

FAIRWAY RAILING™

BY  **Envision™**
OUTDOOR LIVING PRODUCTS

P315 CPVC RAILING INSTALLATION QUICK GUIDE



SQUARE CPVC BALUSTERS
W/ DECKBOARD CAP RAIL

LEVEL & STAIR KIT INCLUDES:

- Top Rail with Aluminum Insert
- Top Sub Rail



- Bottom Rail with Aluminum Insert



- Mounting Brackets with Screws
- Rail Support(s)
- Square CPVC Balusters

TOOLS NEEDED:

- Drill with #2 Square Drive Bit
- Circular Saw
- Speed Square
- Tape Measure
- Drill Extension

LEVEL INSTALLATION

BEFORE STARTING

- Review all local building codes.
- Wear proper safety equipment.

STEP 1 GETTING STARTED

- Plumb all posts or mounting surfaces. Install post trim at this time.
- Determine required bottom rail height off deck surface to underside of rail based on local building requirements.

STEP 2 INSTALLATION OF BOTTOM RAIL MOUNTING SCREW

- Find the center of post/mounting surface. (example; 4.25" post= 2-1/8") Mark vertical center line on post.
- Determine your finished height off deck surface to bottom of bottom rail. Add 3/8" and mark on vertical center line.
- Drill a 3/16" hole at this mark. Install #10 x 1" screw within 1/8" of surface. Check screw head clearance by using bottom rail bracket and adjust clearance between screw head and post/mounting surface to obtain a snap fit.

STEP 3 CUT RAILS

- Measure distance between posts and mark bottom rail to correct length.
- Ensure there is equal and maximum distance from baluster holes on both ends of top and bottom rails. Cut bottom rail with aluminum insert inside to length. Cut top rail, sub-rail and deck board cap rail the same length, ensuring that the baluster holes line up with bottom rail balusters holes.

NOTE: The top aluminum insert should be inserted with DEEP SIDE of the channel facing the baluster pocket side of the rail and should be cut 1/4" shorter than the sub-rail. The bottom aluminum insert should be inserted into the bottom rail with DEEP SIDE of channel facing the baluster pocket side of the rail.

STEP 4 INSTALL RAIL MOUNTING BRACKETS & RAIL SUPPORT

- Place bottom rail inverted on work surface with aluminum insert facing up.
- **Bottom Rail Brackets:** Place bottom rail bracket on underside of bottom rail aluminum insert with post mounting flange up. Make certain flange is flush with the end of the bottom rail and mark the elongated slot. Install one each #10 x 3/4" mounting screw for each bracket. Adjust bracket if necessary.
- Find center of bottom rail and install rail support with one #10 x 3/4" screw.
- **Top Rail Brackets:** With baluster pockets facing up and shallow side of aluminum insert facing down, slide top rail brackets with mounting flanges pointing down on end of top aluminum insert. On elongated slot, find center & install one #10 x 3/4" screw. Adjust bracket if necessary and install second screw.

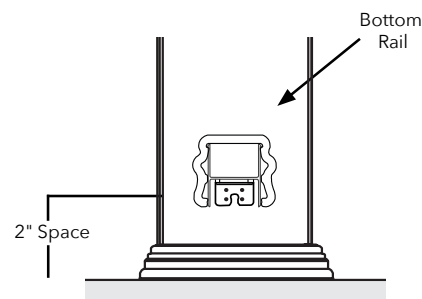
STEP 5 INSTALL RAIL SECTION

- Snap bottom rail onto bottom rail mounting screws between posts and insert balusters into bottom rail.
- With bottom rail in place, insert sub-rail in place and starting from one end, work the balusters into sub-rail.
- Pre-drill two 1/8" holes through top mounting bracket holes into post/mounting surface and install #10 x 1-1/4" screws in both ends of rail.
- Place deck board (not supplied), top side down, on a non-abrasive surface. With flat side down, center top rail along length and width of the deck board. Using the provided hardware, install two #10 x 3/4" screws, side by side, at quarter points along top rail.

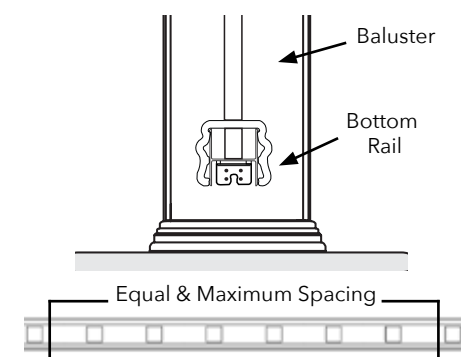
STEP 6 FINISHING STEPS

- With the deck board cap rail installed on top rail, carefully snap top rail over top aluminum insert. Ensure that the top rail is seated entirely.
- With rail mounted in place, measure and mark post sleeves to desired height. Cut post to desired height with a saw and clean edge of cut.
- Apply a small bead of silicone to the inside edge of post cap and install on top of post sleeve. Let set for 12 hours for adhesive to cure.

STEP 2

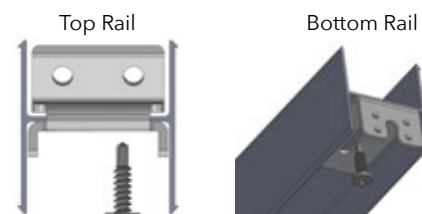


STEP 3

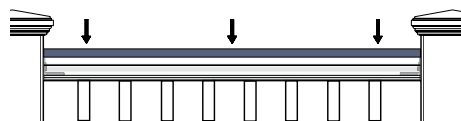
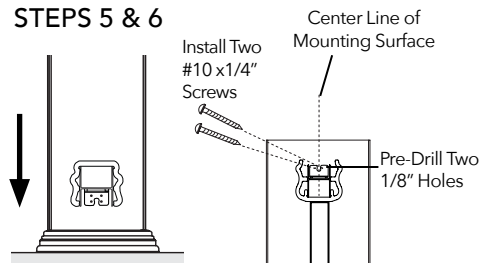


STEP 4

Aluminum Inserts



STEPS 5 & 6



Fairway Architectural Railing Solutions will not be held liable for incorrect or unsafe installations by the installer. It is the installer's responsibility to secure proper building permits, review local codes and safety needs and meet or exceed them. The instructions provided by Fairway are a guide and may not account for every special circumstance. The installer must identify and execute the installation approach that is appropriate for every application.

