Kit 272 Series Installation Instructions for Wood or Metal Posts
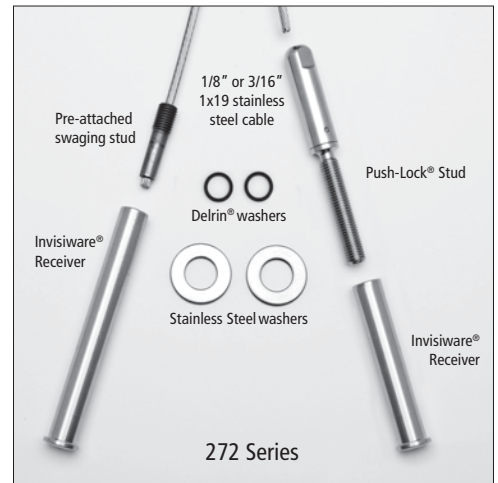
A. Drill Posts

Minimum 4″ x 4″ Wood Post

Minimum 1.9″ Metal Post

29/64″ dia.

29/64″ dia.

Hole size for End Posts for both 1/8″ and 3/16″ dia. cable

29/64″ dia.

29/64″ dia.

5/32″ dia.

5/32″ dia.

Hole size for Intermediate Posts for 1/8″ dia. cable passing cable only

5/32″ dia.

5/32″ dia.

7/32″ dia.

7/32″ dia.

Hole size for Intermediate Posts for 3/16″ dia. cable passing cable only

7/32″ dia.

7/32″ dia.

1/8″ or 3/16″ 1x19 stainless steel cable

Pre-attached swaging stud

Push-Lock® Stud

Delrin® washers

Invisiware® Receiver

Stainless Steel washers

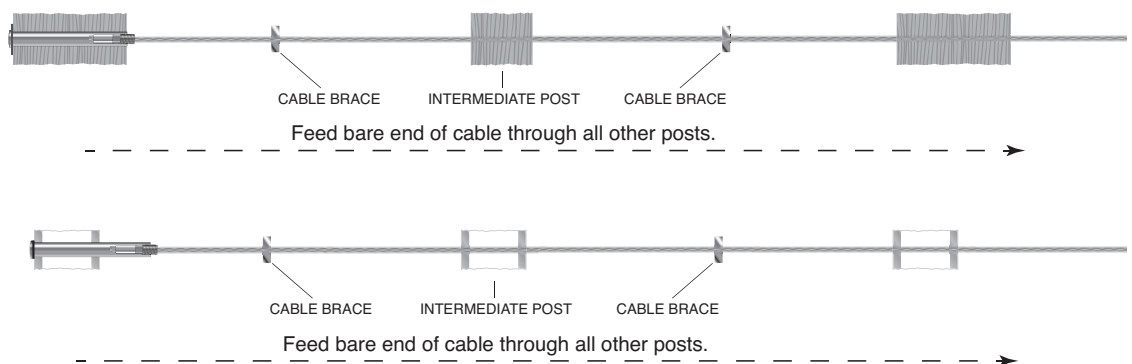Invisiware® Receiver

272 Series

B. Install Tensioning Terminal

1. Install the 3½″ long Receiver tensioning end first. Slide the washer (stainless steel for wood post, Delrin® for metal post) over the body of the Receiver and insert the Receiver into the post.

2. Start the threaded stud attached to the cable into the Receiver and turn 3 complete turns. This will thread about 1/2 of the stud into the Receiver.

S/S Flat Washer

3/16″ hex

Pre-attached Swaging Stud

Delrin® Washer

3/16″ hex

Pre-attached Swaging Stud
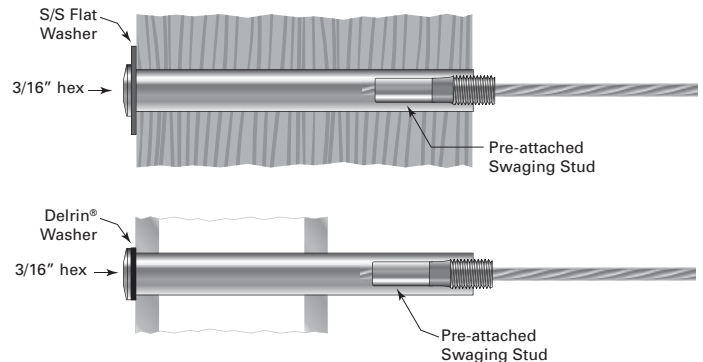
C. Feed Cable through Intermediate Posts

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

CABLE BRACE   INTERMEDIATE POST   CABLE BRACE

Feed bare end of cable through all other posts.

