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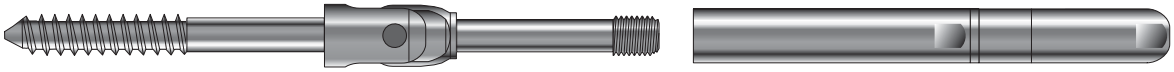
FlexFX™ Installation Instructions

Swageless Tensioning Fittings

A. Wood Level Tensioner

B. Wood Level Extended Length Tensioner

C. Wood Stair Tensioner



D. Wood Stair Extended Length Tensioner

E. Metal Level Tensioner

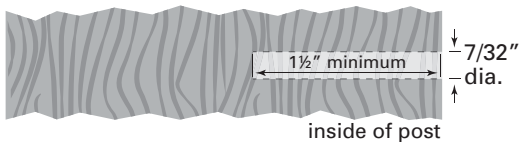
F. Metal Stair Tensioner

A: Drill Posts

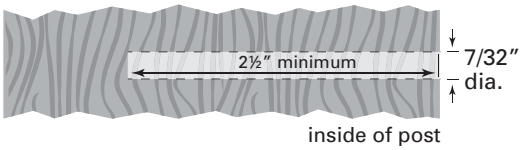
1. Make sure the holes are drilled properly in the end post where you will be installing the fitting.

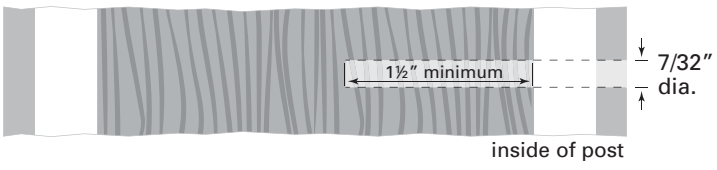
If you are using wood end posts, for A and C, drill a hole into your wood posts a least 1½" deep at 7/32"; for the extended length tensioners (B and D), drill a hole into your wood posts at least 2½" deep at 7/32"; for sleeved wood end posts, drill 7/32" hole to a depth of at least 1½" or enough to allow the fitting to sit flush to the sleeve.

When using regular tensioners A and C:

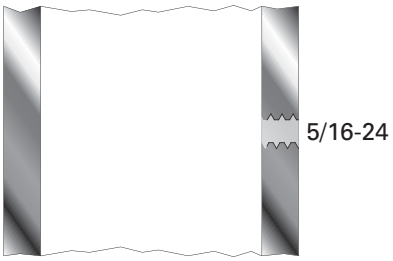


When using extended length tensioners B and D:





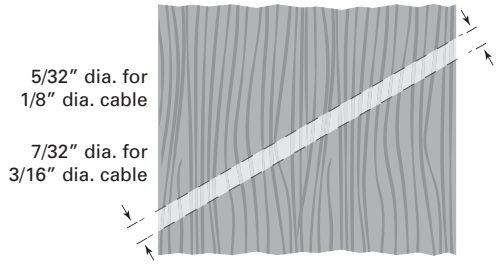
If you are installing the fittings in a metal railing, drill and tap 5/16-24 threaded holes on the inside of each end post.

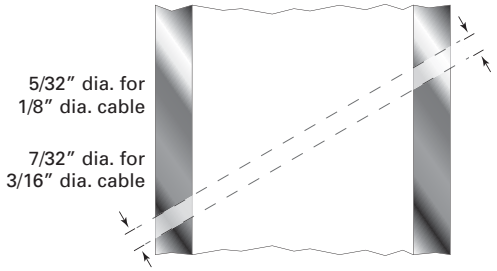


For all intermediate posts and or cable braces, hole sizes are:
5/32" for 1/8" cable
7/32" for 3/16" cable

Straight through for level runs; on the angle for stair runs.

