

Professional 224 Series Installation Instructions for Wood or Metal Posts on Level Runs

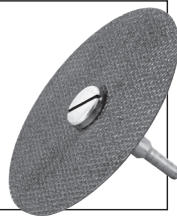
Tools Required for Installation

- 5/32" Drill Bit
- 1/4" Drill Bit
- 29/64" Drill Bit
- 1/8" Hex Wrench
- 3/16" Hex Wrench
- 3" Combo Wrench
- RFXPL-KEY
- Cable Gripper
- Cut Off Kit (mandrel)
- Cut Off Kit (wheel)

Cut-off Tool

Used to cut cable flush with the end of the Pull-Lock® fittings, and to cut excess threads off stud-type Receivers. Includes mandrel and two cut-off wheels.

Order **RFX-CUT-OFF KIT**

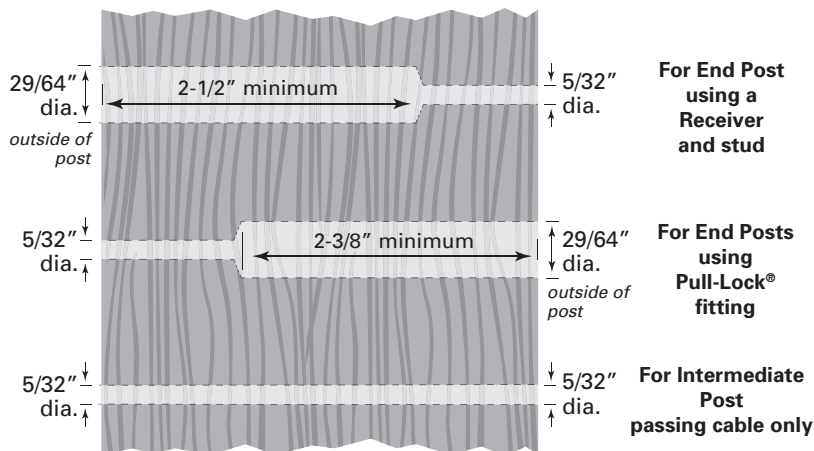


NOTE: Parts must be kept clean and free of debris before installation for best results.

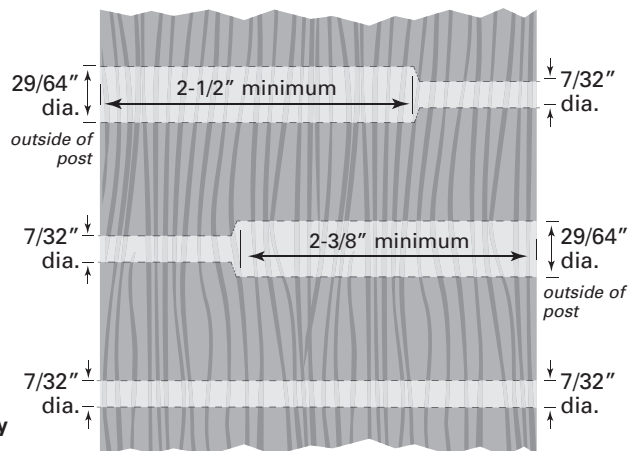
A: Drill Posts

Wood posts must be a minimum 4"x4".

Hole size for 1/8" dia. cable installation



Hole size for 3/16" dia. cable installation

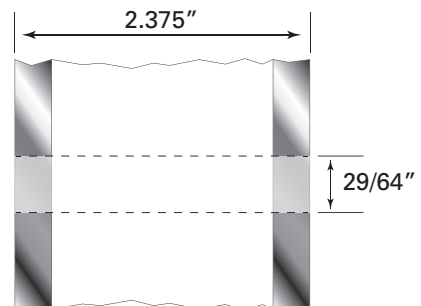


Metal end posts are drilled through, using a 29/64" drill bit for Receiver and Pull-Lock® fitting.

Hole sizes through intermediate posts and/or cable braces are:

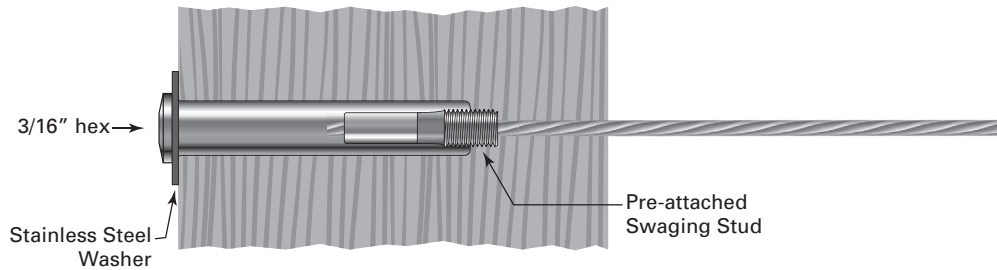
- 5/32" for 1/8" cable
- 7/32" for 3/16" cable

All holes should be burr-free.