CABLE BRACE   INTERMEDIATE POST   CABLE BRACE

Feed bare end of cable through all other posts.

D. Feed/Crimp Cable through Corner Posts

When passing cable railing through a corner, do not bend the cable past 45° at any time.

If turning 90°, a 2-step turn using a double corner post configuration is required, as illustrated. For wood frame cable runs with up to 90° of turn, kits with single tensioners are sufficient. If going through corners totaling more than 90°, you will want to use a kit with tensioners at both ends.

Corners require two posts because the cable itself, being rigid, will not cooperate in bending cleanly through a single post. When you go through a corner post, you will need to prevent the cable from slicing into the wood as it exits the post on an angle by using a Post Protector Tube.

Illustration D-1

5/32"dia. for 1/8"cable
7/32"dia. for 3/16"cable
1½" min.
1/4"dia.
CS-Tube installed

1. Insert a Post Protector Tube (order separately from Accessories) into all wood posts where the cable angles out of the post. Drill 1⁄4" diameter holes 1-1/2" deep into the face of the post where each cable angles out of the post. Force tube into post so it is flush with post face. (Illustration D-1)
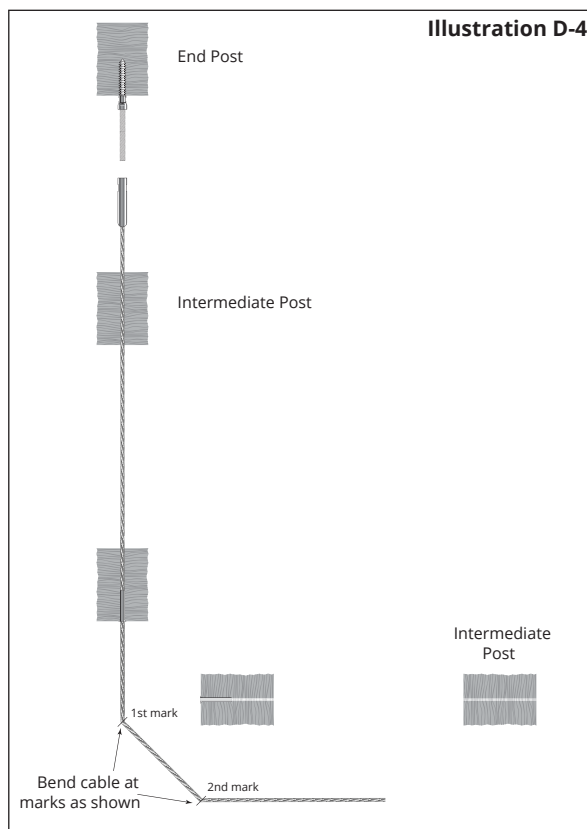
Illustration D-2

