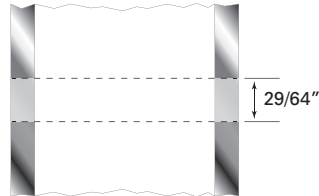


# Kit 232 Series and Kit 224 Series Stair Installation Instructions for Metal Posts

## A: Drill Posts

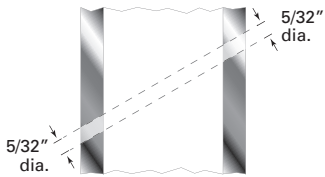
### Hole size into end posts

The respective Receivers and Pull-Locks® will be the same length as the dimension of the post you are using.

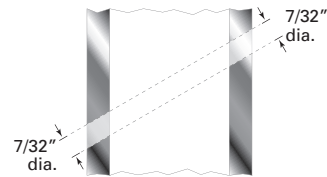


Intermediate posts are drilled on the angle.

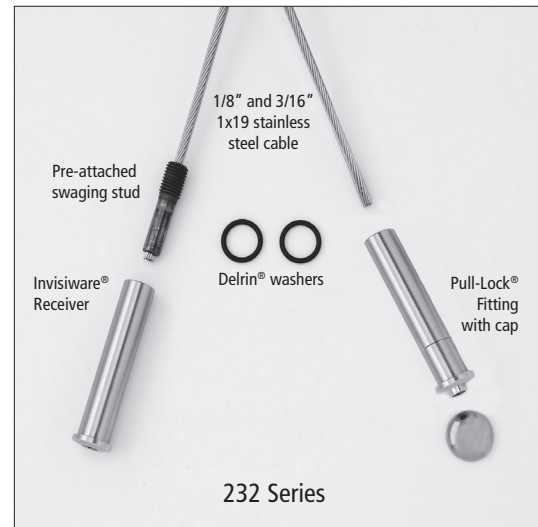
### Hole size for 1/8" dia. cable installation



### Hole size for 3/16" dia. cable installation



All holes should be burr-free.



## B. Install Tensioning Terminal

1. Grip the cable with cable gripping pliers approximately 3/16" away from the swaged stud and install Receiver over threads of stud about 5 to 6 turns. (Figure 1) Bend cable between stud and cable gripping pliers approximately 35-45 degrees. (Figure 2)
2. Remove stud from Receiver and install Receiver into desired end post (remember to install W-R6B Delrin® plastic washer). Reinstall stud into Receiver at least 5 full turns. (Figure 3)

