

V100 Mission Inspired 3-Rail - LEVEL Installation Guide

Step 1 - Plumb post, slide vinyl post sleeves and post trim ring over posts. Determine bottom rail height from deck surface to bottom of rail based on local building codes. Deduct 1/8" and mark post with a pencil. Place bottom of bottom bracket on this line, centered on post. Install bracket with three (3) #8 x 1-1/2" screws. Repeat this step on opposite post.

Step 2 - Measure distance between posts, deduct 3/4" from total length to allow for mounting brackets. Mark bottom rail to correct length. Ensure there is equal & maximum distance from baluster holes on both ends. Cut bottom rail and aluminum insert to length. Cut mid-rail and top rail the same length, ensuring baluster holes line up. NOTE: Ensure bottom aluminum channel is inserted into rail with the DEEP SIDE of channel facing the BALUSTER SIDE of rail. (SEE IMAGE 2B)

Step 3 - After cutting, turn bottom rail over with baluster holes facing downward. Measure distance where bottom rail will set in bottom bracket to finished deck surface. Add 7/8" and cut 1-3/8" \times 6" crush block (supplied) to correct length. Insert crush block into routed hole on bottom rail. Drill a 1/8" hole 1/2" up from bottom of rail, centered on crush block, and install one (1) #10 \times 3/4" color matched screw through side of rail into crush block.

Step 4 - Place bottom rail, crush block down, into bottom brackets on posts. Install two (2) #10 x 3/4" self-drilling screws through both sides of each bracket, securing bottom rail in place.

Step 5 - Install 2 short balusters per rail end and install mid-rail. Place mid-rail brackets on end of mid-rail and mark bracket position on post. Remove mid-rail and Install bracket with three (3) #8 x 1-1/2" screws. Repeat on opposite post. Insert all short balusters into bottom rail. Place mid-rail onto balusters, starting from one end. Install two (2) #10 x 3/4" self-drilling screws through holes in both sides of each bracket, securing mid-rail in place.

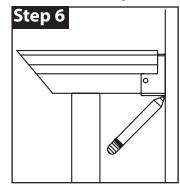
Step 6 - Install 2 long balusters per rail end and install top rail. Place top rail brackets on end of top rail and mark bracket position on post. Remove top rail and Install bracket with three (3) #8 x 1-1/2" screws. Repeat on opposite post. Insert all long balusters through mid-rail and into bottom rail. Place top rail onto balusters, starting from one end. Install two (2) #10 x 3/4" self-drilling screws through holes in both sides of each bracket, securing top rail in place.

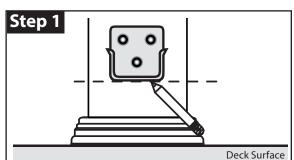
Step 7 - Carefully snap all bracket covers into place over brackets. Adjust post height, if necessary, and install post caps with PVC glue.

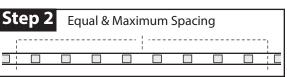
NOTE: For additional security of your railing, you may elect to use the two (2) remaining #10 \times 3/4" color matched screws (supplied) using the following steps. Make certain balusters are inserted against aluminum inserts. At the center baluster, measure up from bottom of top rail 1/2" at center of baluster and install one (1) #10 \times 3/4" color matched screw through side of rail into baluster. Next, measure down, from top of the bottom rail 1/2" at center of the same baluster and install one (1) #10 \times 3/4" color matched screw through side of rail into the baluster.

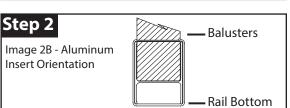
It is the responsibility of the installer to meet or exceed all code and safety requirements, wear proper safety equipment and to obtain all required building permits. These instructions are only a guide and may not address every circumstance. The installer should determine and implement appropriate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

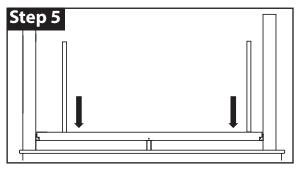
The manufacturer shall not be held liable for improper or unsafe installations.

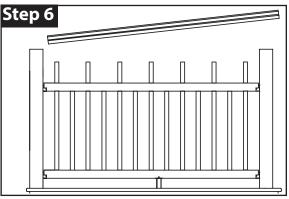


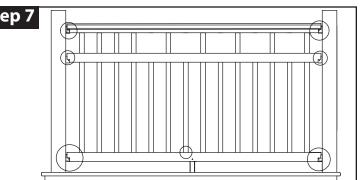






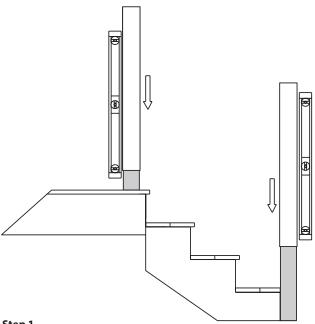




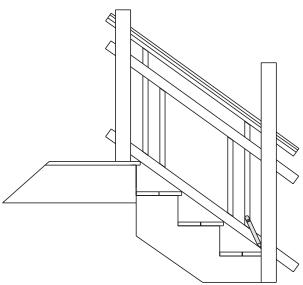




V110 STAIR Mission Inspired 3-Rail Installation Guide



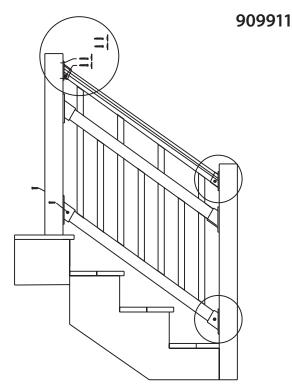
Step 1
Plumb post, slide vinyl post sleeves and post trim ring over posts.



Step 2

NOTE: See local building codes for height and space limitations. 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 bottom rail where it intersects with posts (Top & Bottom).

If posts are plumb, mid-rail and top rail will be the same length. Make certain spacing matches bottom rail and mark. Cut rails with a saw. You may cut both vinyl and aluminum at the same time.



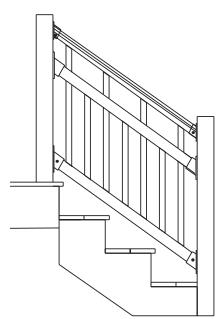
Step 3

NOTE: in some cases, it may be necessary to cut out some of the mounting bracket flange if covering the baluster hole.

With rails cut to length, slide mounting bracket on rail ends. Set bottom rail between posts, adjust height between rail and nosing and center flange on post. Install four (4) $\#8 \times 1-1/2$ " S.S. screws in both mounting brackets.

Insert short balusters in pre-routed holes in bottom rail and mid-rail. Center mid-rail mounting flange on post and install screws same as bottom brackets. Set top rail between posts and insert long balusters through mid-rail and into bottom rail. Center mounting flange on post and install screws same as bottom and mid-rail brackets.

Snap screw covers over screw holes. Install two (2) per bracket, # $10 \times 3/4$ " self-drilling, color matched screws through the side of the bracket (Top & Bottom rails) into the rail to lock in place. Make certain baluster spacing is equal before installing screws.



Step 4

With rail mounted in place, measure and mark post sleeves. Cut post to 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 sleeve (let set 12 hours for adhesive to cure).