

# 200 Series AFco-Rail Level Rail

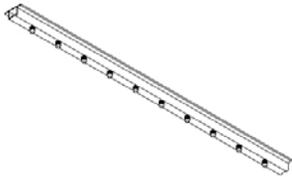
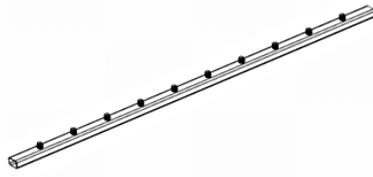
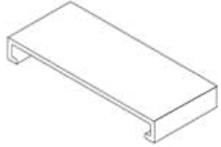
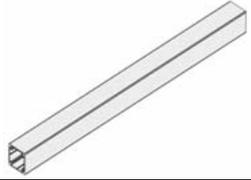
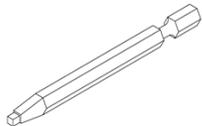
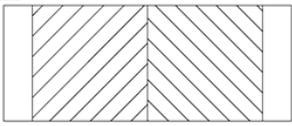


## INSTALLATION INSTRUCTIONS



**AFco**  
Columns and Railings  
a Division of AFco Industries, Inc.

### PARTS INCLUDED:

<b>TOP RAIL WITH CONNECTORS (1)</b>		<b>BOTTOM RAIL WITH CONNECTORS (1)</b>	
<b>A</b>		<b>B</b>	
<b>SADDLE BRACKET (2)</b>	<b>BOTTOM BRACKET (2)</b>	<b>TOP RAIL CAP (2)</b>	<b>10" SUPPORT BLOCK (1)</b>
<b>C</b>		<b>D</b>	
<b>E</b>		<b>F</b>	
<b>SUPPORT BLOCK CONNECTOR (2)</b>	<b>#10x1" SELF DRILLING SCREW (12)</b>	<b>3 1/2" SQUARE DRIVER BIT (1)</b>	<b>ADHESIVE TAB (1)</b>
<b>G</b>		<b>H</b>	
<b>I</b>		<b>J</b>	

**NOTE:** Post and balusters packaged separately.

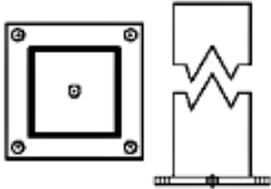
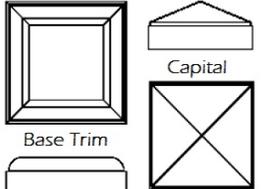
### TOOLS REQUIRED:

Drill bit 5/32" (.156")  
 Drill (with adjustable clutch, recommended)  
 Miter Saw (with metal cutting blade)  
 Level  
 Rubber mallet  
 Tape measure  
 Touch-up paint

### FOR A SUCCESSFUL INSTALLATION:

- Read the instructions completely before beginning the installation.
- Plan your railing project. Sketch your project with the actual measurements of your deck or balcony complete with post locations.
- Check local building codes to ensure compliance.
- Check carton(s) to determine part count is complete.
- After cutting rails, balusters, or posts, paint exposed metal for maximum protection against the elements.
- Installation is best accomplished with two people.
- Wear personal protection equipment; safety glasses, etc.
- Use care not to over-torque the screws. Pre-drilling is recommended.
- **Provided hardware to install AFco-Rail is for use with Aluminum AFco-Rail posts. If installing to other surfaces the installer must acquire the appropriate hardware as needed for proper installation.**

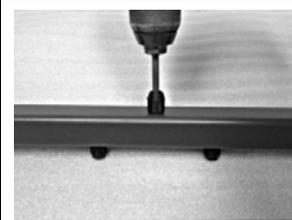
200 SERIES AFco-RAIL LEVEL RAIL

<b>POST INSTALLATION:</b>	
1. Measure and locate the position of the post(s) based on the project layout.	
<p><i>Note: If an over-the-post installation is desired, the post will need to be cut from the standard length to accomplish this. To determine this height, place the post in the desired locations to be installed, and mark for the bracket location as instructed in step 7. Then, mark a line 3/4" above the bracket location marks. This will be the location to cut the post and permit the top rail to be installed flush with the top of the post and allow the deck board to be installed over the top of the post.</i></p> <p>2. Install the post by attaching the aluminum mounting flange to the surface of the deck or balcony. Position the post so the fastener will go into the floor joist, and make sure the decking is firmly attached to the joist at the location of the post. If necessary, use wood blocking as reinforcement underneath the decking where the posts are located. Post mounting fasteners should be able to secure into the joist or reinforcement braces, not just the decking itself. When installing AFCO-Rail Post on top of a wood surface, screws must be lagged into at least 3" of solid wood. Deck boards sized 5/4" or 1 1/2" do not provide sufficient material for a safe installation.</p> <p><i>Note: When installing AFCO-Rail Post onto treated wood surface, install the provided ACQ pad (included in the post kit) between the post base and the treated surface.</i></p>	
3. Position the post to the deck surface. Four 3/8" diameter mounting holes are provided on the mounting flange. Mark the mounting flange hole locations and remove the post. Drill the marked locations into the decking and reinforcement using the proper size drill required for the fasteners being used. Remount the post. Insert the appropriate fasteners to secure the mounting flange to the deck structure.	
4. Finish by sliding the base trim to the bottom of the post to cover the mounting flange.	
5. To install the post cap, set it in place on top of the post and strike with a rubber mallet to drive the post cap onto the post. Silicone or water based caulking may be used to secure the post cap and base trim.	

