail so that any seams fall at the center of a post. Miter the planks at corner posts.
- All fastener locations through the top rail profile must be pre-drilled with a 3/16" drill bit, or mushrooming or splitting may occur.

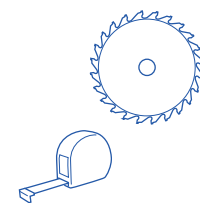
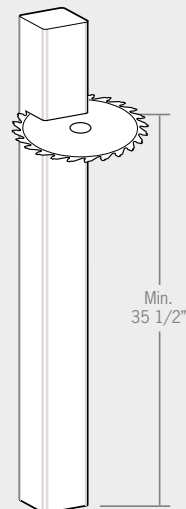
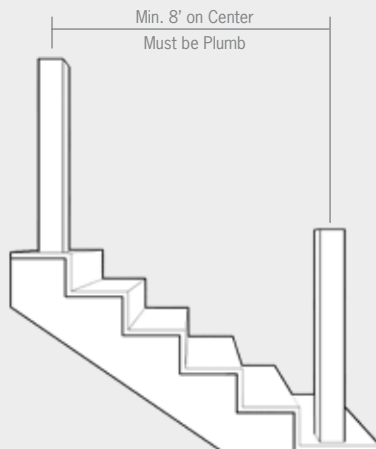


**If your rail has stair sections, start installing the cap at the stairs. Wait until all rail sections are complete before beginning Top Rail installation.**

**1**

## CUT POSTS AND TEMPORARILY INSTALL POST SLEEVES

- Trim post a min of 35 1/2" (for 36") or 41 1/2" (for 42") above finished deck surface.
- Slide Post Sleeve over 4x4 Post. Do not force.

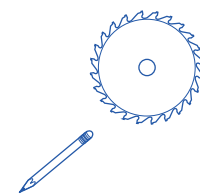
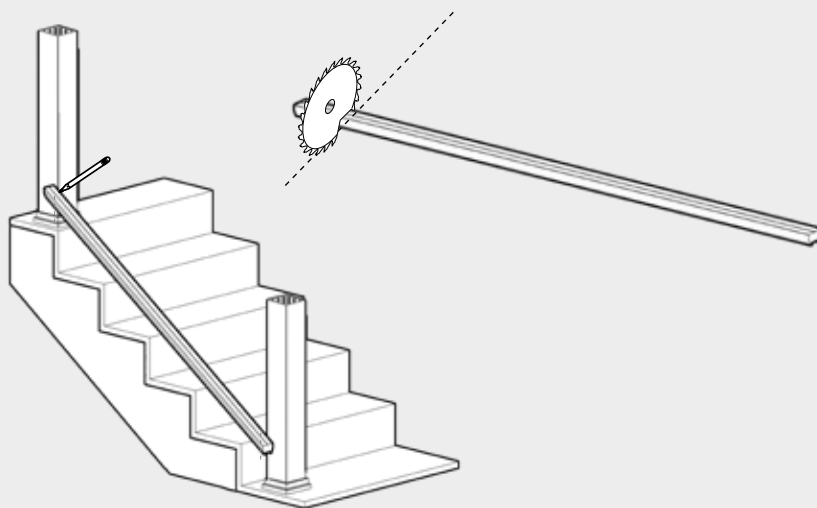


Do not cut Post Sleeves in this step.

**2**

## CUT UNIVERSAL RAILS

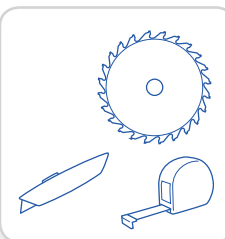
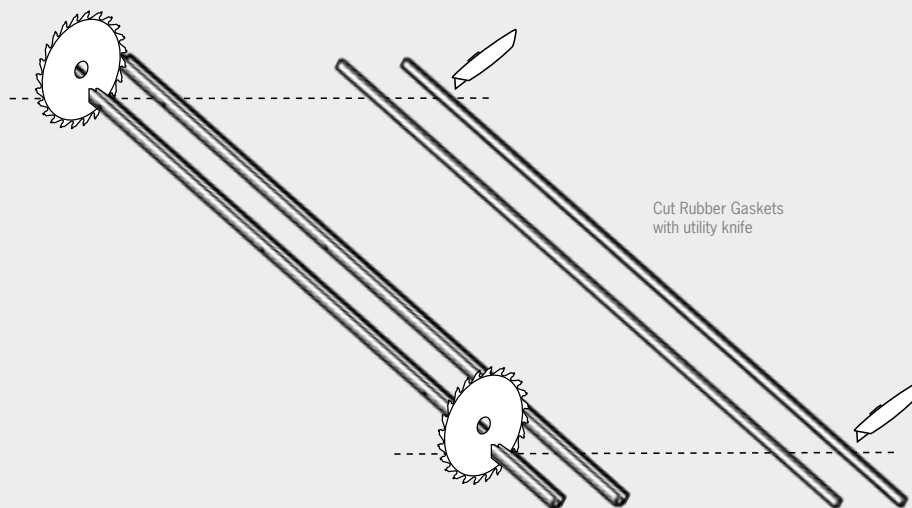
- Rest Bottom Universal Rail on stairs and transfer the length and angle of the stairs onto the rail. This angle will be used throughout the entire installation.
- Cut Bottom and Top Universal Rails according to measurements.



