FOR A SUCCESSFUL INSTALLTION:

- Read the instructions completely before beginning the installation.
- Plan your railing project. Sketch your project with the actual measurements of your layout with the location of the posts for the railing that needs to be installed.
- 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.
- Fasteners for mounting the AFCO-Rail Post to the flooring surface are not included. The installer must acquire the appropriate mounting fasteners for the surface material on which the AFCO-Rail is being mounted.

3” AND 4” POST INSTALLATION:

1. Measure and locate the position of the post(s) based on the project layout.

2. The post will be installed by attaching the aluminum mounting flange to the flooring surface. The installer must acquire the appropriate mounting fasteners for the surface material on which the AFCO-Rail Post is being mounted. If mounting onto a deck, position the post(s) so the fasteners will go into the floor joists, and make sure the decking is firmly attached to the joists at each post location. If necessary, use wood blocking as reinforcement underneath the decking where the posts are located. Post mounting fasteners should be able to secure into joists or reinforcement braces not just the decking itself. When installing AFCO-Rail Post(s) on top of decking, screws must be lagged into at least 3” of solid wood. Deck boards do not provide sufficient material for a safe installation.

3. Position the post(s) on the flooring surface based on the project layout described in steps 1 & 2. Mark the locations of the four (4) 3/8” diameter holes provided on the mounting flange, and remove the post. Drill the marked locations into the flooring surface material and fasteners being used. Reposition the post in the location that has been marked and drilled, and secure the post mounting flange to the flooring surface making sure post(s) are plumb.
   Note: When installing the AFCO-Rail Post onto a treated wood surface, install the provided ACQ pad between the post base and the treated surface.

4. Install the post base trim by sliding the trim over the top of the installed post down to the bottom of the post so that it covers the mounting flange. Complete each rail section by installing the brackets and assembled rail per the instructions included with the rail kit.

5. Install the post cap by setting the cap in place on top of post and strike with a rubber mallet to drive the post cap onto the post. Silicone or water based caulk may be used to secure the post cap and base trim.
INSTALLATION INSTRUCTIONS CONTINUED

AFCO-RAIL 1-7/8” OVER-THE-POST INSTALLATION:

The instructions below are to install the following Over-the-Post applications:

<table>
<thead>
<tr>
<th>180° Post</th>
<th>90° Post</th>
<th>45° Post</th>
<th>End Post</th>
</tr>
</thead>
</table>

1. Measure and locate the position of the post(s) based on the project layout.

2. The post will be installed by attaching the aluminum mounting flange to the flooring surface. The installer must acquire the appropriate mounting fasteners for the surface material on which the AFCO-Rail Post is being mounted. If mounting onto a deck, position the post(s) so the fasteners will go into the floor joists, and make sure the decking is firmly attached to the joists at each post location. If necessary, use wood blocking as reinforcement underneath the decking where the posts are located. Post mounting fasteners should be able to secure into joists or reinforcement braces not just the decking itself. When installing AFCO-Rail Post(s) on top of decking, screws must be lagged into at least 3” of solid wood. Deck boards do not provide sufficient material for a safe installation.

3. Use the 3-1/2” driver bit tip (included in the rail hardware kit) to remove the screw securing the top bracket assembly from the post (retain screw for later use to re-attach the bracket assembly in step 9). Slide the base trim off of the post and set aside to re-install later.

4. Position the post(s) on the flooring surface based on the project layout described in steps 1 & 2. Mark the locations of the four (4) 3/8” diameter holes provided on the mounting flange, and remove the post. Drill the marked locations into the flooring surface material and fasteners being used. Reposition the post in the location that has been marked and drilled, and secure the post mounting flange to the flooring surface making sure post(s) are plumb. Note: When installing the AFCO-Rail Post onto a treated wood surface, install the provided ACQ pad between the post base and the treated surface.

5. Reinstall the post base trim by sliding the trim over the top of the installed post, down to the bottom of the post so that it covers the mounting flange.

6. The AFCO-Rail that will be mounted between the posts can now be cut to length to fit the required opening between the posts. Start by measuring the distance between the two facing sides of the posts near the bottom of the posts and calculate the amount of rail that needs to be cut. Divide the trim length amount in half, and transfer this dimension to each end of the bottom rail, marking the cut locations, and cut the bottom rail to length. Note: There must be at least 1-7/8” from the end of the rail to the center of the first baluster for bracket clearance.
7. Place the bottom rail which has been cut to length, parallel to the top rail aligning the baluster connectors and transfer the cut lengths to the top rail. The end of the top rail that is being mounted into the Over-the-Post Top Rail Bracket cut that end of the top rail at the marked position. If the end of the top rail is being mounted into a Post-to-Post Top Rail Bracket [like those supplied with the rail kit] cut an additional 3/8” of material from that end only.