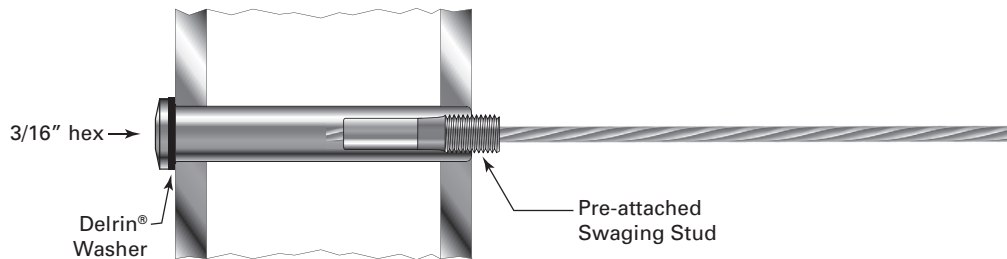
B. Install Tensioning Terminal in a Wood Post

1. Feed the bare cable through first end post, keeping some of the cable with the swaging stud available so you can perform the next step.
2. Slip the stainless steel washer over the body of the Receiver and start the swaging stud into the Receiver and turn 3 complete turns. This will thread about 1/2 of the stud into the Receiver.
3. Insert the Receiver with the stud into the post.



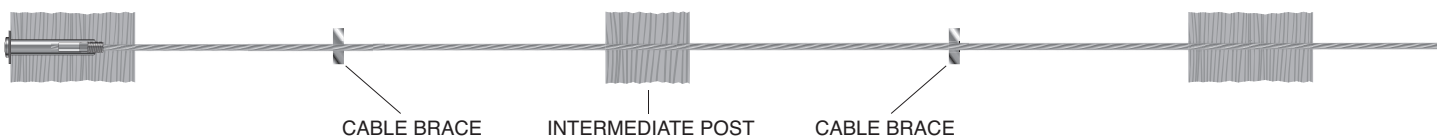
B. Install Tensioning Terminal in a Metal Post

1. Slip the Delrin® washer over the body of the Receiver and insert the Receiver into the post.
2. Start the swaging stud into the Receiver and turn 3 complete turns. This will thread about 1/2 of the stud into the Receiver.



C. Feed Cable through Intermediate Posts

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



Feed bare end of cable through all other posts.



Feed bare end of cable through all other posts.



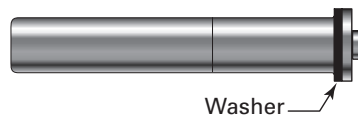
D. Feed/Crimp Cable through Corner Posts

Instructions for going through metal post corners are available at our website. Scan the QR Code on the right with your smart phone, or call us at 800-851-2961 and ask for Cable Railing Technical Support and we'll email it to you.

