FAIRWAY RAILING™

BY Envision™ OUTDOOR LIVING PRODUCTS

P310 CPVC RAILING INSTALLATION QUICK GUIDE

ROUND ALUMINUM BALUSTERS

LEVEL & STAIR* KIT INCLUDES:

- Top Rail with Aluminum Insert
- Top Sub Rail

- Bottom Rail with Aluminum Insert

- Mounting Brackets with Screws
- Rail Support(s)
- Round Aluminum Balusters

TOOLS NEEDED:

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

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LEVEL INSTALLATION

BEFORE STARTING

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

FINISHED RAIL HEIGHT:

36" with Aluminum Balusters = 38-3/8"

42" with Aluminum Balusters = 42-3/8"

STEP 1 - GETTING STARTED

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

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 TO LENGTH

- Making sure that posts are plumb, measure the distance between posts.
- Transfer this measurement to bottom rail making certain that there is equal and maximum distance from each end to the first baluster. The rail should be as symmetrical as possible. Sub-rail may be cut to same symmetrical length.

STEP 4 - INSTALL RAIL MOUNTING BRACKETS & RAIL SUPPORT

- Place bottom rail on work surface with underside facing up and aluminum insert in place. Place bottom bracket on aluminum insert with flange facing upward and flange even with end of insert. Mark, pre-drill 1/8" hole and install one #10 x 3/4" mounting screw for each bracket.
- Find the center of the bottom rail, pre-drill 1/8" hole and install rail support with one #10 x 3/4" screw. Rail support length equals the distance from deck surface to bottom rail + 3/4". **NOTE:** Two rail supports are required for 10' rail lengths.
- Sub-Rail: At this time the aluminum insert for the sub-rail will need to be cut a 1/4" shorter then the sub-rail. With the baluster connector predrilled holes facing upward and aluminum insert on work surface, place mounting brackets on each end of aluminum insert with the flange facing down towards work surface. Install one #10 x 3/4" mounting screw for each bracket. **NOTE:** Be sure to slide the sub-rail back to allow installation of brackets.

STEP 5 - ASSEMBLE RAIL SECTION

- Place rails on non-abrasive work surface with pre-drilled baluster holes facing you.
- Screw baluster connectors to rail in pre-drilled locations using provided hardware.
- With bottom rail on non-abrasive work surface, set balusters in place over connectors using a rubber mallet.
- With balusters installed in bottom rail, set sub-rail in place. Using a rubber mallet, start at one end, gently tapping the sub-rail and work toward opposite end.

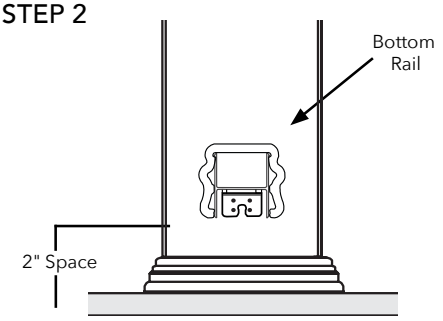
STEP 6 - RAIL INSTALLATION

- Place assembled rail section in place between posts just above bottom screw.
- Slide section down to engage bottom mounting bracket with installed screw.
- Find the center of post/mounting surface and center the top mounting bracket.
- Pre-drill two 1/8" holes through mounting bracket into post/mounting surface and install two "non painted" #10 x 1-1/4" screws in each bracket at both ends.

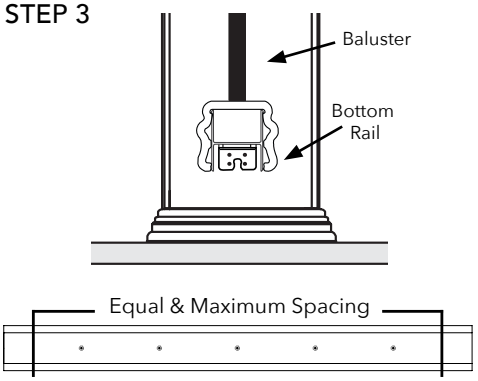
STEP 7 - FINISHING STEPS

- With top rail cut to proper length, snap top rail over aluminum insert.
- 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.

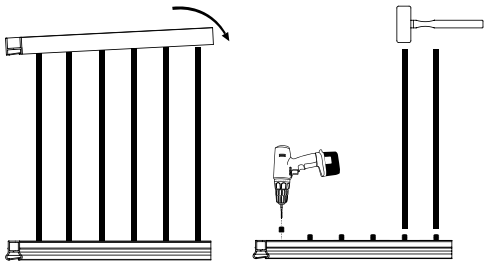
STEP 2



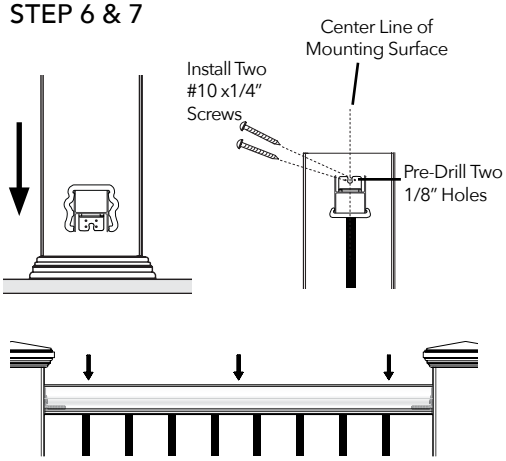
STEP 3



STEP 5



STEP 6 & 7



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 indentify and execute the installation approach that is appropriate for every application.