STAIR INSTALLATION

BEFORE STARTING

- Review all local building codes.
- Wear proper safety equipment.

STEP 1 GETTING STARTED

- Plumb all posts or mounting surfaces. Install post trim at this time.
- Determine required bottom rail height off deck surface to underside of rail based on local code requirements.

STEP 2 INSTALLATION OF BOTTOM RAIL MOUNTING SCREW

- Find the center of post/mounting surface. (Example; 4.25" post = 2-1/8")
Mark vertical center line on post.
- Determine your finished height off deck surface to bottom of bottom rail. Add 3/8" and mark on vertical center line.
- Drill a 3/16" hole at this mark. Install #10 x 1" screw within 1/8" of surface. Check screw clearance by using bottom rail bracket. Fit should be snug.

STEP 3 CUT RAILS & BALUSTERS

NOTE: The top aluminum insert should be inserted with DEEP SIDE of the channel facing the baluster pocket side of the rail and should be cut 1/4" shorter than the sub-rail. The bottom aluminum insert should be inserted into the bottom rail with DEEP SIDE of channel facing the baluster pocket side of the rail.

- Lay bottom rail on stair nosing and against side of posts. Making sure that the baluster spacing is equal distance from posts on each end, mark the rails where it intersects with the posts.
- If posts are plumb, the bottom rail, bottom aluminum insert, sub-rail, top rail and deck board cap rail can be cut to the same length with the same angle. Make sure you are equidistant from each end.

NOTE: Cut the top aluminum insert a 1/4" shorter for bracket installation.

- Determine angle of stairs and cut on end of each baluster to same angle. Make note to check baluster length to desired rail height.

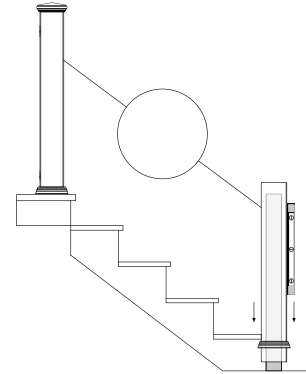
STEP 4 INSTALL BRACKETS, BALUSTERS & RAIL

- Place bottom rail inverted on work surface with aluminum insert facing up.
- **Bottom Rail Brackets:** Place bottom rail bracket on bottom of aluminum insert with post mounting flange facing upward. Make certain flange is flush with the end of the bottom sub-rail and mark the elongated slot. Drill a 1/8" hole in the center of elongated slot and install a #10 x 3/4" mounting screw.
- **Top Rail Brackets:** With mounting flanges pointing down on end of top aluminum insert, (deep part facing baluster) find center of elongated slot and drill a 1/8" pilot hole. Install two #10 x 3/4" screws. Adjust bracket angles if necessary.
- Using pre-drilled holes on bottom rail, align and attach balusters on angle cut end. Attach with provided screws. Slide sub-rail into bottom rail with bracket flanges facing down.
- Install bottom rail with installed balusters onto mounting screws.
- Set top sub-rail between posts and insert balusters. Start at the bottom of stair run and work up.
- With all balusters inserted, center top rail brackets on post and install two each #10 x 1-1/4" screws.
- Place deck board (not supplied), top side down, on a non-abrasive surface. With flat side down, center top rail along length and width of the deck board. Using the provided hardware, install two #10 x 3/4" screws, side by side, at quarter points along top rail.

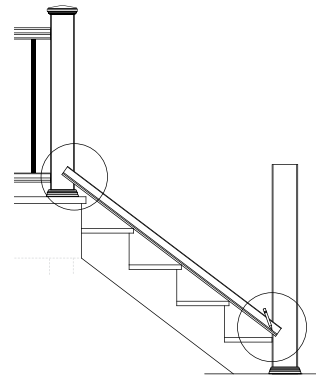
STEP 5 FINISHING STEPS

- With the deck board cap rail installed on top rail, carefully snap top rail over top aluminum insert. Ensure that the top rail is seated entirely.
- With rail mounted in place, measure and mark post sleeves to desired height. Cut post to desired height with a saw and clean edge of cut.
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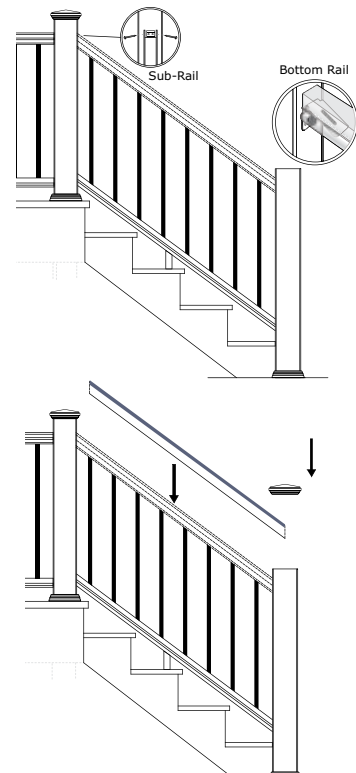
STEP 1



STEP 3



STEPS 4 & 5



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