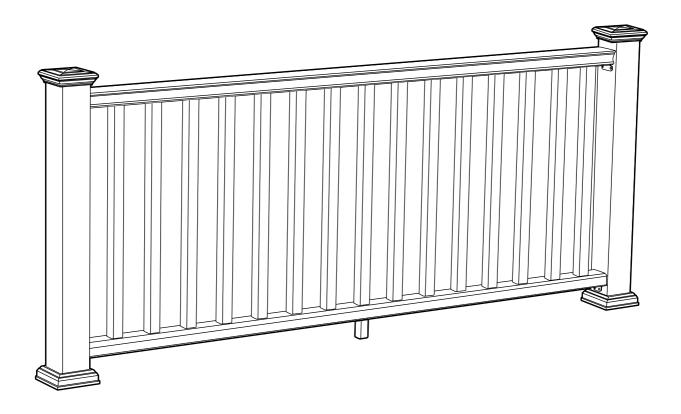


## **INSTALLATION MANUAL**

### **VERANDA ENCLAVE RAILING**



Questions, problems, missing parts? Before returning to the store, call Veranda Customer Service 8 a.m. - 7 p.m., EST, Monday - Friday, 9 a.m. - 6 p.m., EST, Saturday

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#### THANK YOU

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## **Safety Information**

Read and understand this entire manual before you begin the installation of your railing.



WARNING: Use extreme caution when using power tools.



IMPORTANT: Please consult local zoning laws in regards to load requirements and bottom space requirements for rails. All supporting structures must be in accordance with applicable building codes. Neighborhood associations and/or historic districts may regulate size, type, placement and ability of railing. Apply for permits if required by local authorities and codes. Ensure compliance prior to installation. Local building code requirements will always supersede any and all suggested procedures and measurements in the following installation. The following installation instructions are intended as a general guideline based on common building practices used in railing installation.

### Warranty

#### 20 YEAR PERFORMANCE LIMITED WARRANTY

#### WHAT IS COVERED

This railing product is covered under a Limited Residential Warranty to protect against checking, splitting, decay, rot and splintering.

#### WHAT IS NOT COVERED

In no event will the manufacturer be liable for any direct, incidental, special, consequential, punitive, exemplary, statutory, special, or other, damages based upon the manufacturer products or manufacturer fasteners or resulting, directly or indirectly, from any defect in the manufacturer products or fasteners, including but not limited to damage to, diminution in value of and/or loss of use or enjoyment of, any property or part thereof, whether based on contract, tort, strict liability, statute, regulation or otherwise, even if the manufacturer is expressly advised about the possibility of such damages. Some states do not allow the exclusion or limitation of incidental or consequential damages in certain circumstances, so the above limitation may not apply to you.

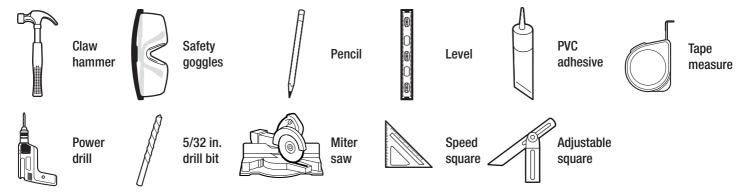
In addition, this Limited Warranty does not cover and the manufacturer shall not be liable for any installation, removal or reinstallation costs. The manufacturer does not warrant against and is not responsible for, and no express or implied warranty shall be deemed to cover, any condition attributable to: (1) improper installation of products and/or failure to abide by the manufacturer's written instructions and any applicable laws or building codes, including but not limited to improper structural support, fastening, ventilation or gapping; (2) use of the manufacturer's products beyond normal use or in an application not recommended or permitted by the manufacturer's written instructions and applicable laws and building codes; (3) movement, distortion, collapse or settling of the ground or the supporting structure on which the manufacturer's products are installed; (4) Defects in or failure arising from decking structure resulting from water caused by improper installation, workmanship, maintenance or repair; (5) any Act of God (including but not limited to flooding, hurricane, tornado, wind, earthquake, lightning, hail, etc.); (6) discoloration, fading, spotting or staining from or caused, in whole or in part, by mold, mildew, other fungal growth, organic materials, metallic oxides or particles (including but not limited to rust or corrosion of any fasteners), dirt, other atmospheric or environmental pollutants, foreign substances such as grease or oil, chemicals (including but not limited to those found in cleaners), or normal weathering (defined as natural efflorescence, exposure to sunlight, weather and atmospheric conditions which causes any colored surface to gradually fade, flake, chalk, or accumulate dirt or stains); (7) damage resulting from casualty, fire or exposure to heat sources such as cooking devices or retro-reflective surfaces; (8) the application of paints, stains, surface treatments or other chemical substances including but not limited to cleaners or pesticides; (9) fading, flaking or other deterioration of any paints, stains or other coatings placed on the manufacturer's products; (10) climate change, environmental conditions, static electricity or any cause beyond the control of the manufacturer; (11) variations or changes in color of the manufacturer's products; (12) improper handling, maintenance, storage, abuse or neglect of the manufacturer's products by Purchaser or others; (13) ordinary wear and tear; (14) impact from objects; or (15) any fasteners not supplied or approved by the manufacturer.