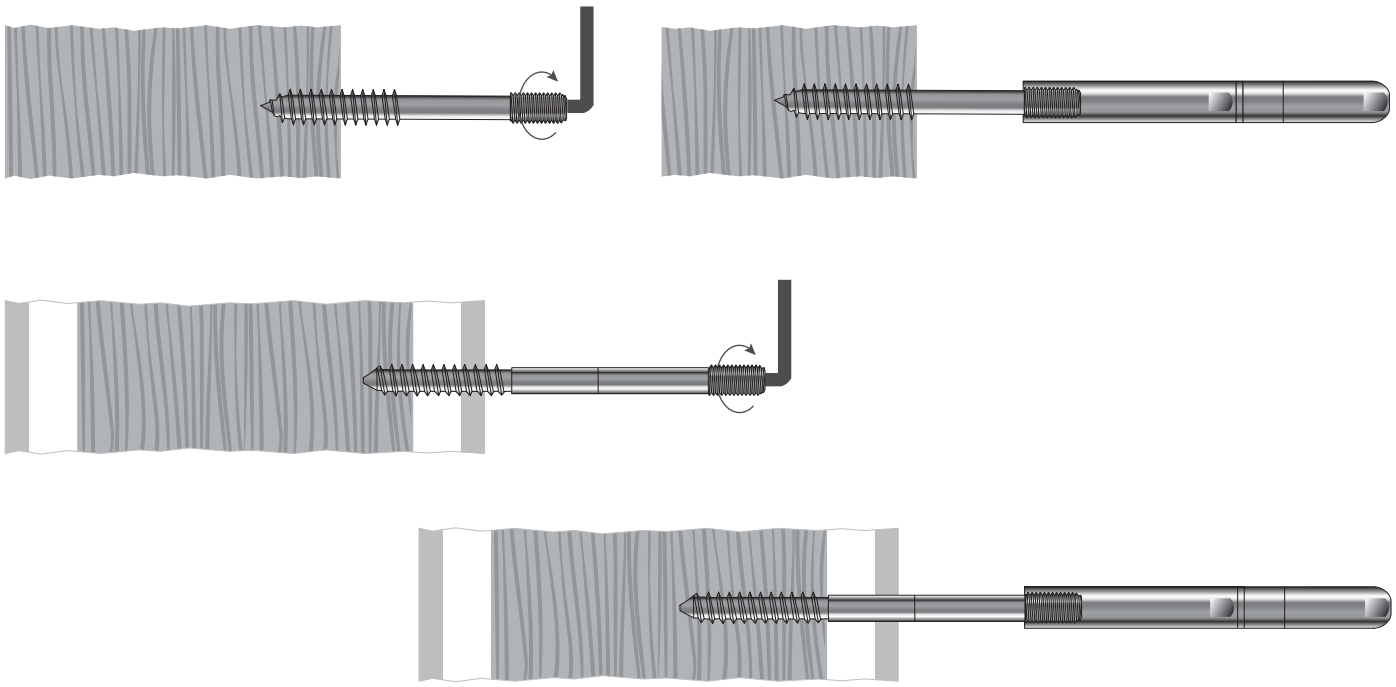
All holes in the metal posts should be burr-free.