End Post
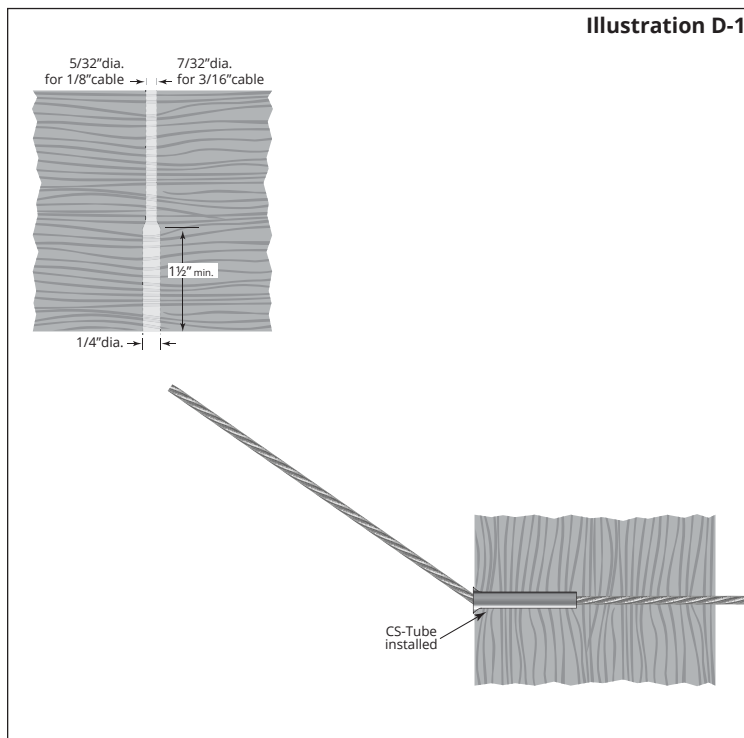
2. As you feed the bare end of your cable through your intermediate posts (per Section C in your installation instructions), stop after you feed it through the first of your two corner posts.

Intermediate Post

3. Mark the cable at the point where it exits the Post Protector Tube at the face of the first post.(Illustration D-2)

Corner Posts with CS-Tubes installed

Mark cable here

Intermediate Post

Intermediate Post

End or Corner Post

Pull tight
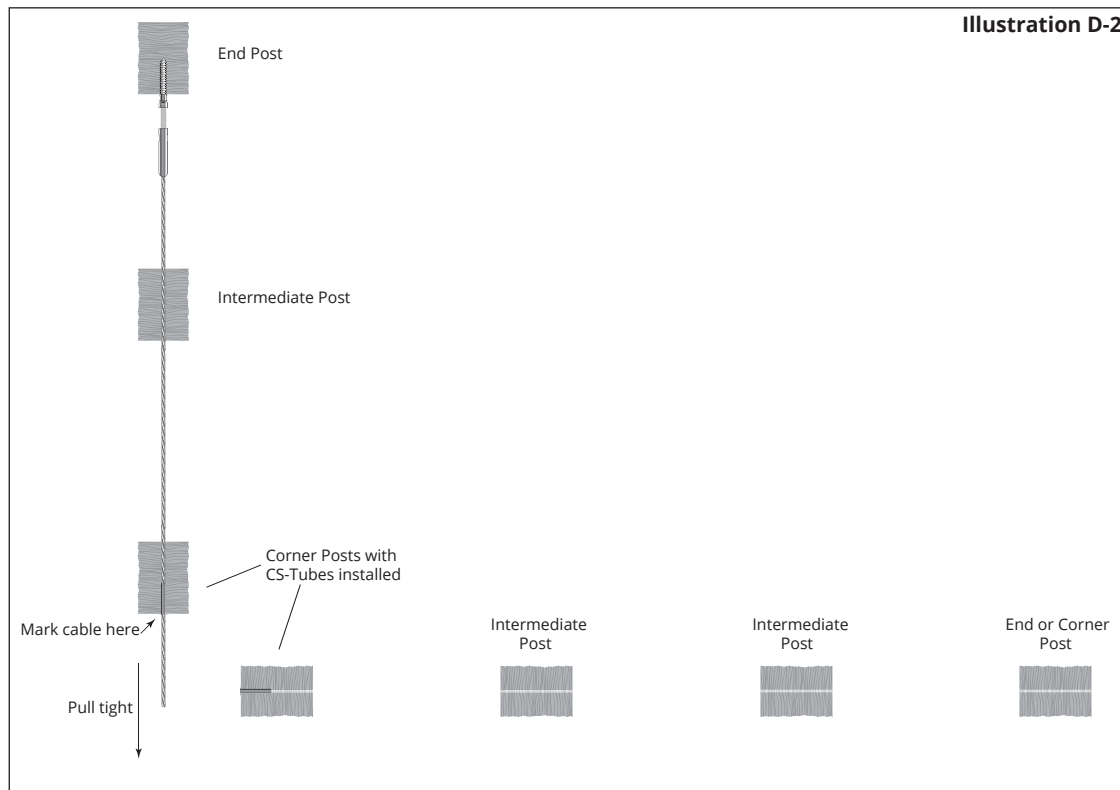
4. Take a measurement in a straight line between the installed Post Protector Tubes on adjacent posts. Make a second mark on the cable that is the same distance away from the first mark as the measurement that you have just taken.(Illustration D-3)
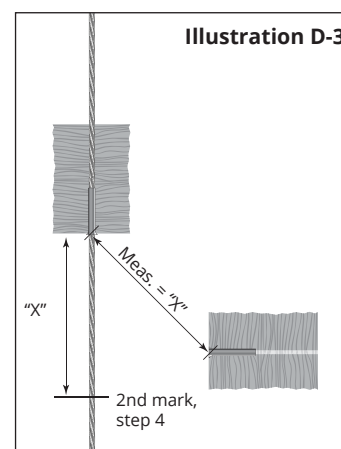
5. Remove the stud or the Adjust-A-Body from the tensioning terminal end that was installed in Section B of your kit instructions. This will make it possible to pull the first mark away from the face of the post so that you can access the mark for bending the cable. (Illustration D-4)