**3**

### TRIM GASKETS AND CLASS CHANNEL

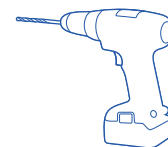
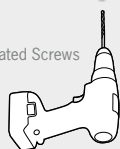
- Using Universal Rail lengths for reference, determine length for Glass Channels and Gaskets, then cut to length at stair angle.



**4**

### ATTACH HINGE BRACKETS TO TOP AND BOTTOM UNIVERSAL RAILS

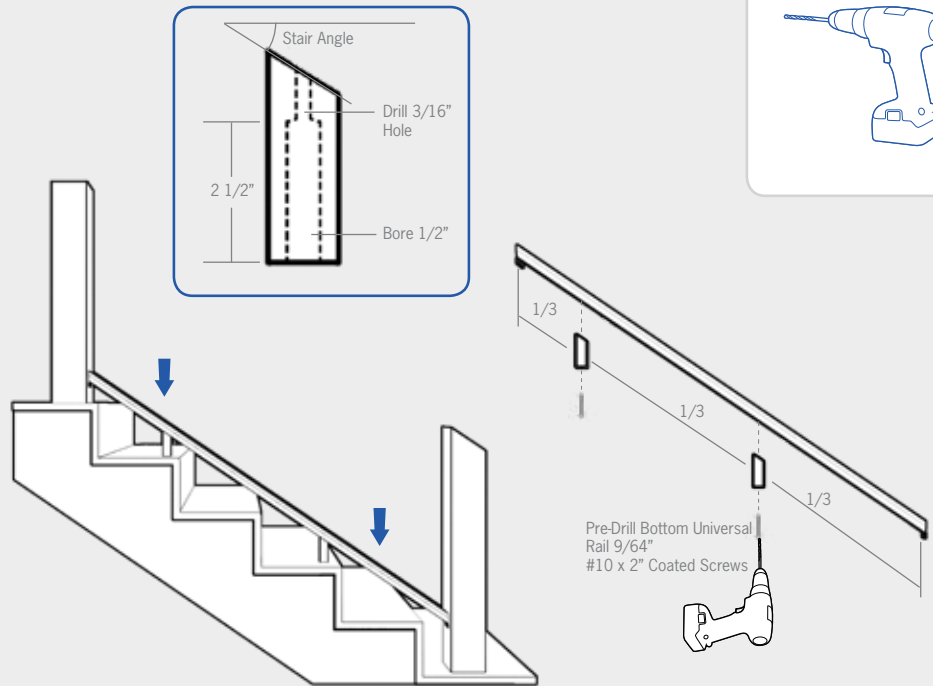
Pre-Drill 9/64"  
#10 x 7/8" Coated Screws



# 5

## INSTALL FOOT BLOCKS

- Temporarily install Bottom Universal Rail.
- Place Foot Blocks in position under Bottom Universal Rail, marking their locations.
- Remove Bottom Universal Rail, Pre-Drill using 9/64" bit, and cut and attach Foot Blocks.

