

# FAIRWAY RAILING™

BY  **Envision™**  
OUTDOOR LIVING PRODUCTS

SQUARE CPVC BALUSTERS



Number of Balusters Provided Per Kit

LEVEL	STAIR
14 - 6' Kit	14 - 6' Kit
19 - 8' Kit	19 - 8' Kit
24 - 10' Kit	N/A - 10' Kit

## P310 CPVC RAILING INSTALLATION QUICK GUIDE

### LEVEL & STAIR\* KIT INCLUDES:

- 1 - Top Rail with Aluminum Insert
- 1 - Top Sub Rail with Rail with Aluminum Insert



- 1 - Bottom Rail with Rail with Aluminum Insert



- 4 - Mounting Brackets with Screws
- 1 - Rail Support per 6' & 8' Kit
- 2 - Rail Supports per 10' Kit

Number of balusters per kit shown left.

### 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 optional post trim at this time.
- Determine required bottom rail height from deck surface to bottom of rail based on local building codes.

## STEP 2 INSTALL BOTTOM RAIL MOUNTING SCREW

- Find center of post/mounting surface. Mark center line on surface. Determine distance from finished deck to bottom of rail. Add 3/8" and mark. Drill 3/16" hole on center of center line. Install #14 x 1" screw to within 1/8" of mounting surface. Check screw head clearance using a bottom bracket and adjust clearance between screw head and post/mounting surface to obtain a snap fit.

## STEP 3 CUT RAILS

- Measure distance between posts.
- 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 insert inside to length. Cut top rail the same, ensuring baluster holes line up.

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

## STEP 4 INSTALL RAIL MOUNTING BRACKETS & RAIL SUPPORT

- Place bottom rail bracket on underside of bottom rail, aluminum insert with post mounting flange up. Make certain post 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.
- With baluster pockets facing up, 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.
- Find center of rail and install rail support with one #10 x 3/4" screw.

**NOTE: TWO RAIL SUPPORTS ARE REQUIRED FOR 10' KITS**

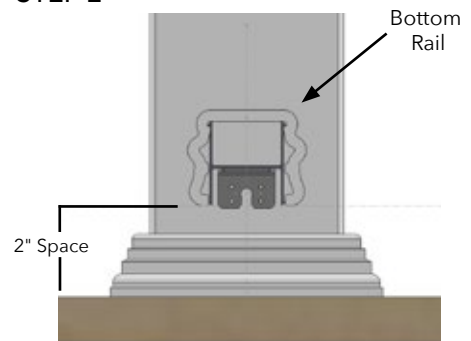
## STEP 5 INSTALL RAIL SECTION

- Snap bottom rail onto bottom rail mounting screws between posts.
- Insert balusters into bottom rail.
- With bottom rails in place, set sub-rail in place and starting from one end, work the balusters into sub-rail
- Pre-drill two 1/8" holes through top mounting brackets holes into post/mounting surface and install #10 x 1-1/4" screws in both ends of rail.

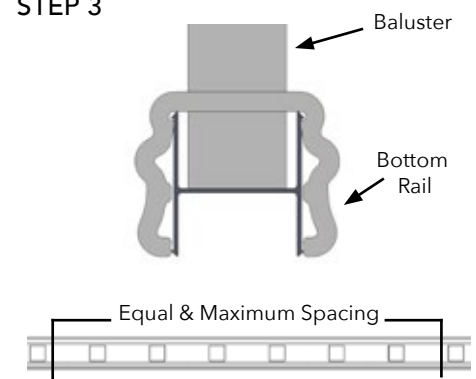
## STEP 6 FINISHING STEPS

- Carefully snap top rail cap over top aluminum insert. Ensure that cap 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 of edge of post cap and install on top of post sleeve (let set 12 hours for adhesive to cure).

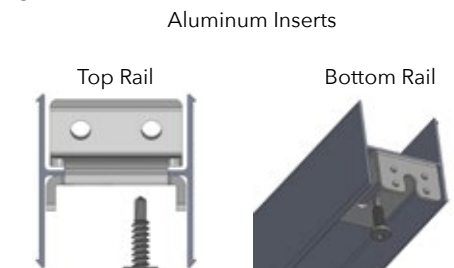
### STEP 2



### STEP 3



### STEP 4



### STEP 5



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.