Figure 1

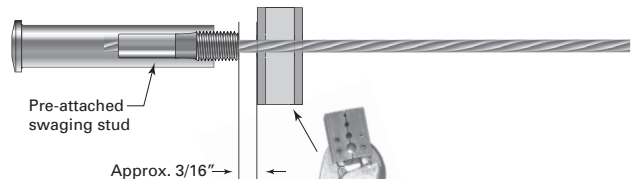


Figure 2

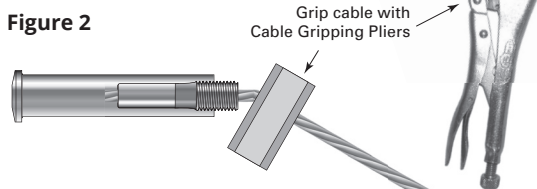
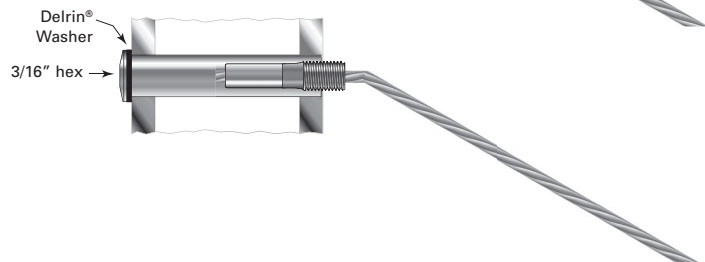
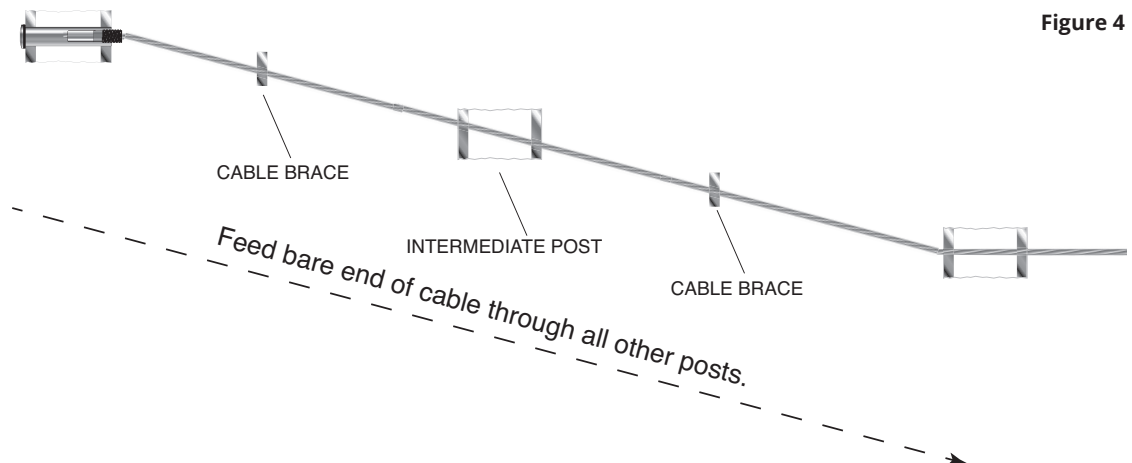


Figure 3



## 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

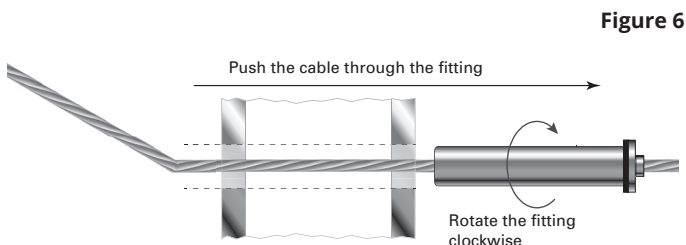
As this section deals with passing cables through corners, which you will not be doing with stairs, please proceed to Section E.

## E. Install Swageless Terminal

1. Slip the Delrin® washer over the body of the Pull-Lock® fitting. (Figure 5)

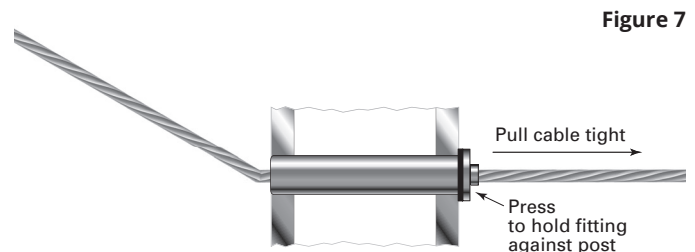


2. Rotate the Pull-Lock® fitting clockwise as you push it onto the cable. If the cable begins to “unravel,” you are rotating the fitting in the wrong direction. (Figure 6)



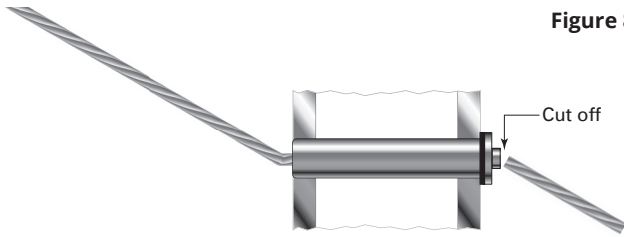
*Note: If you have trouble inserting the cable into the fitting, it may be because the locking wedges have become stuck. This is not a defect! Here's what you can do to “free the wedges” — For Pull-Lock® or Push-Lock® fittings for 1/8” cable, using either a PL-KEY or 1/4” diameter bolt, insert the PL-KEY 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. (Figure 7)  
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.