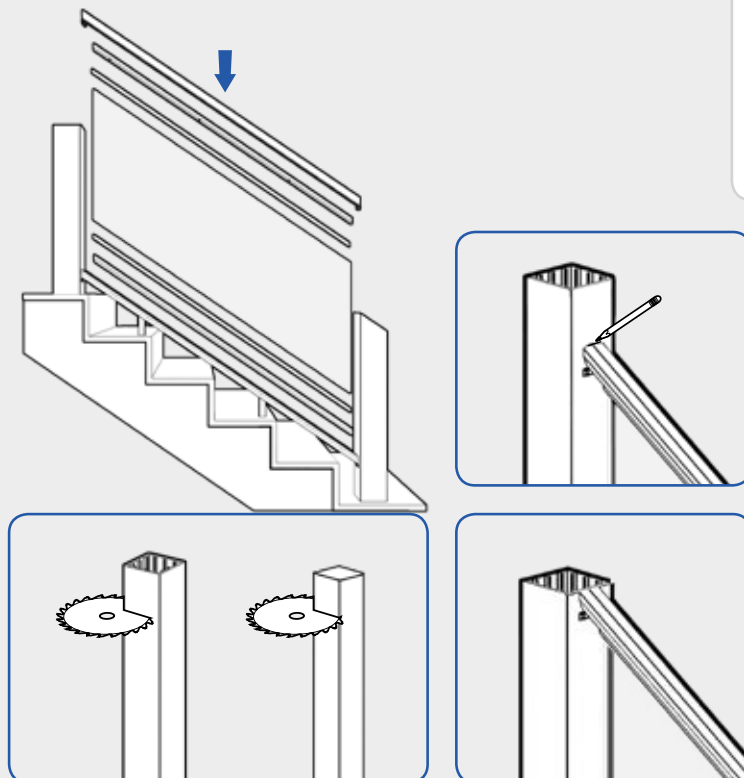


**For sections up to 6':** Space two Foot Blocks approximately at 1/3 intervals on the rail

# 6

## MEASURE AND TRIM TOP POST AND TOP POST SLEEVE

- Temporarily install infill from bottom up: Bottom Universal Rail, Bottom Glass Channel, Gasket, glass panel, Gasket, Top Glass Channel, Top Universal Rail assembly.
- Mark the top of the Top Universal Rail.
- Remove Post Sleeve and trim to length, then Trim Post to same length and replace Post Sleeve.

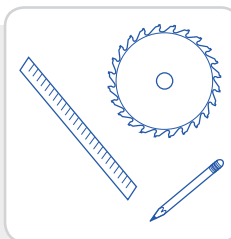
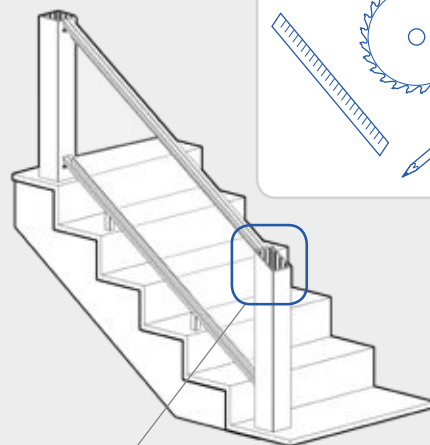
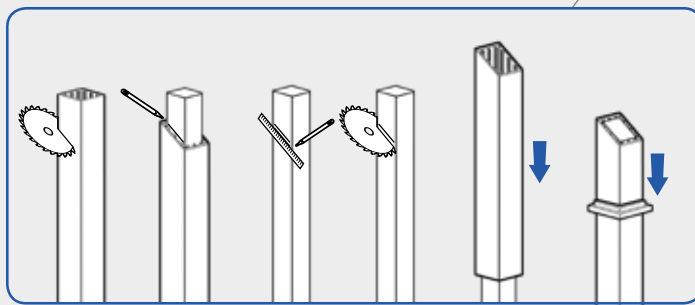
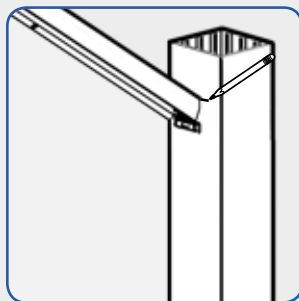


Post Sleeves should be flush with Top Universal Rail.