No warranty is given with respect to any fasteners other than the fasteners produced by the manufacturer. Other fasteners, whether approved fasteners or otherwise, are subject to only the warranties provided by the manufacturer of the fastener and Purchaser's sole warranty and remedy is with that manufacturer.

Contact the Customer Service Team at 1-800-230-7547 or visit www.HOMEDEPOT.com/VERANDA.

## **Pre-Installation**

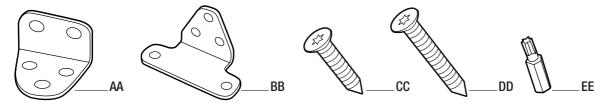
### **TOOLS REQUIRED**



### **RAILING HARDWARE KIT**



NOTE: Hardware not shown to actual size.

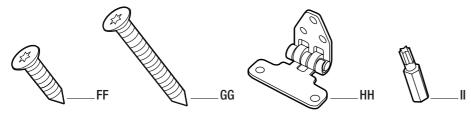


Part	Description	Quantity (per kit)
AA	Bottom bracket	2
BB	Top bracket	2
CC	#10 x 1 in. screw	12
DD	#10 x 2 in. screw	8
EE	Driver bit	1

### STAIR RAILING HARDWARE KIT



**NOTE:** Hardware not shown to actual size.



Part	Description	Quantity (per kit)
FF	#10 x 1 in. screw	12
GG	#10 x 2 in. screw	8
НН	Stair rail bracket	4
II	Driver bit	1

## **Pre-Installation (continued)**

#### PRIOR TO INSTALLING THE RAILING



IMPORTANT: Please read and follow the instructions in this section before you begin installation of your railing products.



**NOTE:** Rail and baluster lengths will vary slightly due to manufacturing processes. Make sure rails and balusters are cut properly to correct length, and with hole pattern centered between posts before securing.

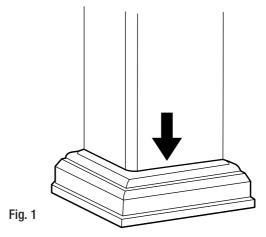


NOTE: For best results, cut post sleeves with a carbide-tipped balde, minimum 32-tooth.

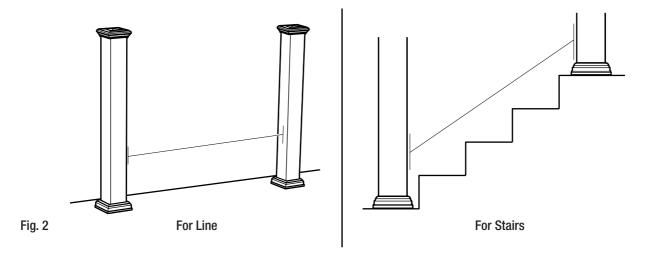


NOTE: If using the post sleeve moulding, make sure to position and glue moulding in place prior to securing the bottom rail.

□ If using cove moulding, slide the post down into the cove moulding prior to securing any railings (Fig. 1).