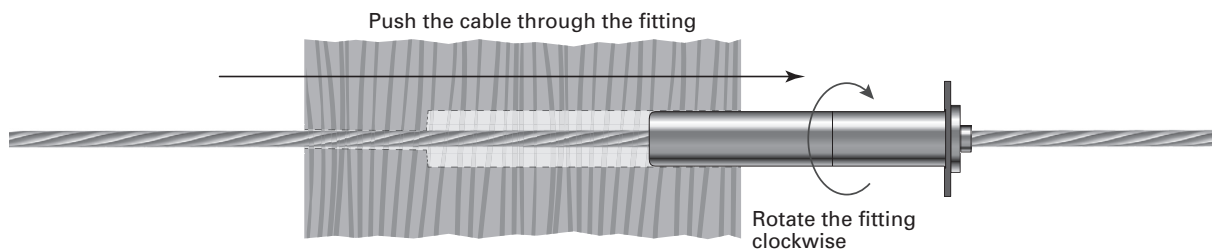


E. Install Swageless Terminal

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

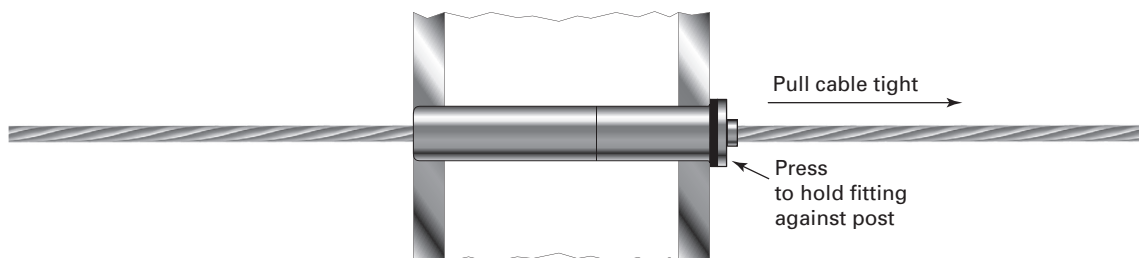


2. Rotate the Pull-Lock® fitting clockwise as you push it onto the cable. If the cable begins to "unravel," you are rotating the fitting in the wrong direction.



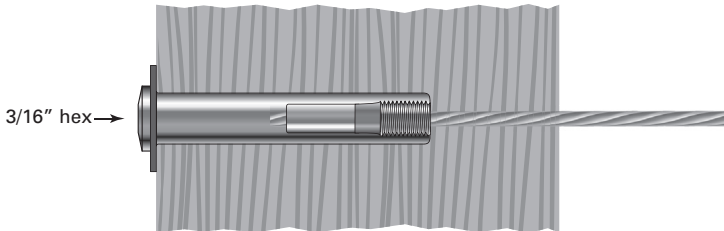
Note: If you have trouble inserting the cable into the fitting, it may be because the locking wedges have become stuck. This is not a defect! Here's what you can do to "free the wedges" — For Pull-Lock® or Push-Lock® fittings for 1/8" cable, using either a RFXPL-KEY or 1/4" diameter bolt, insert the 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.

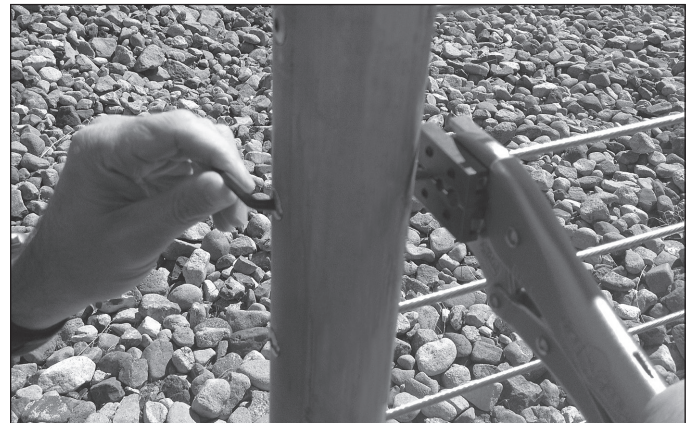


F. Tension Cables

1. Go to the other end and tension the cable by holding the cable securely to prevent it from turning while you turn the Receiver with a hex wrench. Be careful to protect the cable from damage while tensioning.



The swaging stud will be pulled into the Receiver by rotating the Receiver clockwise.

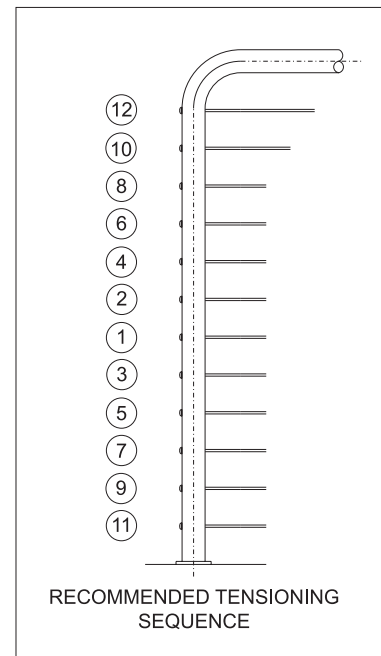


RailFX Small Cable Gripper

As an alternative to a large cable gripper, this small gripper will clamp on the cable while tensioning to keep the cable from unraveling. Order **CG-4-6-RFX**