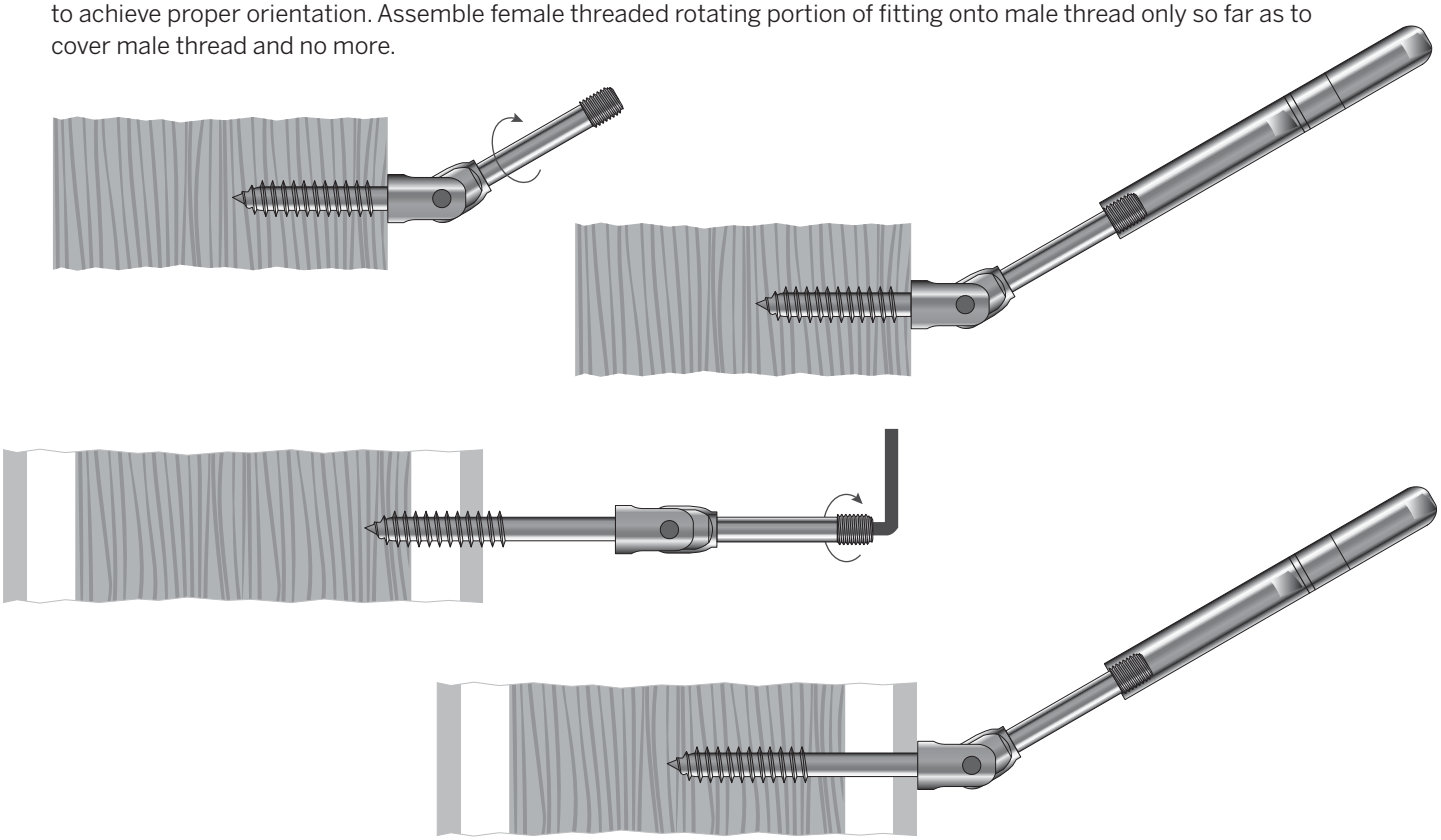


B. Install Tensioning Terminal

1A, B. If you are using the Wood Level Tensioner, place lag thread into pre-drilled hole and drive lag thread into wood post (or wood post with composite sleeve with a diameter up to 4½") using a 3/16" hex (Allen) wrench. Stop turning when the lag threads on the fitting are fully within the wood post. Assemble female threaded rotating portion of fitting onto male thread only so far as to cover male thread and no more.