6. Bend the cable in both locations that you have marked to approximately 45° (in the same plane). Use a tool such as Ultra-tec Cable Gripping Pliers to help you make "sharp" bends in your cables at the marked locations. (Illustration D-4)

7. Re-attach the tensioning terminal such that the first mark is at the face of the post with the Post Protector Tube. Feed the bare end of the cable through the second post and continue to feed the cable through all other intermediate posts and/ or another corner section. Pull tight until the second mark contacts the Post Protector Tube on the second post. (Illustration D-5)
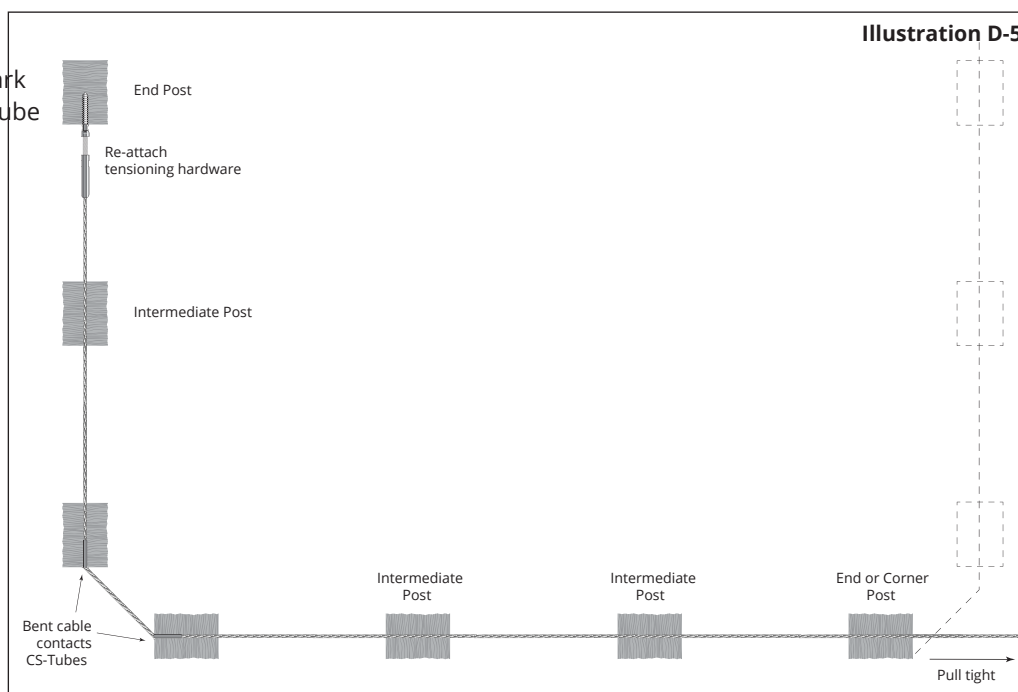
8. When the bare end of the cable has been passed through all remaining intermediate posts (if another 2-post corner is encountered, repeat Steps 1-7) proceed to Section E of the installation instructions for your kit application.