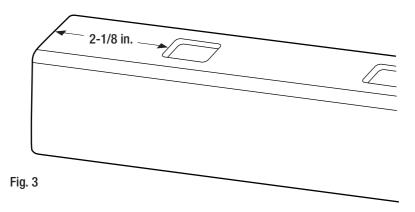


□ Measure the inside distance between properly installed, plumb posts. See Fig. 2 for Line and Stair Railings.



## **Pre-Installation (continued)**

□ Transfer the measurement to the top rail, making sure that the distance from the end of the rail to the first baluster slot is equal on both ends of the rail. The minimum distance from a post to first baluster slot is 2 -1/8 in. for clearance from the brackets. (See Fig. 3)



□ Place the rails together so that the top and bottom baluster slots are aligned. Mark the bottom rail for the inside distance between the posts (see Fig. 4). Cut the top and bottom rails to fit tightly between the posts.

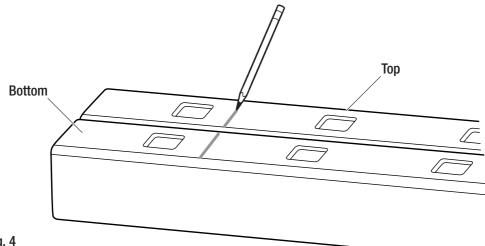
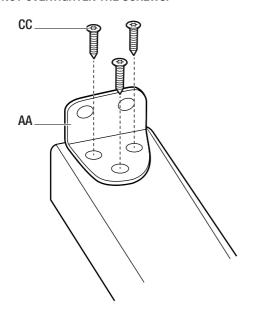


Fig. 4

### **Line Rail Installation**

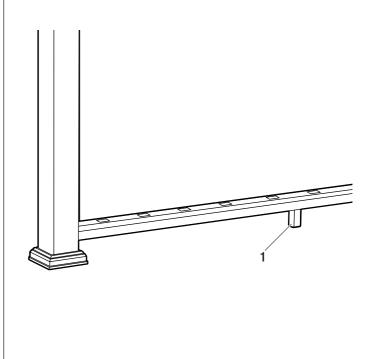
## Preparing the bottom rail

- Position bottom brackets (AA) 1/32 in. 1/16 in. from the ends of the bottom rail and mark the hole locations. Ensure the brackets (AA) are installed on the opposite side from the baluster holes.
- Predrill holes using a 5/32 in. bit and then attach the brackets (AA) to the bottom rail using 1 in. screws (CC).
   DO NOT OVERTIGHTEN THE SCREWS.



## **2** Attaching crush blocks

 Use PVC adhesive to place and glue crush blocks (1) to the bottom of the bottom rail at mid-point of rail length to support the rail in a level position.



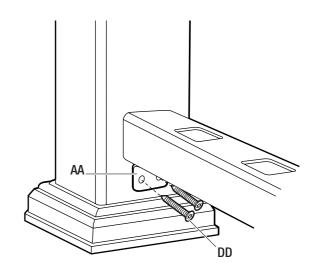
# 3 Installing the bottom rail

- Completely lower the rail onto the brackets and check to make sure it is level.
- Once the lower rail is level, mark bracket hole locations.
  Remove the rail before pre-drilling the holes.
- Pre-drill the holes with a 5/32 in. bit, angling slightly upward and inward to allow for clearance from the rail once repositioned for securing.



**NOTE:** Using extended drill bits is recommended to prevent damage to the rail, and allow a more perpendicular driving angle.

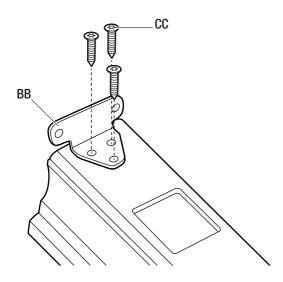
 Secure the bottom railing in place using the 2 in. screws (DD).



### **Line Rail Installation (continued)**

# 4. Preparing the top rail

- Position top brackets (BB) 1/32 in. 1/16 in. from the ends of the top rail and mark the hole locations. Ensure brackets are installed on the side of the top rail with the baluster holes.
- Predrill holes using a 5/32 in. bit and then attach the brackets (BB) to the top rail using 1 in. screws (CC).
   DO NOT OVERTIGHTEN THE SCREWS.