# 7

## MEASURE AND TRIM BOTTOM POST AND POST SLEEVE

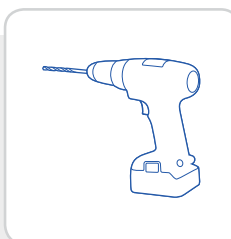
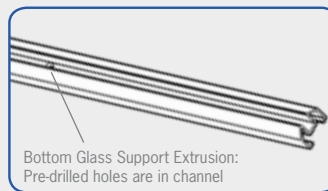
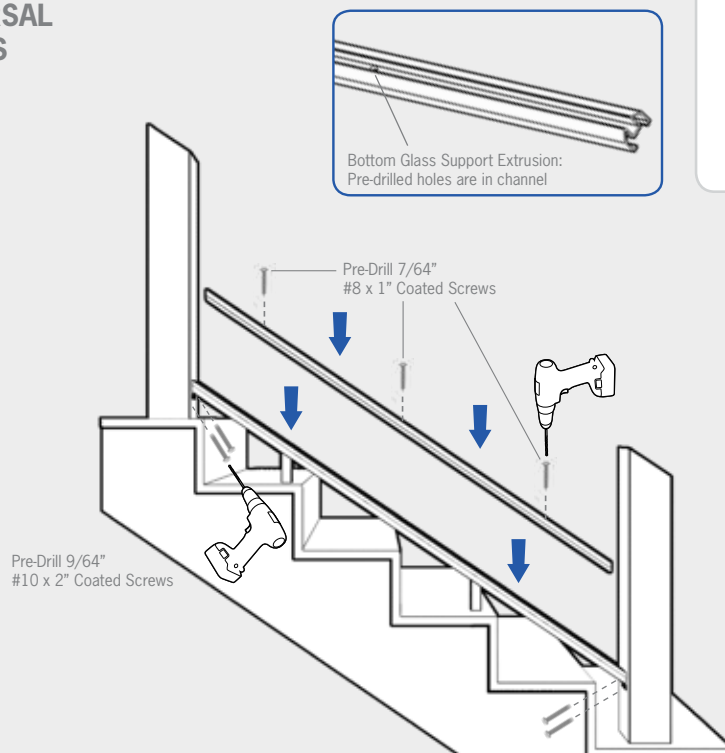
- Mark where Top Universal Rail meets Bottom Post Sleeve.
- Remove Post Sleeve and trim to stair angle. Replace Post Sleeve.
- Use Post Sleeve to mark the angle of cut on Post. Remove Post Sleeve.
- Using a straight edge, draw a line roughly 1/8" below previous mark on Post.
- Trim Post at lower line.
- Replace Post Sleeve.
- Slide on Post Skirts.



# 8

## INSTALL BOTTOM UNIVERSAL RAIL AND BOTTOM GLASS CHANNEL

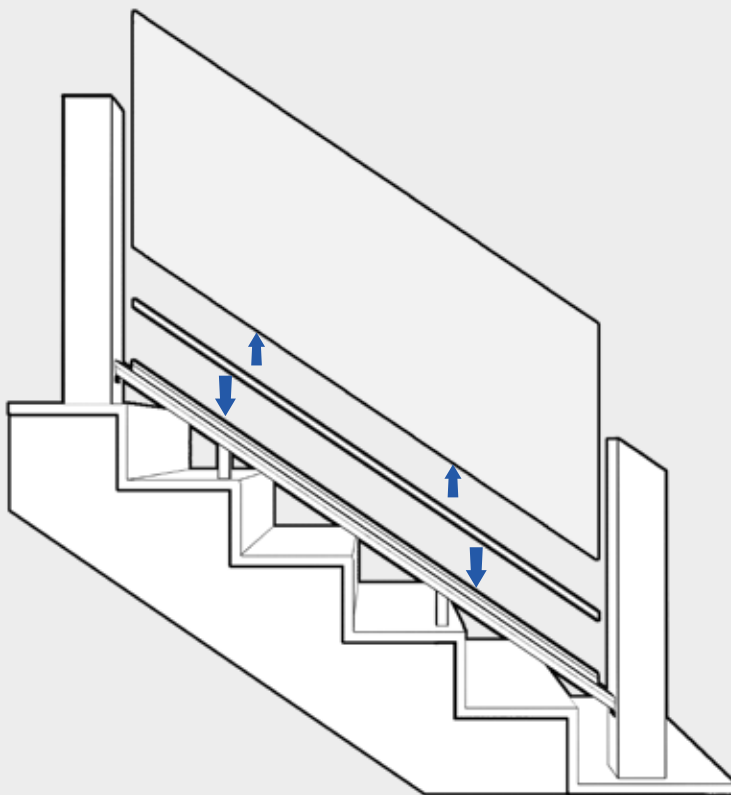
- Move Bottom Universal Rail and Glass Channel into place and secure.