P310

# STAIR INSTALLATION

## BEFORE STARTING

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

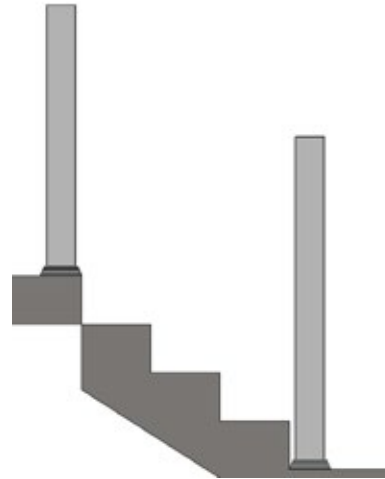
## STEP 1 GETTING STARTED

- Plumb all posts or mounting surfaces, install optional post trim at this time.
- Determine required bottom rail height from deck surface to bottom of rail based on local building codes.

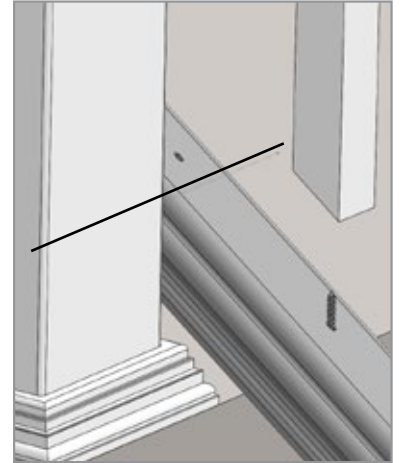
## STEP 2 CUT RAILS & BALUSTERS

- Lay bottom rail against post resting on stair and deck nosing. Balance out spacing between post and closest baluster with equal and maximum distance. Mark rails where it intersects with posts (Top & Bottom)
- If posts are plumb, top rail will be the same length. Top aluminum insert will be 1/4" shorter than top rail (to allow for mounting brackets). Cut rails with a saw. You may cut both pvc and aluminum at the same time.
- Determine angle of stairs and cut one end of each baluster to same angle. Make note to check baluster length with desired rail height.

### STEP 1



### STEP 2



## STEP 3 INSTALL BRACKETS, BALUSTERS & RAIL

- **Bottom Rail Brackets:** Place bottom rail bracket on bottom of aluminum insert with post mounting flange pointing up. Make certain post 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:** Top Rail Brackets with mounting flanges pointing down on end of top sub-rail. 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-routed holes on bottom pvc rail, align and attach balusters on angle cut end. Attach with provided screws. Slide sub-rail into bottom rail with bracket flanges facing down.
- Find center of post/mounting surface. Mark center line on surface. Determine distance from finished deck to bottom of rail. Add 3/8" and mark. Drill 3/16" hole on center of center line. Install #14 x 1" screw to within 1/8" of mounting surface. Check screw head clearance using a bottom bracket and adjust clearance between screw head and post/mounting surface to obtain a snap fit.
- Install bottom rail with installed balusters onto mounting screws.
- Set top sub-rail between posts and insert balusters.

**TIP:** Start at the bottom of stair run and work up.

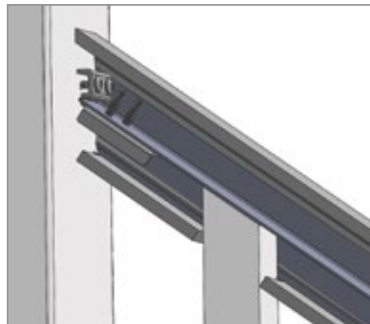
- With all balusters inserted, center top rail brackets on post and install 2 each #10 X 1 1/4" screws
- With all mounting screws installed, carefully snap top rail cover over aluminum insert.

## STEP 4 FINISHING STEPS

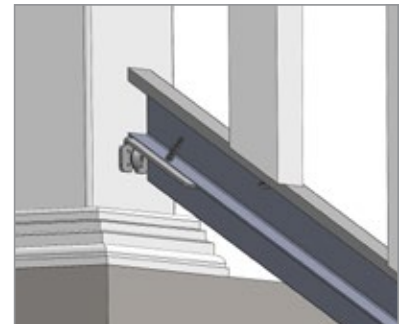
- With rail mounted in place, measure and mark post sleeves to desired height.
- Cut post to desired height with a saw and clean edge of cut.
- Apply a small bead of silicone to the inside edge of post cap and install on top of post sleeve (let set 12 hours for adhesive to cure).

### STEP 3

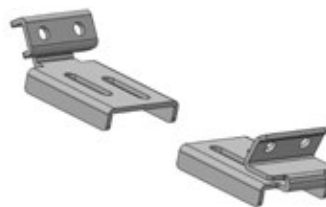
Cutaway of Top Rail



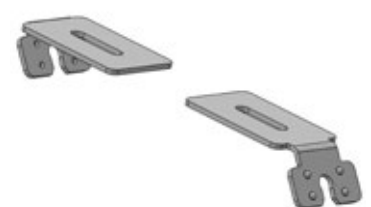
Cutaway of Bottom Rail



Top Rail Brackets



Bottom Rail Brackets



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