<b>LEVEL RAIL INSTALLATION:</b>
1. Carefully measure the opening between posts or walls and calculate the length of rail that needs to be cut. Divide the trim length amount in half, and starting with the bottom rail (B), transfer and mark the measurement to each end of the rail. For the sake of baluster spacing or personal preference, all of the trim length could be cut from one end of both rails. Make this determination before cutting the rails. Always refer to local building code requirements to determine the baluster spacing requirements in your area (4" maximum is typical). Carefully cut the rail. Mark top rail (A) and cut. For clearance purposes the top rail is precut 3/4" shorter than the bottom rail.

2. Install support block connectors (G) using self-drilling screws (H) to the underside of bottom rail (B). The support block will be installed in step 10.

*Note: One support block, cut from support block material (F), is recommended for rails measuring 72" in length or less; two support blocks for longer lengths. If one support block is required, install the support block connector (G) at center point of bottom rail (B). If two support blocks are required, install support block connectors (G) equal distance from each end of the bottom rail (B).*



3. To assemble rail, begin with top rail (A) and insert balusters over pre-installed connectors. Firmly tap each baluster with a rubber mallet to ensure the baluster is fully seated against the top rail.

*Note: It is recommended to use the box as a pad to prevent scuffing of the painted finish. If installing square balusters, make sure they are properly seated in the slot on the underside of the top rail to prevent twisting.*



4. Attach balusters to bottom rail (B) beginning at one end and working to opposite end. Stand the assembly upside down on the surface of the box and firmly tap the bottom rail with a rubber mallet to secure the balusters in place. Stand assembly upright.

*Note: Notches are provided on the front of the box to help align balusters and aid in the assembly of the rail in this step.*



5. Slide bottom brackets (D) with screw holes down and counter bore holes facing toward the balusters, over each end of the bottom rail (B).



6. The 200 Series deck rail can be installed with or without a deck board on top of the top rail (A). If installing without a deck board on the top rail, measure up 35 1/4" (36" rail height) or 41 1/4" (42" rail height) from the floor and mark a level, horizontal line on the post or wall.

*Note: If installing with a deck board on the top rail (A) reduce the above dimensions by the thickness of the deck board being used. Overall rail height may vary by local code or personal preference.*

7. Align screw holes in saddle bracket (C) on the horizontal line marked in step 6 making certain the saddle bracket (C) is centered on the post. Mark screw locations. Repeat process at opposite end.



8. Attach both saddle brackets (C) with self-drilling screws (H) at the marked screw locations completed in Step 7. Pre-drilling is recommended.



*Note: If installing a deck board on the top rail (A), omit this step and do not install the rail caps.*

9. Slide the top rail cap (E) on both ends of the top rail (A) and set the rail assembly into the saddle brackets (C) letting the bottom rail hang freely between the posts. Check for level.



10. At the point(s) where you installed support block connectors (step 2), carefully measure the distance from the underside of the bottom rail (B) to the floor. Cut support block material (F) to fit. Remove rail assembly from the saddle brackets (C). Slip support blocks over support block connectors (G). Slide the rail back into place and make certain the rail is plumb.



11. Slide and hold the bottom bracket (D) firmly against the post or wall. Secure the bracket with self-drilling screws (H). Repeat the process on the other side.  
*Note: Screw holes in the bottom brackets (D) are angled to make mounting the brackets easier.*



12. Screw self-drilling screws (H) into the top rail (A) from the underside of each saddle bracket (C) through the provided locating hole to securely fasten the rail.



13. If a deck board is to be installed on top of the rail, carefully measure and cut the material to the length required. Place the deck board on top of the rail and secure from the under-side of the rail as shown, with the appropriate fasteners under the flange of both sides of the rail.



14. If the deck board will not be installed, place the adhesive tab (J) to the top surface of the top rail (A) near the post. Slide the top rail cap (E) towards the post and press down to secure it with the adhesive tab (J).



*Note: This photo depicts a fully assembled rail section installed between two posts, with a deck board mounted on the top rail. The left side is butted up to the post and the right side is depicting an application where the post may be cut flush with the top rail for a continuous board to be mounted over the post and provide an uninterrupted sight line.*

