Cable Installation Instructions

Installing an Aluminum Post w/ Adjustable Plate

1. Gather and identify all posts. Use the stamps at the top of each post to identify the type of post. Post types can be identified by the pattern and size of the holes drilled in the post. End Posts have a 29/64" hole on one side and a 1/4" hole on the other side. Line Posts have 1/4" holes on each side.

NOTE: The installer is responsible to have the substructure strong enough to support the post for what it is rated.

Place the (2) stainless steel strips beneath the post plate under the leveling bolts.
 a. For general installation: fasten aluminum post to wood surface using (4) 3/8" x 5" or longer stainless steel lags or equivalent (lags not included).

WARNING: When installing the Aluminum Post on top of a wood structure, the 5" lags MUST be lagged into at least 4" of solid wood! It will not be strong enough if it is fastened only into a 5/4" or a $1\frac{1}{2}$ " thick deck board! Below is an example of how to design the wood structure to accept the Aluminum Post. Any other way must meet or exceed these qualifications.



b. For IRC wood surface installation; attach wood blocking to substructure with #10 x
3" wood screws. Fasten aluminum post using (4) 3/8"x 5-1/2" bolts (anchors not included) thru aluminum backer plate (sold separately) as shown below.



c. For concrete installation, fasten aluminum posts to concrete using (4) 3/8" x 3" or longer concrete anchors (anchors not included.)

4. Use a 1/2" open end wrench to level the aluminum post by turning the leveling bolts on the welded post plate.

5. Attach caps. Lightly tap with a rubber mallet if needed.

Installing an Angle (Swivel) Mount

1. Measure up 34" from the top of the welded base plate to the bottom of the top mount.

2. Keeping the base of the mount centered on the post and pin hole turned down, fasten the base to the post with pan head self-tapping screws (provided).



3. Angle the swivel mount after it is installed on the post. Measure from the back of the mount at one end to the back of the mount at the other end to determine rail length. Cut rails.

4. Assemble sections as specified in Standard (Level) railing steps 4-7.

Installing a Level Mount and Top Railing

1. Attach the level mount to the post by measuring up 34" from the top of the welded base plate to the bottom of the level mount. Keeping the mount centered on the post, fasten the mount to the post with self-tapping pan head screws (provided).

2. Measure from the back of the mount at one end to the back of the mount at the other end to determine rail length. Cut rails.

Alternate Top Rail Installation Scenarios:

Crossover Post to Crossover Post - For top rail attaching to a crossover post on each end, measure between the crossover posts. Add 2" (1" for each crossover post) and cut the top rail to length.

Rail Mount to Crossover Post - For top rail attaching to a mount on one end and a crossover post on the other end, measure from the back of the mount on one end to the face of the post on the other end. Add 1" and cut the top rail to length.

3. Fasten the top rail through the side of the mount with flat head screws (provided). **Crossover Railing-** Fasten the top rail to the crossover adaptor with pan head screws (provided).

- 4. Snap covers on all mounts.
- 5. Attach the 2-piece flair to all posts.

Installing an Intermediate Baluster

Note: Intermediate balusters are required every 3' to maintain proper spacing of cables and to help prevent scenarios of openings greater than 4" being created in guardrails.

1. Mark the intermediate baluster location on both the underside of the top rail and the deck surface with a pencil. For top rail sections that are 6' or less in length, center the intermediate baluster between the posts. For top rail sections that are greater than 6' in length, divide the measurement between the posts by three, and use the resulting dimension to measure off each post toward the center of the section.

2. Sleeve the baluster mounts over the baluster. Ensure that the installation tabs on the lower baluster mount are facing down, and that the installation tabs for the upper baluster mount are facing up.

3. Insert the intermediate baluster between the top rail and the deck surface.

4. Beginning with the upper baluster mount, slide the mount up the intermediate baluster to the top rail. Ensure that the mount is centered on your layout mark, and the screw holes are oriented along the centerline of the top rail.

5. Using the provided self-tapping screws, attach the baluster mount to the top rail.

6. Center the lower baluster mount on your layout mark. Using a level, verify that the intermediate baluster is plumb in both left-to-right and front-to-back planes. Adjust the location of the lower baluster mount as needed to ensure the intermediate baluster is plumb.