Illustration D-3

Meas. = "X"

"X"

2nd mark, step 4

Illustration D-4

End Post

Intermediate Post

Intermediate Post

1st mark

Bend cable at marks as shown

2nd mark

Illustration D-5

End Post

Re-attach tensioning hardware

Intermediate Post

Bent cable contacts CS-Tubes

Intermediate Post

Intermediate Post

End or Corner Post

Pull tight

E. Install Swageless Terminal

1. Slip the appropriate washer over the body of the Receiver (stainless steel for wood post, Delrin® for metal post), then turn the Receiver half way onto the threads of the Push-Lock® Stud.

Push-Lock Stud   Receiver   Washer
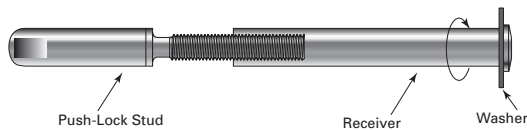
2. Slide the connected Receiver with Push-Lock® Stud into the hole in the end post with the Receiver cap and washer resting against the back side of the post.

Washer
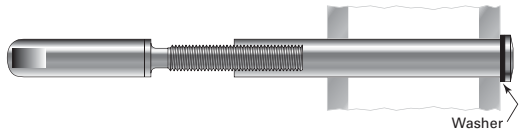
3. Pull the cable tightly along the side of the fitting and mark the cable 1-3/16" from the leading edge of the Push-Lock® Stud. Cut the cable at the mark, using a cable cutter.

1³/₁₆"

Mark and cut cable
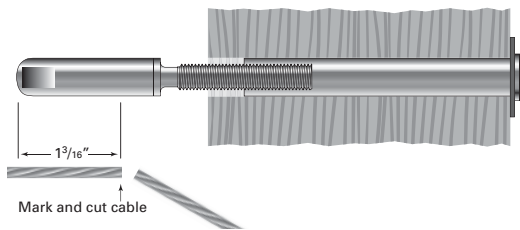
4. At opposite end post with tensioning terminal, detach the stud from the Receiver to allow cable slack so you can perform the next step.

5. Back at post with the swageless terminal, push the cable into the hole in the fitting as far as it will go (approximately 1-1/16"). Twist the cable in the right-hand direction as you push it into the fitting. You will feel it slide through the jaws inside the stud.
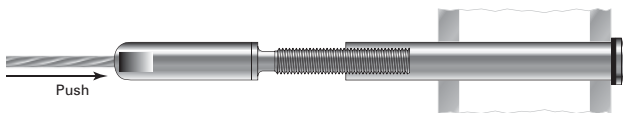
Push

> *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 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" 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!*

6. Return to the post with tensioning terminal and rethread the stud back into the Receiver.

F. Tension Cables

1. Go to the post with swageless terminal. Grip the wrench flat on the end of the Push-Lock® Stud with a 3/8" open-end wrench (to keep the cable from turning), then turn the Receiver with a 3/16" hex wrench until you can't turn it anymore, exhausting all adjustment.

Hex wrench

Wrench flat   Stud   Receiver
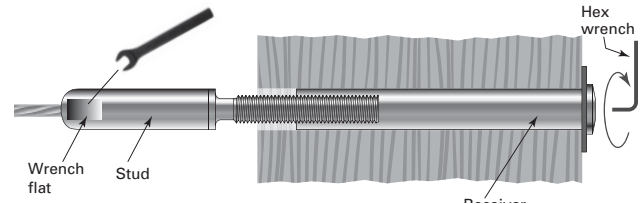
2. Finish tensioning the cable at the post with tensioning terminal by holding the cable securely to prevent it from turning while you turn the Receiver with a hex wrench. Be careful to protect the cable from damage while tensioning.
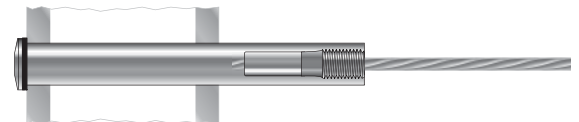
The swaging stud will be pulled into the Receiver by rotating the Receiver clockwise.

3. 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.

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RECOMMENDED TENSIONING SEQUENCE