8. Assemble the top and bottom rail sections with the required balusters along with the top and bottom brackets per the instructions included with the rail.  
*Note: AFCO-Rail top bracket cover will not be required on the end where the Over-the-Post bracket is installed.*

9. Insert the ends of the top rail of each rail section that have been assembled, into each end of the Over-the-Post bracket assembly[1] (removed in step 3). Lower the top bracket assembly with the two adjoining rail assemblies onto the top of the post[2] where it was previously removed in step 3 and reinstall the screw[s] also previously removed[3]. Complete each rail section by installing the brackets and assembled rail per the instructions included with the rail kit.  
*Note: Install a screw from the rail kit through the bottom of the Over-the-Post Bracket in the provided pre-drilled holes securing both of the top rails in place.*

### AFCO-RAIL 1-7/8” FIXED STAIR LINE POST INSTALLATION:

• **1-7/8” Fixed stair line post**

1. Measure and locate the position of the post[s] based on the project layout.

2. The post will be installed by attaching the aluminum mounting flange to the flooring surface. The installer must acquire the appropriate mounting fasteners for the surface material on which the AFCO-Rail Post is being mounted. If mounting onto a deck, position the post[s] so the fasteners will go into the floor joists, and make sure the decking is firmly attached to the joists at each post location. If necessary, use wood blocking as reinforcement underneath the decking where the posts are located. Post mounting fasteners should be able to secure into joists or reinforcement braces not just the decking itself. When installing AFCO-Rail Post[s] on top of decking, screws must be lagged into at least 3’ of solid wood. Deck boards do not provide sufficient material for a safe installation.

3. Remove the top bracket assembly from the post (retain screw which is attached inside of the top bracket assembly for later use to reattach the bracket assembly in step 11). Slide the base trim off of the post and set aside to re-install later.

4. When installing a Fixed Stair Line Post it will be required first install the upper and lower posts at the top and bottom of the stair run respectively, as well as install the Top Rail Saddle Brackets that are included with the Fixed Stair Rail Kit on both the upper and lower posts per the Fixed Stair Rail installation instructions. With the saddle brackets installed, fasten a string line passing through the holes of the upper and lower saddle brackets top side down as shown in the photo. Position the post[s] on the step surface based on the project layout described in steps 1 & 2. Mark the locations of the four [4] 3/8” diameter holes provided on the mounting flange. At the location where the string line crosses the 1-7/8” post, place a mark on the post 1/4” below the string line following the same angle.
5. Remove the post and cut the post to length at the same 34° angle at the mark placed on the post 1/4” below the string line in step 4 above.

6. Drill the marked locations on the step surface with the appropriate drill for the step surface material and fasteners being used. Reposition the post in the location that has been marked and drilled, and secure the post mounting flange to the step structure making sure post(s) are plumb.

Note: When installing the AFCO-Rail Post onto a treated wood surface, install the provided ACQ pad between the post base and the treated surface.

7. Remove the string line attached to saddle brackets. Reinstall the post base trim by sliding the trim over the top of the installed post down to the bottom of the post so that it covers the mounting flange.

8. The AFCO-Rail that will be mounted between the posts can now be cut to length to fit the required opening between the posts. Start by measuring the distance between the two facing sides of the posts near the bottom of the posts and calculate the amount of rail that needs to be cut. Divide the trim length amount in half, and transfer this dimension to each end of the bottom rail, marking the cut locations and cut the bottom rail to length at the same 34° angles.

Note: There must be at least 2” from the end of the rail to the center of the first baluster for bracket clearance.

9. Place the bottom rail which has been cut to length, parallel to the top rail aligning the baluster connectors, transfer the cut length to the top rail. Cut the ends of the top rail that will mount into the Over-the-Post Top Rail Bracket at the marked position. Cut an additional 5/8” of material from the end of the top rail (as shown in the photo) that will mount into the Top Rail Saddle Brackets on the upper and lower post. All cuts should be made at the same 34° angle.

10. Assemble the top and bottom rail sections with the required balusters per the instructions included with the rail.

Note: AFCO-Rail top bracket cover will not be required on the end where the Over-the-Post bracket is installed.

11. Insert the ends of the top rail of the rail sections that have been assembled, into each end of the Over-the-Post bracket assembly [1] (removed in step 3). Lower the top bracket assembly, with the two adjoining rail assemblies into the top of the post[2]. where it was previously removed in step 3. Install the painted screw[s] [packed inside the top bracket] into the side of the post (3) 1/4” down so it pierces into the bracket flange on the top bracket assembly. Complete each rail section by installing the brackets and assembled rail per the instructions included with the rail kit.

Note: Install a screw from the rail kit through the bottom of the Over-the-Post Bracket in the provided pre-drilled holes securing both of the top rails in place.