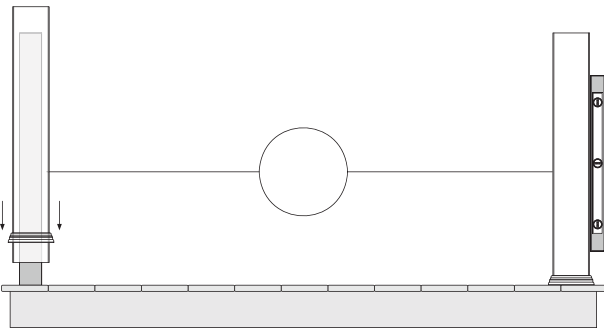


# Fx2 Composite Level Railing With Aluminum Balusters

It is the responsibility of the installer to meet or exceed all code and safety requirements, and to obtain all required building permits. These instructions are only a guide and may not address every circumstance. The deck and railing installer should determine and implement appropriate installation techniques for each situation.

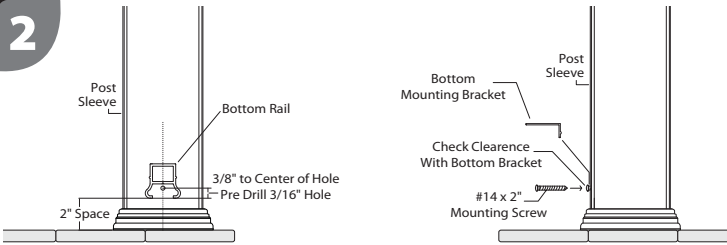
**FAIRWAY Vinyl Systems shall not be held liable for improper or unsafe installations.**

**1**



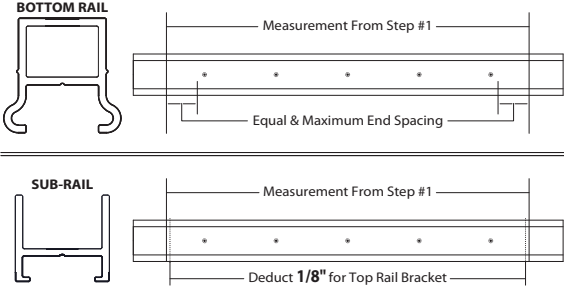
**Measure Rail Length**  
Plumb post/mounting surface. Slide base trim ring and sleeve over post. Measure distance between mounting surfaces.

**2**



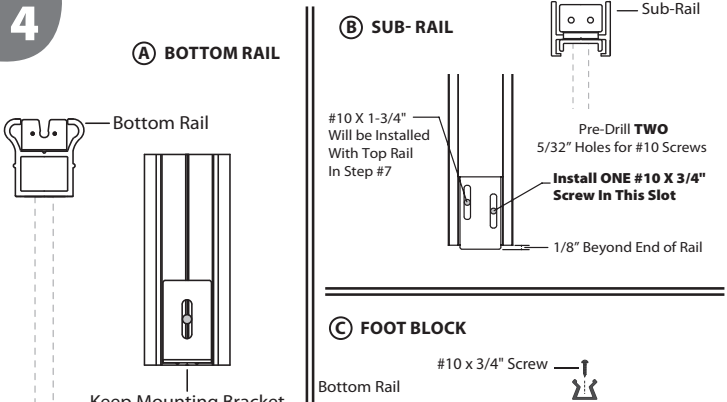
**Install Bottom Rail Mounting Screw**  
Find center of post/mounting surface (Example: 5-1/4" post = 2-5/8"). Mark center line on surface. Determine distance from finish deck to bottom of rail. Add 3/8" and mark. Drill 3/16" hole on center of center line. Install #14 x 2" screw to within 1/8" of mounting surface. Check screw head clearance using a bottom bracket and adjust clearance between screw head and post/mounting surface to obtain a snap in fit.

**3**



**Cut Rails to Length**  
Using measurement from step #1, cut bottom rail to length. Make certain there is equal and maximum distance on end spacing. If posts are plumb, measure sub-rail same length, DEDUCT 1/8" from each end and cut to length.

**4**



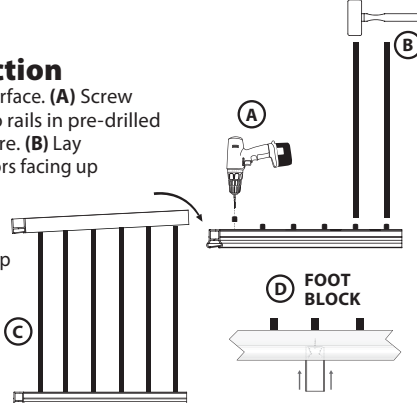
**(A) BOTTOM RAIL**  
Keep Mounting Bracket Flush w/End of Rail

**(B) SUB-RAIL**  
#10 X 1-3/4" Will be Installed With Top Rail In Step #7  
Pre-Drill TWO 5/32" Holes for #10 Screws  
Install ONE #10 X 3/4" Screw In This Slot  
1/8" Beyond End of Rail

**(C) FOOT BLOCK**  
#10 x 3/4" Screw  
Bottom Rail  
Center of Bottom Rail

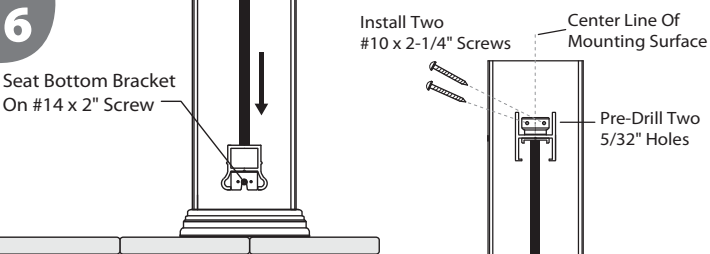
**5**

**Assemble Rail Section**  
Place cut rails on a non-abrasive surface. (A) Screw aluminum baluster connectors to rails in pre-drilled locations using provided hardware. (B) Lay bottom rail with baluster connectors facing up and set balusters in place using a rubber mallet. (C) With balusters installed in bottom rail, set sub-rail in place and starting at one end, tap Sub-rail onto top of balusters. (D) Using measurement from Step #2 (Distance from finish deck to bottom rail) add 7/8". Cut foot block (supplied) and clip onto foot block bracket.