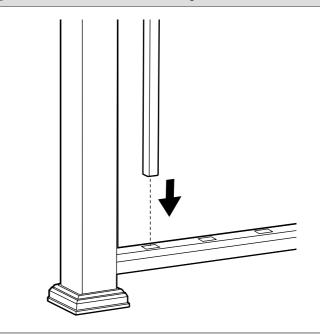


## 5 Inserting balusters

 Insert a baluster into the first and last baluster holes in the bottom rail.

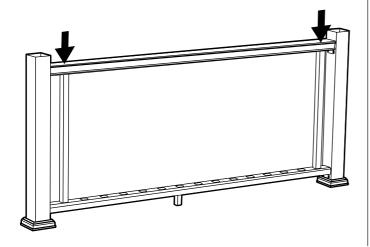


**NOTE:** Baluster length may vary slightly. Make sure all balusters are cut to the correct length.



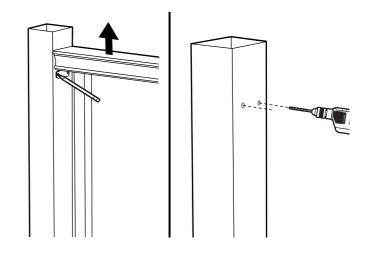
# **6** Positioning the top rail

- Carefully position the top rail between the posts and lower onto the two balusters. Ensure you fully seat the balusters into the top rail.
- Check the top rail and ensure it is level.



## Marking and drilling top rail holes

- Mark the location of the bracket holes.
- Remove the top rail and balusters. Pre-drill the holes with a 5/32 in. bit, angling slightly upward and inward to allow for clearance from the rail once repositioned for securing.



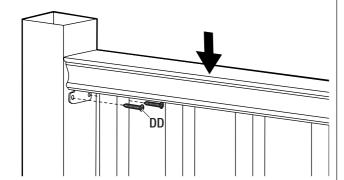
### **Line Rail Installation (continued)**

# 8 Installing the balusters and top rail

 Insert all balusters into the bottom rail. Reposition the top rail over the balusters, and lower into place between the posts. After the top rail is fully seated, secure using 2 in. screws (DD). DO NOT OVERTIGHTEN.

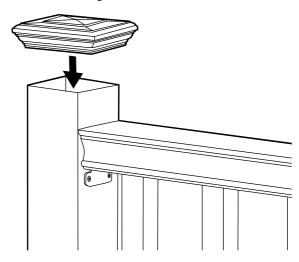


**NOTE:** Using extended drill bits is recommended to prevent damage to the rail, and allow a more perpendicular driving angle.



## Installing the post caps

Complete the installation by installing the post cap in place.
 You can use a quality exterior adhesive in order to do this but note that you will not be able to remove the cap at a later time once it is glued.



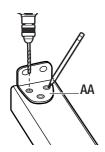
### **Pre-Assembled Rail Installation**

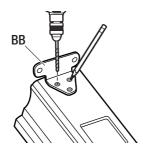
# Preparing the railing for installation



**NOTE:** Do not remove the strapping until instructed to do so at the end of this installation procedure.

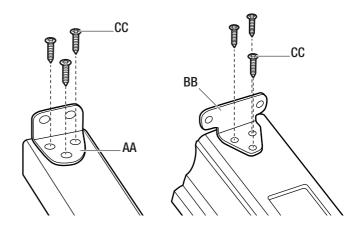
- □ Allow 1/32 in. 1/16 in. from the end of the top and bottom rails, then mark locations of the holes for the top and bottom brackets (AA and BB).
- □ Pre-drill holes for the screws using a 5/32 in. bit.





## Installing the top and bottom bracket

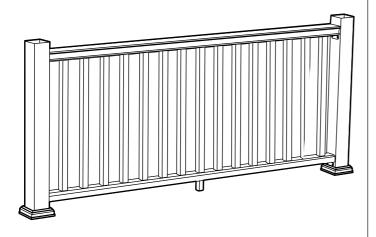
 Attach the top and bottom brackets (AA and BB) using the 1 in. screws (CC). DO NOT OVERTIGHTEN.