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STAIR INSTALLATION

STEP 1 - GETTING STARTED

- Plumb all posts or mounting surfaces. Install post trim at this time.
- Determine bottom rail height off stair tread nosing to bottom of bottom rail based on local code requirements.

NOTE: Due to the rise, or the height between consecutive treads, a longer post or mounting surface will be required to maintain proper installations on stairs on the downward slope of the stair. Example, a 39" post sleeve on a stair with a 7" rise will not leave enough surface to mount a 36" rail. A post that is 44" or longer is recommended.

STEP 2 - CUTTING RAILS

NOTE: Before cutting rails make sure that the aluminum inserts are properly positioned within the rail. The deeper channel should always face the pre-drilled baluster connector holes.

- Lay bottom rail on stair nosing and against side of posts. Make sure that the baluster spacing is equidistant 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, and top rail can be cut to the same length. Again, make sure you are equidistant from each end.

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

STEP 3 - INSTALL BRACKETS, BALUSTERS, & RAIL SUPPORTS

- **Bottom Rail Brackets:** Place bottom rail bracket on underside of bottom rail aluminum insert with mounting flange facing upward. Flange should be flush with the end of the rail. Mark and drill 1/8" hole in aluminum. Install #10 x 3/4" mounting screw through bracket.
- **Top Rail Brackets:** Since the mounting brackets will be installed on the top rail aluminum insert, cut the top rail aluminum insert ¼" shorter than the top rail. With bracket flange facing down, drill 1/8" hole and install #10 x 3/4" mounting screw on each end.
- Adjust bracket angles if necessary
- Find center of post/mounting surface (Example 4.25" post = 2/18"). Mark vertical center line. Now determine distance between bottom of bottom rail and stair tread. Add 3/8" and mark on vertical line. Drill 3/8" hole at this mark and install #14 x 1" screw to within 1/8" of surface. Check screw clearance by using bottom rail bracket. Fit should be snug.
- Set bottom rail in place and locate center of rail. Measure distance between tread and bottom of rail. Add 3/4" and cut rail support, cutting one end to match stair angle. Remove bottom rail and install support through aluminum using #10 x 3/4" screw.

STEP 4 - ASSEMBLE RAIL SECTION

- Place rails on non-abrasive work surface. With predrilled baluster connector holes facing up, screw baluster connectors in pre-drilled locations using supplied hardware.
- Attach aluminum balusters onto bottom rail using a rubber mallet.
- With balusters in place in bottom rail, set sub-rail in place. Using a rubber mallet, start at one end gently tapping the sub-rail and work toward opposite end. With bracket flanges facing up, snap the top rail aluminum insert into sub-rail.

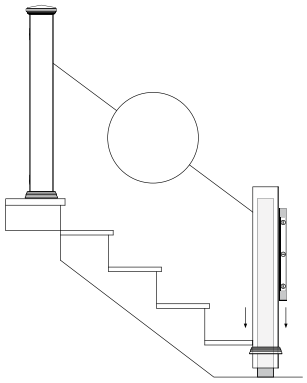
STEP 5 - INSTALL RAIL SECTION

- Place assembled rail sections between posts and slide down over installed bottom screws, ensuring that it is properly seated.
- Find center of post at top rail aluminum insert, pre-drill two 1/8" holes through top rail brackets into posts and install two #10 x 1-1/4" screws into posts.
- With all screws installed, carefully snap top rail over aluminum insert.

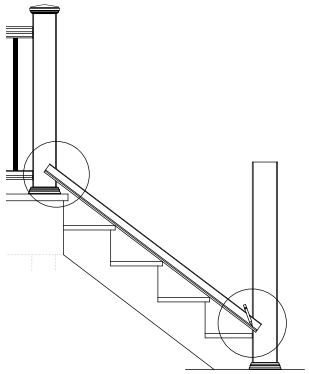
STEP 6 - FINISHING STEPS

- Apply a small bead of silicone to the inside edge of post cap and install on top of post. Let set for 12 hours for adhesive to cure.

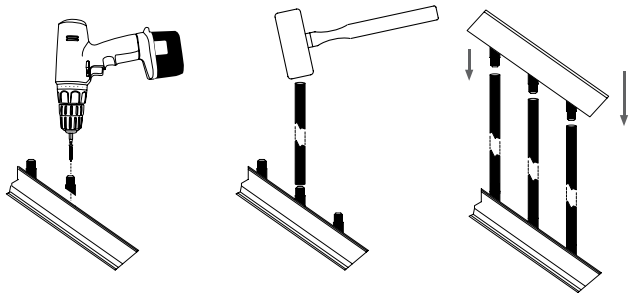
STEP 1



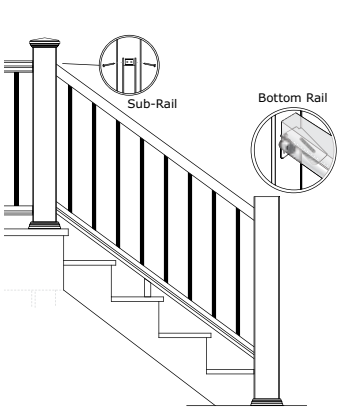
STEP 2

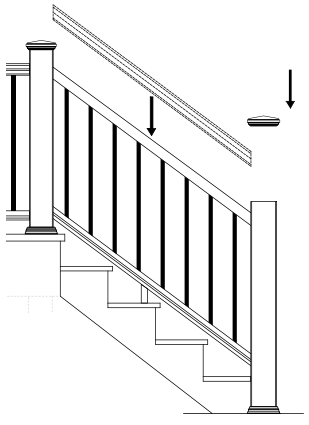


STEP 4



STEP 5





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