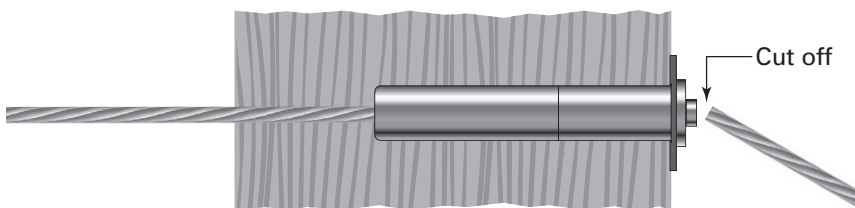


2. Tension all cables to desired amount in sequence, beginning with the center cables, moving up and down toward the top and bottom. As you tension each cable, give it a sharp pull downward mid-span to help set the wedges, then re-tension as necessary in the same sequence. Be aware that the cable may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

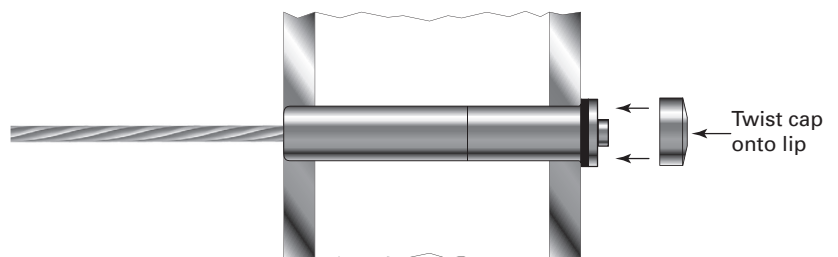


G. Trim Excess Cable

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



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



Professional 224 Series Installation Instructions for Wood or Metal Posts for Stairs

Tools Required for Installation - see page 1, plus:

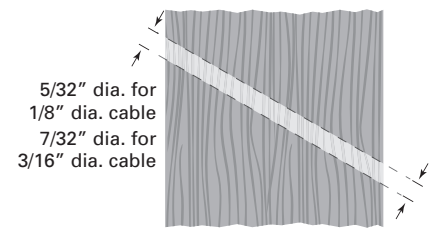
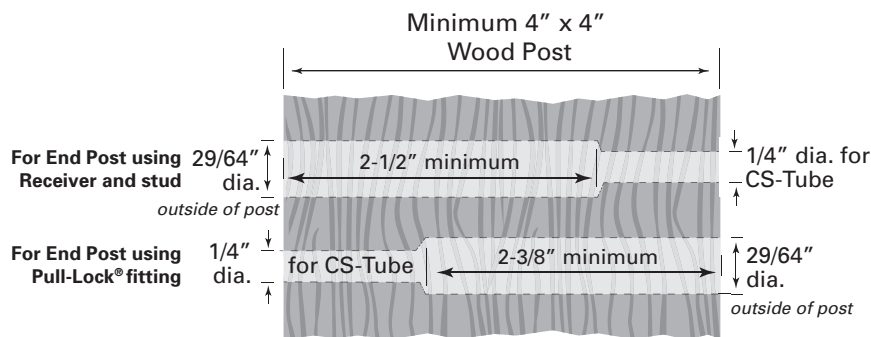
- Hammer
- Small block of wood

A. Drill Posts

Wood posts must be a minimum 4"x4".

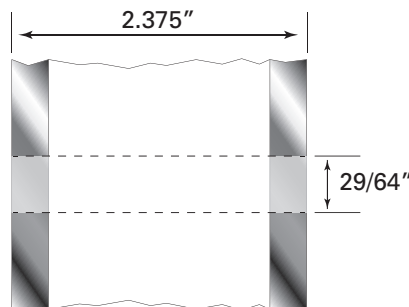
Hole size for 1/8" or 3/16" dia. cable installation

Intermediate posts are drilled on the angle.

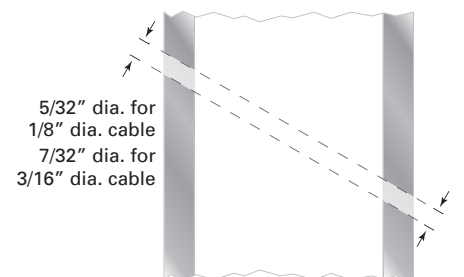


Metal end posts are drilled through, using a 29/64" drill bit for both the Receiver and Pull-Lock® fitting.

All holes should be burr-free.



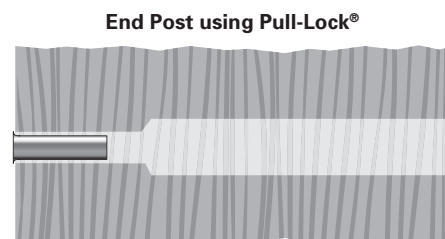
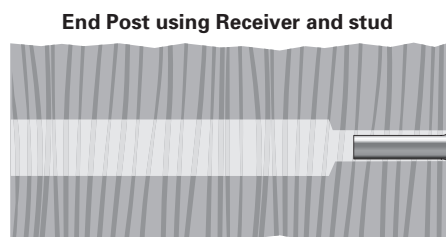
Intermediate posts are drilled on the angle.