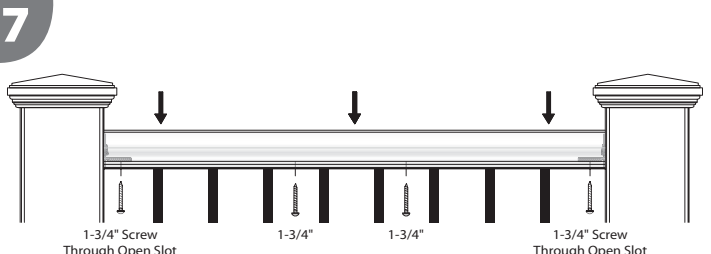
**Install Railing and Foot Block Mounting Brackets**  
(A) (A) Place bottom rail bracket on underside of bottom rail with post mounting flange pointing up. Make certain post flange is flush with the end of the bottom rail and mark the elongated slot. Mark and drill a 5/32" hole in the center of elongated slot on each bracket and install one each #10 x 3/4" mounting screw for each bracket. Adjust bracket if necessary.  
(B) Slide top rail brackets into each end of the sub-rail, post mounting flanges pointing down and mark two slots. Find center and drill with 5/32" bit (same as bottom rail). Install ONE #10 x 3/4" screw in the outer elongated slots on each end of the rail. (Second screws will install when cap rail is installed in step #7)  
(C) Find center of rail & install foot block mounting bracket with one #10 x 3/4" screw.

**6**



**Install Rail Section**  
Place rail section between posts/mounting surfaces above bottom screw. Slide rail section down to engage bottom mounting bracket onto screw. Find center of post/mounting surface and center top mounting bracket. Pre-drill two 5/32" holes through top mounting bracket holes into post/mounting surface and install 2 each "non-painted" #10 x 2-1/4" screws (both ends).

**7**



**Install Top Rail**  
With rail section mounted in place, measure inside distance between post/mounting surface. Cut TOP RAIL to length. Slide TOP RAIL over sub-rail. In the inner second slots of top rail brackets install a #10 X 1-3/4" screw in pre drilled hole. Find "quarter points" between post, pre-drill and install the 2 additional #10 x 1-3/4" screws.

# Fx2 Composite Stair Railing With Aluminum Balusters



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**1**

**Measure Rail Length**  
Plumb post/mounting surface. Slide base trim ring and sleeve over post. Measure distance between mounting surfaces.

**2**

**Install Bottom Rail Mounting Screw**  
Find center of post/mounting surface (Example: 5-1/4" post = 2-5/8"). Mark center line on surface. Determine distance from finish deck to bottom of rail. Add 3/8" and mark. Drill 3/16" hole on center of center line. Install #14 x 2" 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 in fit.

**3**

**Lay Out Rails**  
Lay bottom rail between post, balance out equal and maximum distance between baluster and post. If posts are plumb, Sub-Rail will be the same length. Mark Sub-Rail and deduct 1/8" from SUB-RAIL ends (to allow for mounting brackets). Note: Make certain spacing matches both Sub-Rail and Bottom Rail.

**4**

**Cut Rails to Length**  
With angle and stair rail run marked and cut to length. Make certain on **SUB-RAIL ONLY to deduct 1/8"** from each end to allow for mounting bracket. NOTE: Make certain there is equal and max. distance between baluster and post on both rail ends. Also check to see if top and bottom rails match to provide plumb baluster installation.

**5**

**Install Railing Mounting Brackets**  
**Bottom Rail Brackets:** Place bottom rail bracket on bottom of rail with post mounting flange pointing up. Make certain post flange is flush with the end of the bottom rail and mark the elongated slot. Drill a 5/32" hole in the center of elongated slot and install a #10 x 3/4" mounting screw. **Top Rail Brackets:** Slide top rail brackets into each end of the sub-rail, post mounting flange pointing down and mark two slots. Find center of the slots and drill with 5/32" bit (same as bottom rail). Install one #10 x 3/4" screw in the inner elongated slot of each bracket. (Second screws will install when cap rail is installed in step #8) Adjust bracket angles if necessary.

**6**

**Assemble Rail Section**  
Place cut rails on a non-abrasive surface. (A) Screw aluminum baluster connectors to rails in pre-drilled locations using provided hardware. (B) Seat aluminum balusters on bottom rail baluster connectors with a rubber mallet. (C) With balusters installed in bottom rail, set sub-rail in place and starting at one end, tap sub-rail into top of balusters.

**7**

**Install Rail Section**  
Place rail section between posts/mounting surfaces above bottom screw. Slide rail section down to engage bottom mounting bracket onto screw. Find center of post/mounting surface and center top mounting bracket. Pre-drill two 5/32" holes through top mounting bracket holes into post/mounting surface and install #10 x 2-1/4" screws (both ends).

**8**

**Install Top Rail**  
With rail section mounted in place, measure inside distance between post/mounting surfaces. Cut TOP RAIL to length at stair angle. Slide TOP RAIL over sub-rail. In the inner second slots of top rail brackets install a #10 X 1-3/4" screw in pre drilled hole. Find "quarter points" between post, pre-drill and install the 2 additional #10 x 1-3/4" screws.