7. Using the provided self-tapping screws, attach the baluster mount to the deck surface.

8. Repeat steps 1-7 for each of the intermediate balusters before moving on to Cable Kit installation.

Installing a Corner Kit

Note: The Cable Railing system requires the installation of two posts at all 90^o corners. To reinforce the corner posts against the loads placed upon them by cables under tension, the Cable Railing system utilizes the Corner Kit.



Double-Post 90[°] corner illustrated without the Corner Kit installed, showing the cable assembly passing through each post with Isolation Bushings at directional changes.

Note: each post must be equally offset from the corner to successfully install the Corner Kit. The minimum offset from the corner to the edge of the post baseplate is 5". This will leave enough space to install the baseplate cover over each post following post installation.

1. Position the 45[°] fixed angle bracket on each post so that the radius is up and the openings on the brackets are facing each other.

2. Measure the distance between the bracket openings and add 1". This is the dimension to which you will cut the 18" top rail section included with the Corner Kit.

3. Insert each end of the top rail into the corresponding 45[°] fixed angle bracket.

4. Using the provided self-tapping screws, attach each 45[°] fixed angle bracket to its corresponding post.

5. Install self-tapping screws (one each side) through the bottom of each 45^o fixed angle bracket to secure the bracket and top rail of the Corner Kit.

Note: for standard installations utilizing proud posts with caps, measure up 33-3/4" from the top of the welded base plate to the bottom of the 45° fixed angle bracket flange. For over-the-post drink rail installations, install the top flange of the 45° fixed angle bracket flush with the top of the post - this will leave a 1/2" gap between the bottom of the drink rail and the top of the top rail.

Installing Cable Kits

Install Tensioning Terminal

Install the Threaded Stud end first. Start by inserting the plastic stud bushing into the pre-drilled hole in the post. Feed the cable and stud through the end post. Slide the stainless steel washer onto the Threaded Stud and turn the brass locknut onto the threads as far as possible by hand (at least two full turns).



Feed Cable through Intermediate Posts

Feed the bare end of the cable through all intermediate posts/cable braces and through the end post where you will be installing the Pull-Lock® fitting.



Install Swageless Terminal

1. Slip the Delrin® washer over the body of the Pull-Lock® fitting.



2. Rotate the Pull-Lock® fitting clockwise as you push it onto the cable. If the cable begins to "unravel," you are rotating the fitting in the wrong direction.



Note: If you have trouble inserting the cable into the fitting, it may be because the locking wedges have become stuck. This is not a defect! Here's what you can do to "free the wedges" — For Pull-Lock® or Push-Lock® fittings for 1/8" cable, using either a RFXPL-KEY or 1/4" diameter bolt, insert the RFXPL-KEY or bolt into the hole and press until the wedges move freely. Perform the same operation for a 3/16" Pull-Lock® or Push-Lock® , except use a 16d nail or another tool with 1/8" or smaller diameter. Anything larger than what is recommended can actually get stuck inside the fitting – NOT what you want!

3. Push the Pull-Lock® fitting along the cable and firmly into the hole in your post. While holding the Pull-Lock® fitting against the end post, pull the bare end of the cable to remove as much slack in the cable as possible.



Tension Cables

1. Return to the Threaded Stud end post. Insert an 1/8" hex wrench into the broached opening on the tip of the stud. Tighten the locknut with a 7/16" wrench while holding the hex wrench to prevent the stud from turning.



2. Tension all cables to desired amount in sequence, beginning with the center cables, moving up and down toward the top and bottom. As you tension each cable, give it a sharp pull downward mid-span to help set the wedges, then re-tension as necessary in the same sequence. Be aware that the cable may move as much as 3/16" toward the tensioning terminal as the wedges seat.



Trim Excess Cable

1. When all of the cables are tight, cut off any exposed thread as near to the locknut as possible by using a cut-off wheel or hack saw.



2. Twist the cap over the locknut.



3. Return to the swageless terminal. Cut the cable flush with the hole in the back of the fitting using a cut-off wheel.



4. Twist the cap onto the lip of the Pull-Lock® fitting.