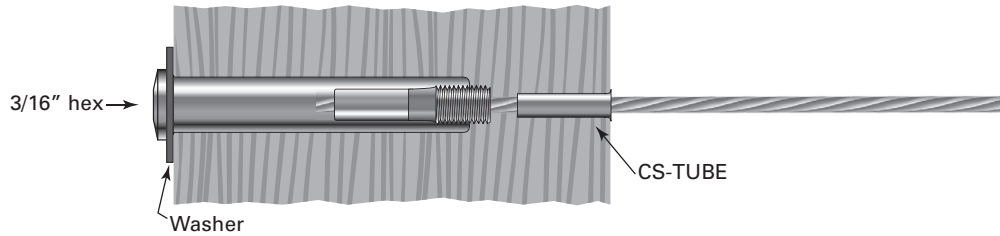
All holes should be burr-free.

B. Install Tensioning Terminal in a Wood Post

1. Insert the post protector tube first into the face of both end posts. Force each tube into post so it is flush with post face.

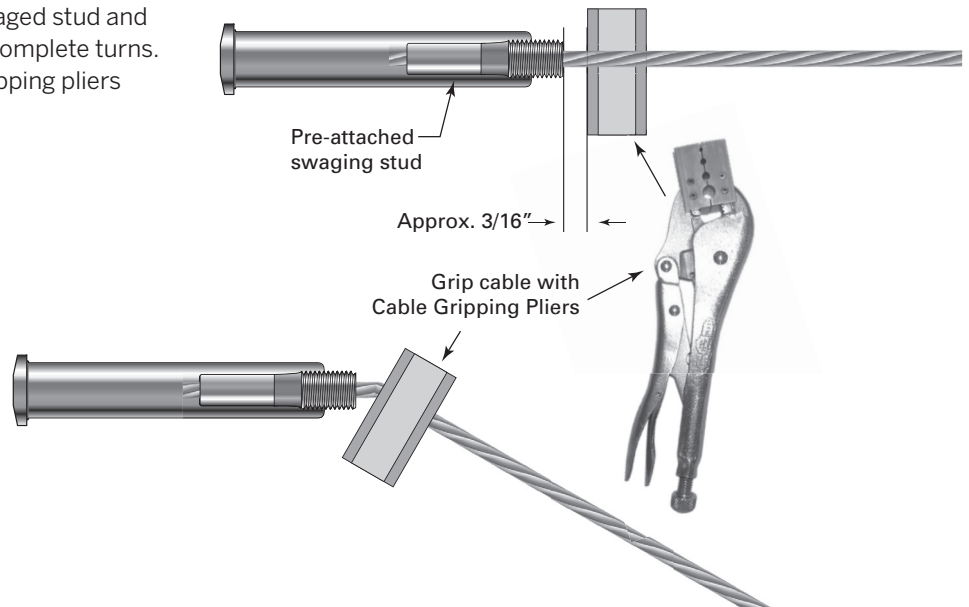


2. Feed the bare cable through the first end post. Slip the stainless steel washer over the body of the Receiver, start the swaging stud into the Receiver 5 complete turns. Insert the Receiver into the post.

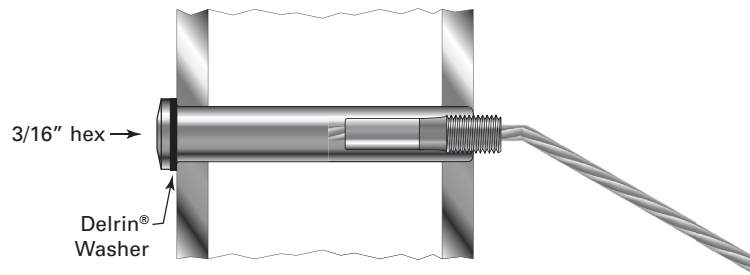


B. Install Tensioning Terminal in a Metal Post

1. Grip the cable with cable gripping pliers approximately 3/16" away from the swaged stud and install Receiver over threads of stud 5 complete turns. Bend cable between stud and cable gripping pliers approximately 35-45 degrees.