**9**

### INSTALL GASKET AND GLASS PANEL

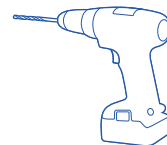
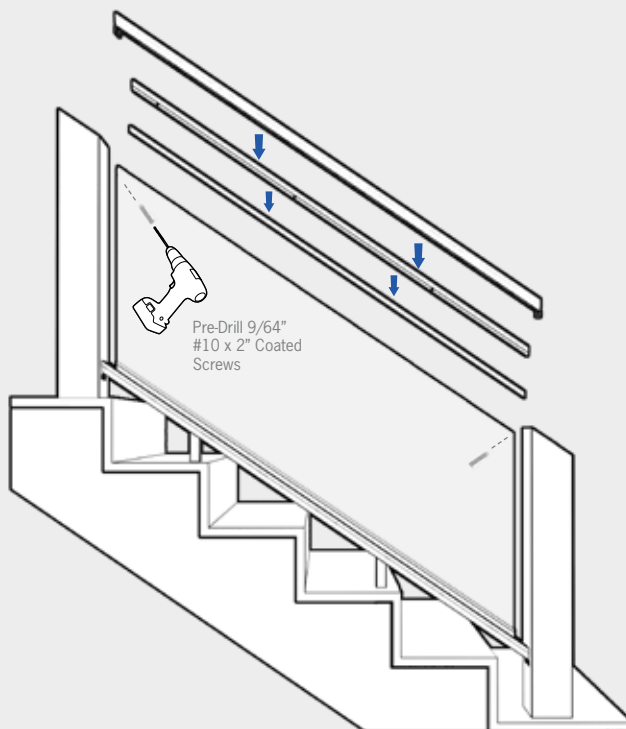
- Fit Bottom Gasket onto bottom of glass panel and fit assembly into channel in Bottom Glass Channel.



**10**

### INSTALL BOTTOM SUPPORT RAIL AND BOTTOM GLASS CHANNEL

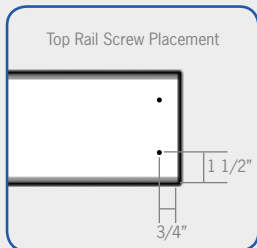
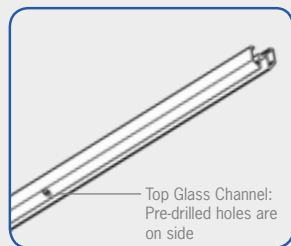
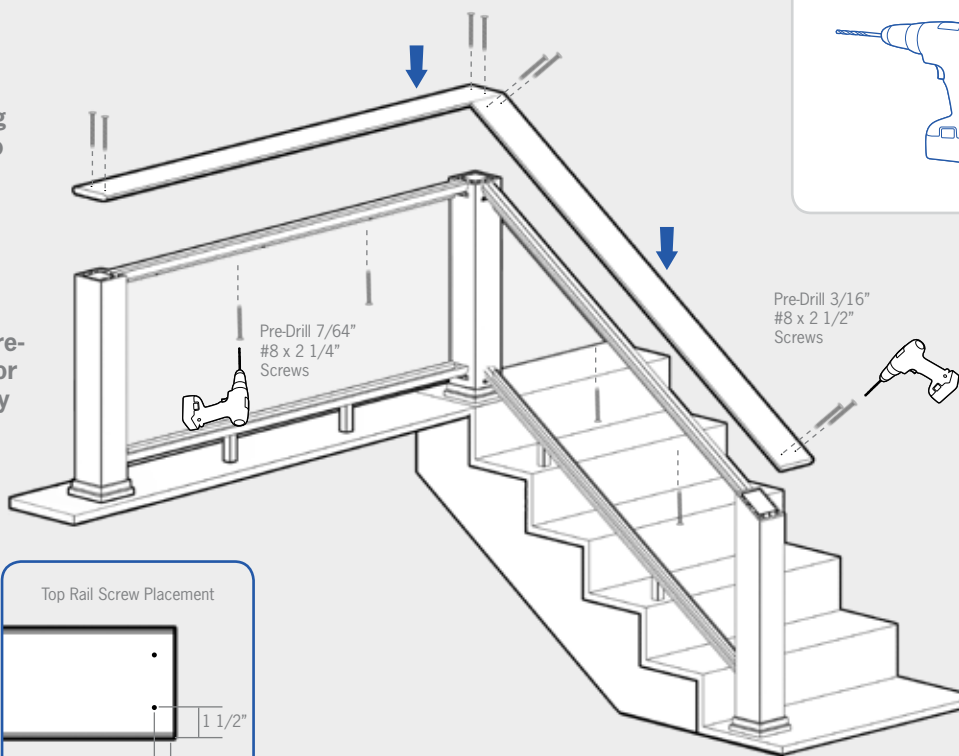
- Fit Top Gasket on top of glass panel, followed by the Top Glass Support Extrusion.
- Place Top Universal Rail over glass panel assembly and secure.



# 11

## INSTALL TOP RAIL

- Finish railing system installing the Contemporary Top Rail to the top of the rail assembly.
- Pre-Drill 3/16" and secure planks at posts.
- All fastener locations through the top rail profile must be pre-drilled with a 3/16" drill bit, or mushrooming or splitting may occur.



This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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