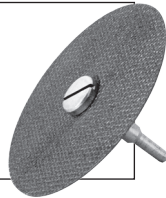
4. Cut the cable flush with the hole in the back of the fitting using a cut-off wheel. (Figure 8)

Figure 8



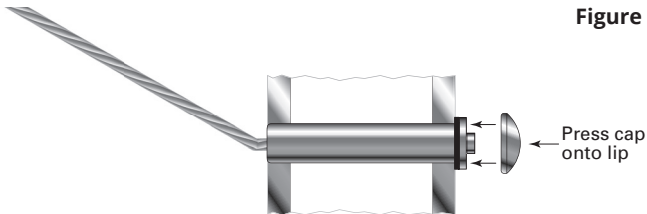
#### Cut-off Tool

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 **CUT-OFF KIT**



5. Press the cap onto the lip of the Pull-Lock® fitting. (Figure 9)

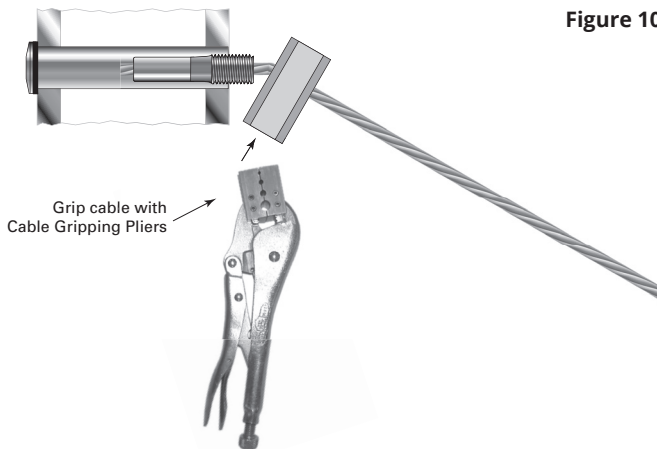
Figure 9



## F. Tension Cables

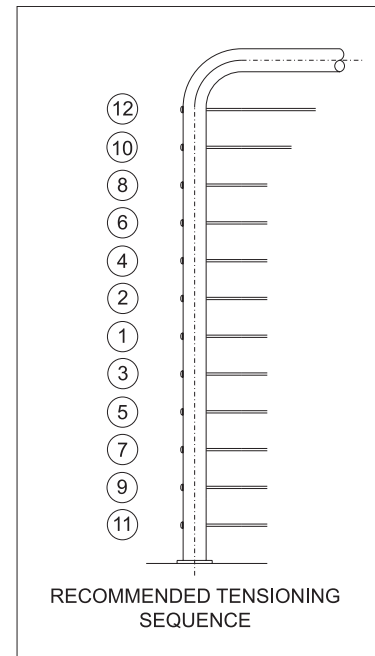
1. Move back to the Receiver and stud end of cable and attach cable gripping pliers to the cable as close as is practical to the fittings without contacting the end post. (Figure 10)  
Rotate the Receiver to create desired tension on the cable (you may have to move the cable gripping pliers several times to avoid contact with the end post).

Figure 10



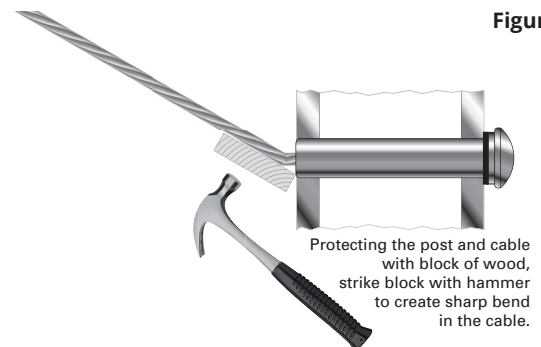
2. Tension all cables in sequence, beginning with the center cables, moving up and down toward the top and bottom. (Figure 11) As you tension each cable, give it a sharp pull downward mid-span to help set the wedges, then re-tension as necessary in the same sequence.

Figure 11



3. Move to Pull-Lock® end of the run and you are going to create a sharp bend in the cable where it exits post by placing a block of wood (for protection of the post) on the cable at the face of the post and striking it with a hammer. (Figure 12) This will create the sharp bend you are looking for.

Figure 12



If tension has diminished slightly as a result of the bending of the cable, re-tension the Receiver as described back up to desired amount, making sure to prevent rotation of the cable by gripping it with cable gripping pliers while rotating Receiver.