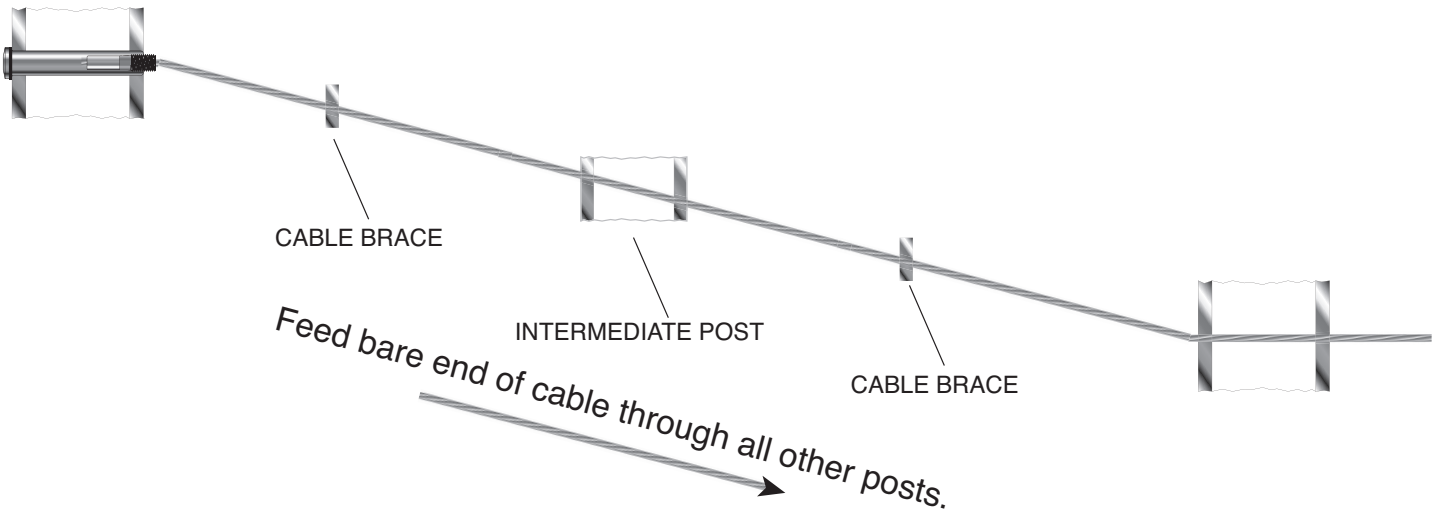
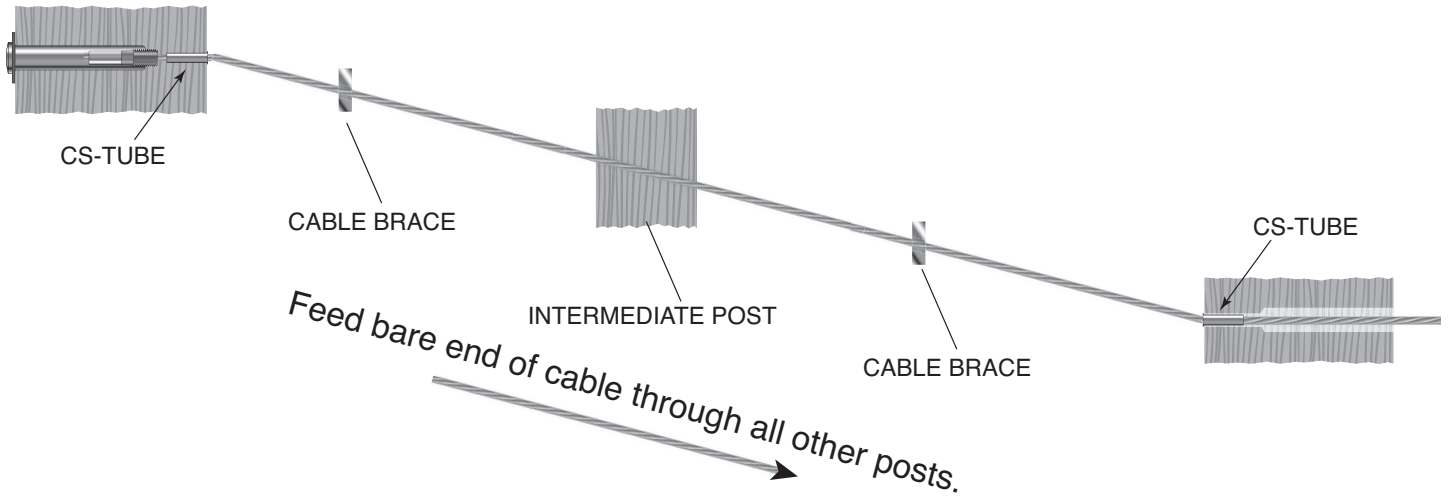


2. Remove stud from Receiver. Slip the Delrin® washer onto the Receiver. Insert the Receiver into the end post. Reinstall stud into Receiver at least 5 complete turns.