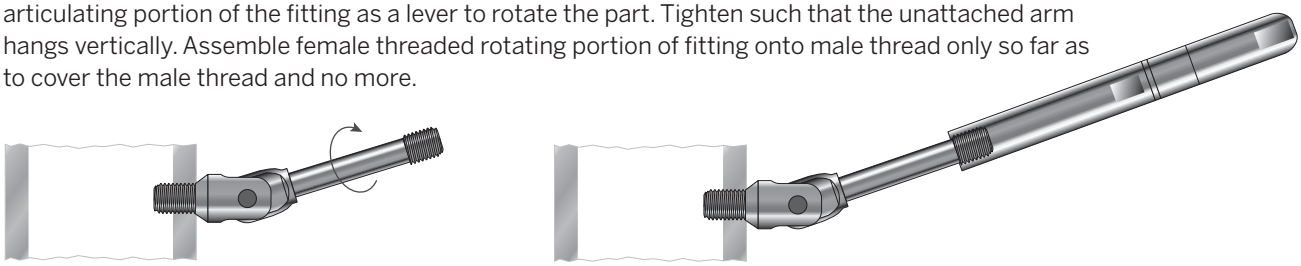


1C, D. If you are using the Wood Stair Tensioner, place lag thread into pre-drilled hole and drive lag thread into wood post using the articulating portion of the fitting as a lever to rotate the lag end of fitting. Stop turning when shoulder on fitting between lag thread and clevis makes contact with wood post face. You may continue to rotate fitting up to 1/4 turn to properly orient the fitting. If the wood is too hard to rotate 1/4 turn clockwise, it may be backed off 1/4 turn to achieve proper orientation. Assemble female threaded rotating portion of fitting onto male thread only so far as to cover male thread and no more.



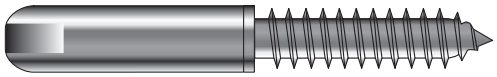
1E. If you are using the Metal Level Tensioner, hand turn the threaded bolt component of the assembly clockwise into the post, tightening with a 3/16" hex wrench. Assemble female threaded rotating portion of fitting onto male thread only so far as to cover the male thread and no more.

1F. If you are using the Metal Stair Tensioner, hand turn the threaded clevis into the post using the articulating portion of the fitting as a lever to rotate the part. Tighten such that the unattached arm hangs vertically. Assemble female threaded rotating portion of fitting onto male thread only so far as to cover the male thread and no more.



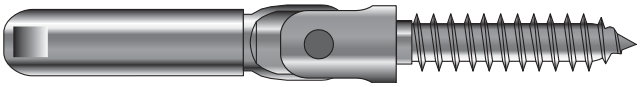
2. Go to the other end of the cable run and install the non-tensioning fitting.

Push-Lock Stop-End (non-tensioning) Fittings

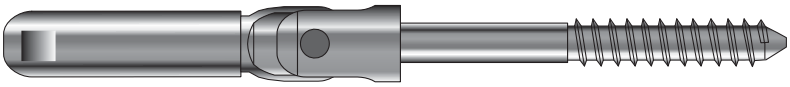


A. Wood Level Non-Tensioner

B. Wood Level Extended Length Non-Tensioner

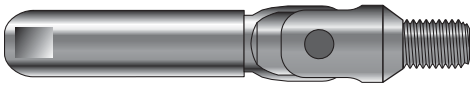


C. Wood Stair Non-Tensioner



D. Wood Stair Extended Length Non-Tensioner

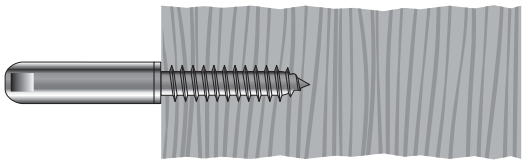
E. Metal Level Non-Tensioner



F. Metal Stair Non-Tensioner

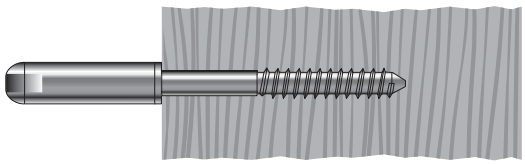
C: Drill Posts

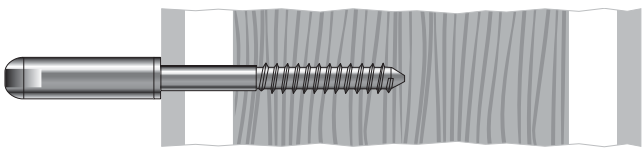
1. Make sure the holes are drilled properly in the end post where you will be installing the non-tensioner fitting. See Section A on page 1 for detailed instructions.