## **Pre-Assembled Rail Installation (continued)**

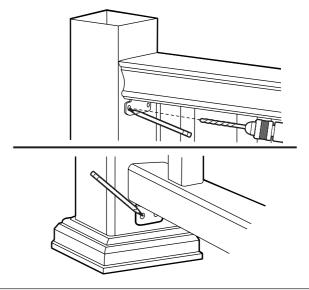
# 3 Installing the crush block

With the brackets secured to the rails, use PVC adhesive to place and glue crush block to the bottom of the bottom rail at the mid-point of the rail length to support the rail in a level position.



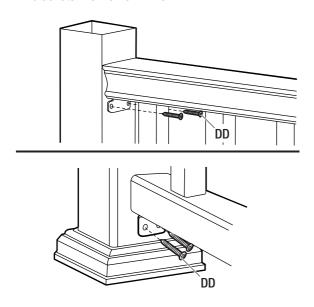
# **4** Marking and drilling the railing locations

- Carefully lower the rail assembly and mark the holes for the top and bottom brackets. Remove the rail assembly before pre-drilling the holes.
- □ Pre-drill all hole locations using a 5/32 in. bit.



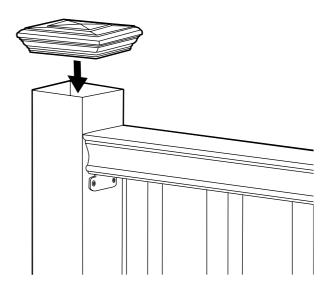
# **5** Securing the rail

- Starting with the top brackets, secure the top rail with the
  2 in. screws (DD). DO NOT OVERTIGHTEN.
- After the top rail is secured, continue with the bottom brackets, DO NOT OVERTIGHTEN.



# 6 Installing the caps

Complete the installation by installing the post cap in place. You can use a quality exterior adhesive in order to do this but note that you will not be able to remove the cap at a later time once it is glued. Remove the strapping from the section.



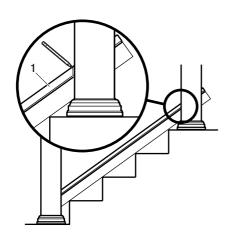
### **Stair Railing Installation**

#### **SPECIAL NOTES ON STAIR RAILING**

The stair systems are designed for the typical angles created by an approximate 7 in. rise/11 in. run with allowance for accepted variation in components. The Enclave stair system allows for a 30-34 degree stair angle. Building codes are very specific on allowable angles and widths. It is very important to consult with your local building code officials and plan your stair layout accordingly. Ensure that you leave adequate space for graspable hand rail if applicable. "Dry fitting" intermediate post placement will result in easier and better looking installations and may avoid placement of post mounting brackets in areas where screws cannot attach to the guardrail.

## Determining the angle for the railing

 Using a 2 x 4 over the steps to create a consistent angle, place the bottom rail (1) over the 2 x 4 and mark the end angles for the bottom rail.

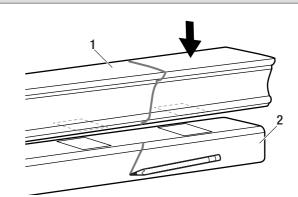


## **2** Marking the angles

Align the top rail (1) on top of the bottom rail (2), ensuring the baluster holes are facing each other. Then mark the angle of the bottom rail to the top rail.

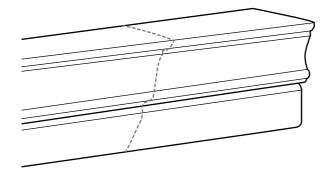


**NOTE:** Make sure that when the holes are aligned, the stair angle is continuous across both pieces. The minimum distance from post to first baluster slot is 2 -1/8 in. (5 cm) for clearance from the brackets.



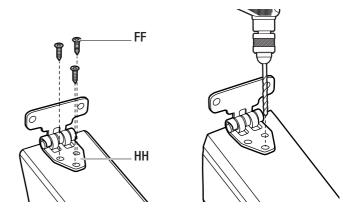
# 3 Cutting the rail angles

- Cut the top and bottom rails at the marked angles to fit tightly between the posts.
- Transfer the stair angle to the crush block and cut to the desired length (consult your local building official for the proper spacing between the stair tread and the railing).