C. Feed Cable through Intermediate Posts

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

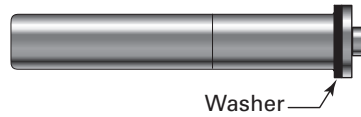


D. Feed/Crimp Cable through Corner Posts

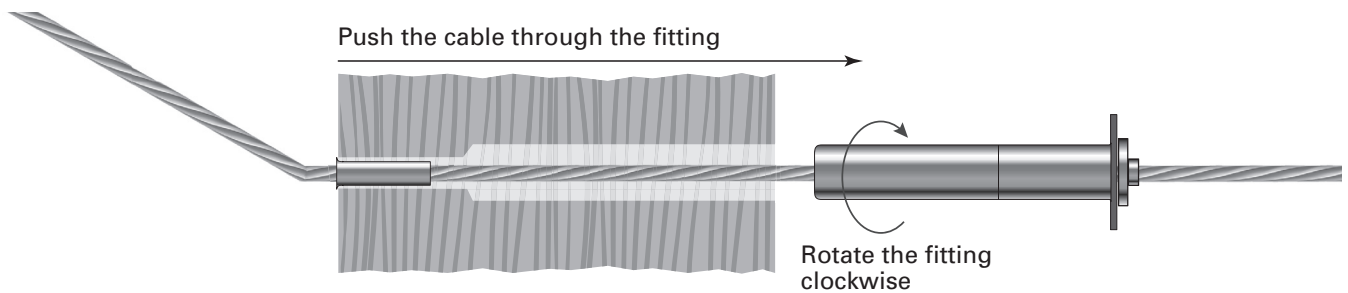
As this section deals with passing cables through corners, which you will not be doing with stairs, please proceed to Section E.

E. Install Swageless Terminal

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



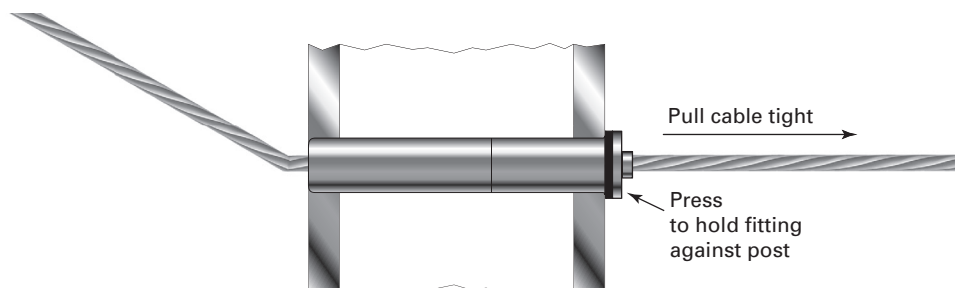
2. Rotate the Pull-Lock® fitting clockwise as you push it onto the cable. If the cable begins to “unravel,” you are rotating the fitting in the wrong direction.



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. Pull on the cable (cable gripping pliers are helpful for this) to create as much tension as possible as you seat the Pull-Lock® fitting into the hole.

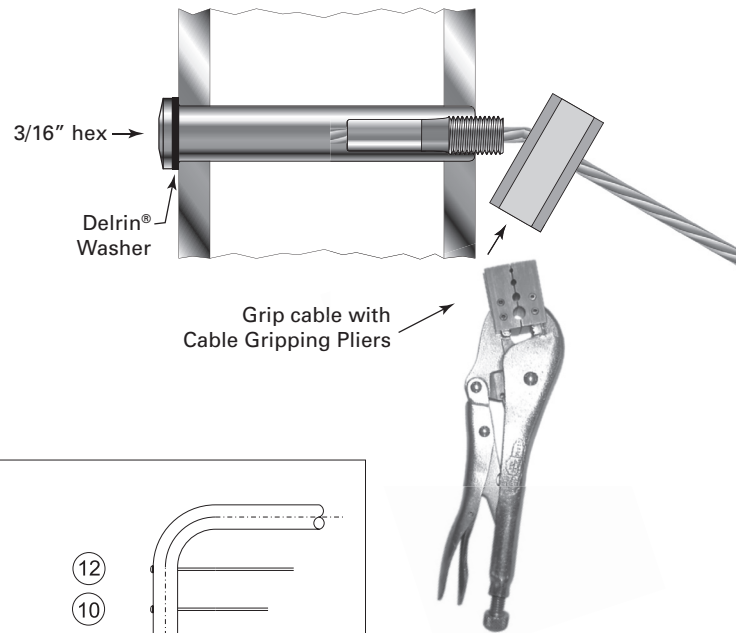
Make sure that the Receiver and stud on the opposite end are still seated in their pre-drilled hole (if not, seat them and repeat the process). The purpose of this is to make the cable as tight as possible prior to increasing tension on the cable by tensioning the Receiver.



