



## SAFETY PRECAUTIONS

**Step 1** - Check all local building codes for design load requirements for railing applications. Always use safety equipment when installing our vinyl railing system. This product has been tested according to ESR-5074. Refer to our test reports for test results and reinforcing requirements.

## RECOMMENDED TOOLS AND MATERIALS



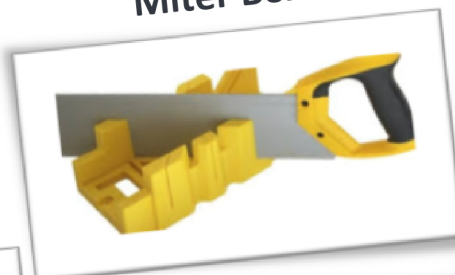
Measuring Tape



Pencil



Level



Miter Box



Hacksaw



Drill

## STEP 2- Post Preparations

Prepare all mounting surfaces and posts where your new vinyl railing will be installed. Ensure that any slide over style trim rings for your posts are already on the posts as you will not be able to install them after the railing has been fully constructed. Make sure the posts are level before securing.

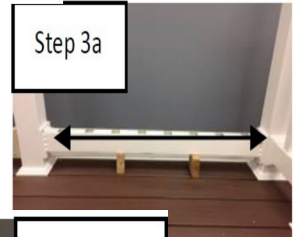


## STEP 3- Bottom Rail

**A)** Determine the level placement of the bottom rail making sure that there is a 2½” space from the bottom of the rail to the standing level surface. Mark the mounting surface using a pencil.

**B)** Mark your bottom rail with the measurement from step 3A paying close attention that the spacing from picket to the end of your rail is equal on each side. The rails can be cut with the aluminum inside.

**C)** Slide the mounting brackets on each end of the rail making sure the flat side is facing the post. Place the rail between the posts on 2½” spacing blocks. Center the bracket on the posts and screw the bracket to the post with the provided screws. Screw the bracket to the rail as shown in the diagram and snap on the bottom bracket.



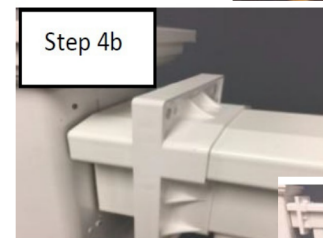
## STEP 4- Top Rail & Balusters

**A)** Measure the post to post distance for the top rail; deduct ⅛” from the measurement to allow for expansion of the rail

**B)** Mark your top rail with the measurement from step 4A paying close attention that the spacing from the picket to the end of your rail is equal on each side and lines up with the holes on the bottom rail. The rail can be cut with the aluminum inside. Slide the top rail brackets onto each end of the top rail with the flat side facing the post.

**C)** Beginning on one side; insert the top of each picket into the corresponding top rail routed picket hole, working your way across the rail to the other end. Position the top mounting brackets onto the previously marked areas making sure the railing is plumb and square, now fasten the top brackets to the posts.

**D)** Snap on your top cover brackets (2 pieces) on each side of the top rail.



These instructions assume that steps have a typical angle between 32° and 35° and that the posts are plumb. These instructions explain how to install stair rail in a typical application. Always check with your local building code official for regulations specific to your area.

**STEP 1-** Unpack your section of railing, confirm and inspect that all parts and pieces needed to assemble are in the box.

**STEP 2-** Lay the bottom rail on the steps beside the posts. Make sure the holes are facing upwards. Measure the distance from the post to the first route and center rail between posts.

**STEP 3-** Using the side of the posts as a guide, scribe a line on the rail at both the top and bottom of rail, allowing about 1/8" on each end for expansion.

**STEP 4-** The bottom rail can be cut with the aluminum insert inside (if applicable). Cut along the scribed lines.

**STEP 5-** Place the bottom mounting brackets onto the bottom rail at each end making sure the flat side is facing the mounting surface. Pay attention to the position of the brackets.

**STEP 6-** Place the bottom rail between posts. Confirm the distance between the underside of the bottom rail and nose of tread does not exceed one inch. Attach the brackets at each end of the railing.

**STEP 7-** Insert two balusters into the bottom rail in the third route from post on each end. Do not insert all the pickets at this time.

**STEP 8-**

**A)** Align the uncut top rail onto the balusters. Make sure that the balusters are inserted into the same corresponding routes as bottom rail.

**B)** Using a level, ensure that the balusters are plumb. Scribe top rail as in Step 2 and remove top rail.

**STEP 9-** The top rail can be cut with the aluminum insert inside. Cut along the scribed lines.

**STEP 10-** Slide top rail brackets onto top rail, the same as in Step 5. Pay attention to the position of the brackets. **One bracket slopes downward, this is the bracket for top of the stairs. The bracket for the bottom of the stairs slopes upward.**

**STEP 11-** Insert the remainder of the balusters into the bottom rail. Make sure balusters insert fully into the rail and extend all the way to the bottom.

**STEP 12-** Reinstall the cut top rail with aluminum insert by starting at one end of the railing section; insert each baluster into the matching hole of the top rail. Ensure the balusters insert fully into top rail and extend all the way to aluminum insert.

**STEP 13-** Place and install top rail to posts. Secure the top rail brackets by pre-drilling each screw hole and using the provided screws.

**STEP 14-**

**A)** Each bracket set contains 2 set screws with screw covers. Pre-drill through the top and one side of each bottom bracket into the bottom rail and through the bottom and one side of each top bracket into the top rail. Secure the screws into place using the supplied screws.

**B)** Snap decorative covers into place. This completes the installation of your vinyl rail.

