Railing Installation Instructions

1000 or 3000 Series
Concrete or Wood Deck Installations

For 1000/3000 Series railing systems (concrete floor) with rail sections for (AC174 1 or 2 family dwelling) Residential housing:

- 36” height required
- Maximum section length: 120”
- Maximum post spacing using our post mounts: 120”
- Post mounts: 2432S
  2436G
  8436G
- 5” Structural (100 series) Porch Post

For 1000/3000 Series railing systems (wood decking) with rail sections for (AC174 1 or 2 family dwelling) Residential housing:

- 36” height required
- Maximum section length: 120”
- Maximum post spacing using vinyl over wood or post mounts: 120”
- Post mounts: 2432S
  2436G installed on top of 4” stainless steel post mount adaptor.

For 1000/3000 Series railing systems (concrete floor only) with rail sections for (AC174 Residential) Commercial housing or apartment buildings:

- 36” height if porch is no higher than 30” off the ground
- 42” height required for porches higher than 30” off the ground
- Maximum section length if using our post mounts: 48”
- Maximum section length if using vinyl over wood 4 x 4: 96”
- Post mounts for 36” high: 2432S
  2436G
  8436G
- Post mounts for 42” high: 2432S
  2442G

For all installations:

- Concrete decks must be at least 6” thick and 4,000 PSI. Recommended: 1/2” x 4” wedge bolts for single lag brackets (2000 series)
  1/4” x 3 1/2” GRK Fasteners for 4-lag brackets (8000 series)
- Railing must be secured to mounting mount by driving screw through the mount and railing into the railing aluminum insert on both sides of the mount. (Top rail only required) (1000 & 3000 Series).
Railing Installation Instructions

Note:
While the PVC products used in this system are extremely durable, prevent soiling or marring the railing by keeping hands clean and using a piece of carpet or cardboard under the components during assembly.

Tools that you will need to complete this installation

- Cut off saw with fine tooth blade, and/or a
- Circular saw with a carbide tip multi-purpose blade.
- Electric or battery drill.
- ½” Masonry drill bit (if mounting a post on concrete).
- #3 + #2 Square drive screw drivers or screw driver bits.
- A wrench set.
- 24” or 48” level.
- 25’ Measuring tape.
- Pencils.
- Staging blocks to determine the height of the railing; 2” for 36” and 42” railing heights or 4” for 30” railing.

Wooden decks can accommodate both the new style design posts with coordinated railing or the old style square posts. Typically, square 4” x 4” support posts are placed according to the length of railing desired and extend through the deck and then are cut to a height to receive the railing post. Square PVC posts are then slid over the wooden posts, ready for railing sections to be installed.
1. Design posts can be used on an older wooden deck with stainless steel mounting brackets. Having chosen the correct stainless steel post bracket for the location and design of the post, place and anchor the bracket to the deck. Design posts installed on wooden decks require the use of a stainless steel post adapter, concrete decks do not. Post adapters should be used only where the deck joists are 2" x 8" or more. Add bridging to the deck where an adapter is mounted in a bay without an intersecting joist (see A below).

2. To comply with AC174 on wooden decks use of a stainless steel bracket adapter is required (see A below). The top of the bracket will extend above the joists an amount equal to the height of the decking material. Using the bolts included with the adapter, securely fix the adapter to the joists as shown with the center (hold down) bolt in place as shown. Decking will need to be trimmed around the adapter but will be covered with post trim when the post is installed.

3. The post mount is installed on the adapter by first tightening the primary hold down bolt (center) and then adjusting the four leveling bolts to make the post plumb. After post mounts are plumb and secure, slide PVC posts in place. To improve bracket mounting strength, 4) poly-lumber backing plates are now inserted into the top of the post after it is positioned over the post mount.

4. When a post is installed on a concrete deck or post footer, use a ½" masonry drill and, with the post positioned properly, drill a hole for the post mount anchor. Using the wedge bolt that is provided, loosely secure the bracket. Use an impact wrench to first "pre-thread" the wedge bolt. Position the post mount in place and secure with the wedge bolt. Plumb the bracket using the leveling bolts.
5. Railing balusters are inserted into the top rail and then the bottom, with the top rail against a wall to keep it in place. With all balusters in the top rail, cock the bottom rail slightly and insert balusters starting at one end and working your way to the other end until all balusters are in place.

6. Mark the height of the railing bracket on each post. Place the railing brackets over the railing before positioning the sections between the posts. Secure the railing bracket in position with the bracket centered on the post.

7. Step railing is installed like inline railing, making sure that the bottom railing is parallel to the steps. Brackets are placed in the railing before they are positioned between the posts. You may find it necessary to shorten the balusters if the steps have an increased angle (step railing sections are cut to accommodate stairs with a 32° pitch). Remove equal amounts from both ends of the baluster.

8. Secure the railing to the railing bracket using the screws with washers and caps that are provided with the brackets.

Note that baluster ends are cut on an angle. Position the balusters into the rails with the angle cut running in the same direction as the railing.
Step Rail Sleeve Over Installation Instructions

Tools Required: Measuring Tape • Miter Saw • Phillips Screw Driver • Fine Grit Sand Paper

1. Determine the degree of the stairs angle and set miter saw to that degree. Measure and mark the 12" "sleeve over" section for 1½" to 2" wide angled pieces.

2. Slide "sleeve over" pieces onto railing, then insert mounting brackets into rail. Position railing assembly in place between post. Mount brackets onto posts. Slide "sleeve over" pieces against bracket and secure assembly using stainless steel screws and caps provided with the mounting brackets.