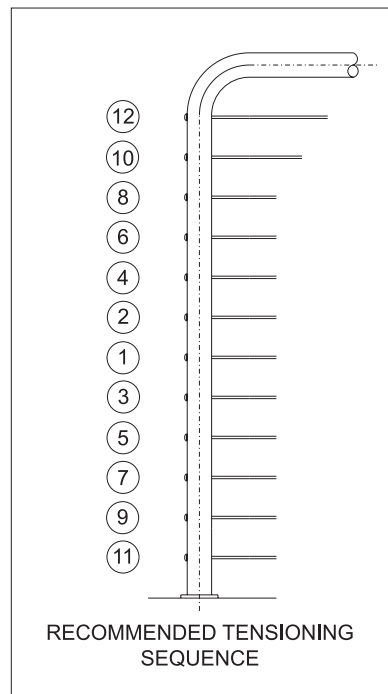
F. Tension Cables

1. Move back to the Receiver and stud end of cable and attach cable gripping pliers to the cable as close as is practical to the fittings without contacting the end post.

Rotate the Receiver to create desired tension on the cable (you may have to move the cable gripping pliers several times to avoid contact with the end post).



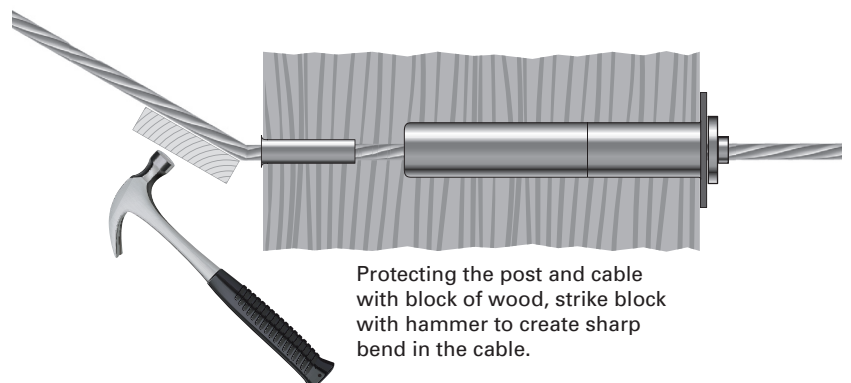
2. Tension all cables in sequence, beginning with the center cables, moving up and down toward the top and bottom. As you tension each cable, give it a sharp pull downward mid-span to help set the wedges, then re-tension as necessary in the same sequence. Be aware that the cable may move as much as 3/16"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



3. At both ends of the run, you are going to create a sharp bend in the cable where it exits the post (post protector tube in the wood post) by placing a block of wood (for protection of the post) on the cable next to the post / tube at the face of each post and striking it with a hammer.

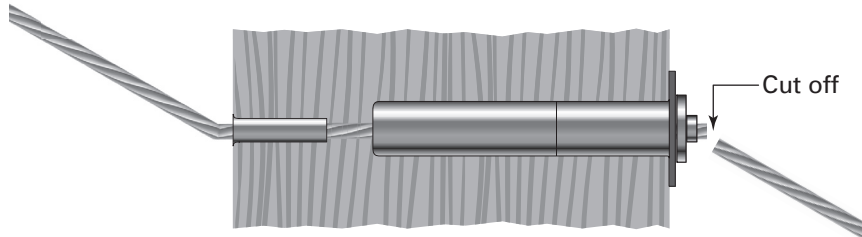
Metal post applications only require this step be done to the Pull-Lock end of the run.

If tension has diminished slightly as a result of the bending of the cable, re-tension the Receiver back up to desired amount, as in Step F-2.



G. Trim Excess Cable

1. Cut the cable flush with the hole in the back of the fitting using a cut-off wheel.



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