## 4 Attaching brackets to the rails

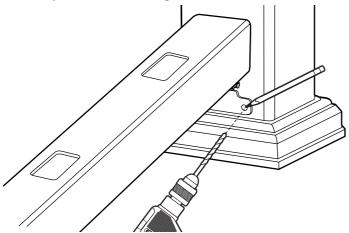
- Place brackets (HH) on each end of the bottom rail (side without baluster holes). Place brackets on each end of the top rail (baluster hole side). Leave 1/32 in.-1/16 in. space from the cut edge of the rail. Mark all bracket hole locations and then drill holes using a 5/32 in. bit.
- Secure all brackets using the 1 in. screws (FF).



### **Stair Railing Installation (continued)**

## **5** Preparing the bottom rail installation

- Place the bottom rail between the posts. Using the bracket as a guide, mark the location of the holes on the posts.
   Remove the rail before pre-drilling the holes.
- Predrill the holes with a 5/32 in. bit, angling slightly upward and inward to allow for clearance from the rail once repositioned for securing.

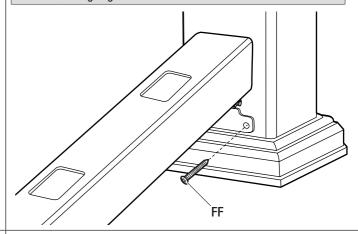


## $\mathbf{6}$ Installing the bottom rail

- Place the crush block on the stair tread surface midway between the posts and glue to bottom of bottom rail.
- Secure the bottom rail to the post at both ends using the 2 in. screws (GG). DO NOT OVERTIGHTEN.



**NOTE:** Using extended drill bits is recommended to prevent damage to the rail, and allow a more perpendicular driving angle.

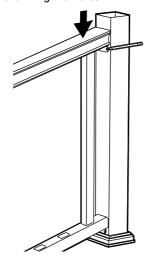


# Positioning the top rail



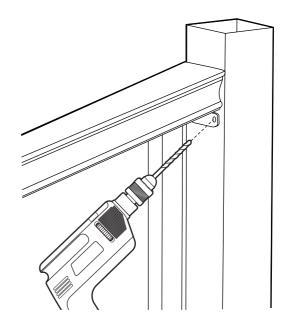
**NOTE:** Baluster length may vary slightly. Make sure all balusters are cut to the correct length.

- Insert a baluster into the first and last holes in the bottom rail. Carefully position the top rail over the balusters. Lower until the balusters are fully inserted.
- With the top rail fully seated, and using the top bracket as a guide, mark the location of the holes. Remove the rail before pre-drilling the holes.



# **8** Drilling the top rail holes

 Predrill the holes with a 5/32 in. bit, angling slightly upward and inward to allow for clearance from the rail once repositioned for securing.



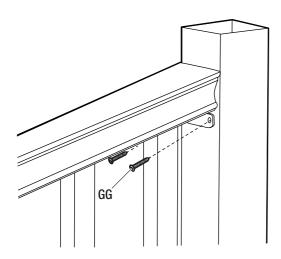
## **Stair Railing Installation (continued)**

# 9 Installing the top rail

□ Fully insert all balusters and secure the top railing using the 2 in. screws (GG).

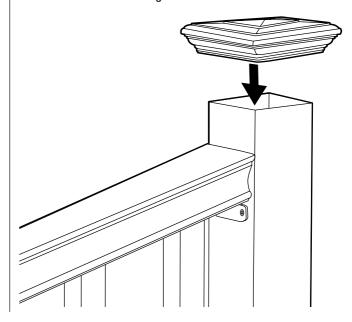


**NOTE:** Using extended drill bits is recommended to prevent damage to the rail, and allow a more perpendicular driving angle.



# 10 Installing the caps

Complete the installation by installing the post cap in place.
 You can use a quality exterior adhesive in order to do this but note that you will not be able to remove the cap at a later time once it is glued.





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Retain this manual for future use.