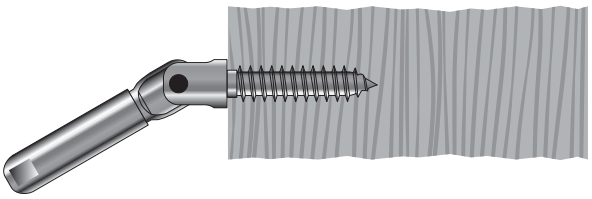
D. Install Non-Tensioning Terminal

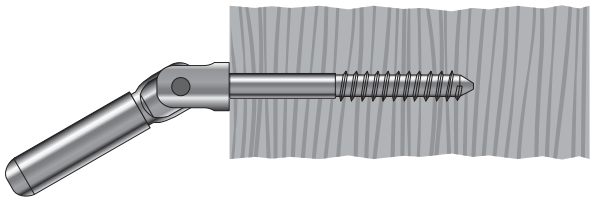
1A, B. If you are using the Wood Level Non-Tensioner or Extended Length Non-Tensioner, place lag thread into pre-drilled hole and drive lag thread into wood post using our DRIVER PL-LAG tool (or a 3/8" open-end wrench) on wrench flats milled into body of fitting. Stop turning when shoulder on fitting between lag thread and body makes contact with wood post or the sleeve..

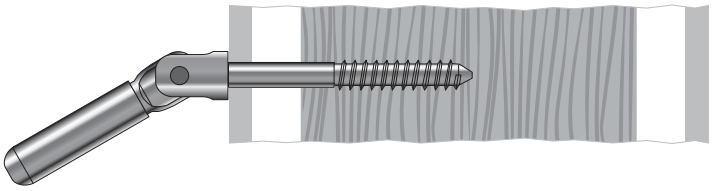




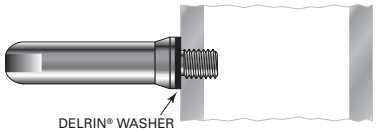
1C, D. If you are using a Wood Stair Non-Tensioner or Extended Length Non-Tensioner, place lag thread into the pre-drilled hole and drive lag thread into wood post using the articulating portion of the fitting as a lever to rotate the lag end of fitting. Stop turning when shoulder on fitting between lag thread and clevis makes contact with the wood post face. You may continue to rotate fitting up to 1/4 turn to properly orient the fitting. If the wood is too hard to rotate 1/4 turn clockwise, it may be backed off 1/4 turn to achieve proper orientation.



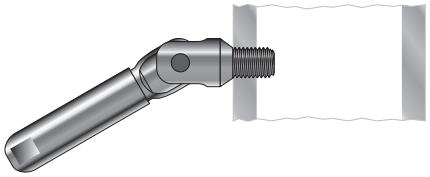




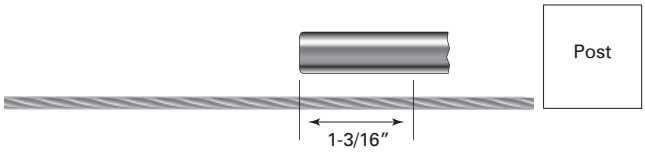
1C. If you are using the Metal Level Non-Tensioner, place a black Delrin® washer over the threaded bolt. Turn the fitting into the pre-drilled and tapped 5/16-24 hole in the post using our 3" Combo Wrench tool (or 3/8" open-end wrench) on wrench flats milled into body of fitting. Stop turning when shoulder on fitting between threaded bolt and body makes contact with metal post.



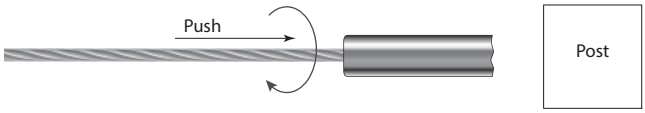
1F. If you are using a Metal Stair Non-Tensioner, hand turn the fitting into the pre-drilled and tapped 5/16-24 hole in the post using the articulating portion of the fitting as a lever to rotate the threaded end of fitting. Stop turning when shoulder on fitting between the thread and clevis makes contact with the metal post face. You may continue to rotate fitting up to 1/4 turn to properly orient the fitting.



2. Pull the cable tight and mark the cable at a point 1-3/16" from the end of the fitting away from the post. Cut the cable at the mark, using a cable cutter.



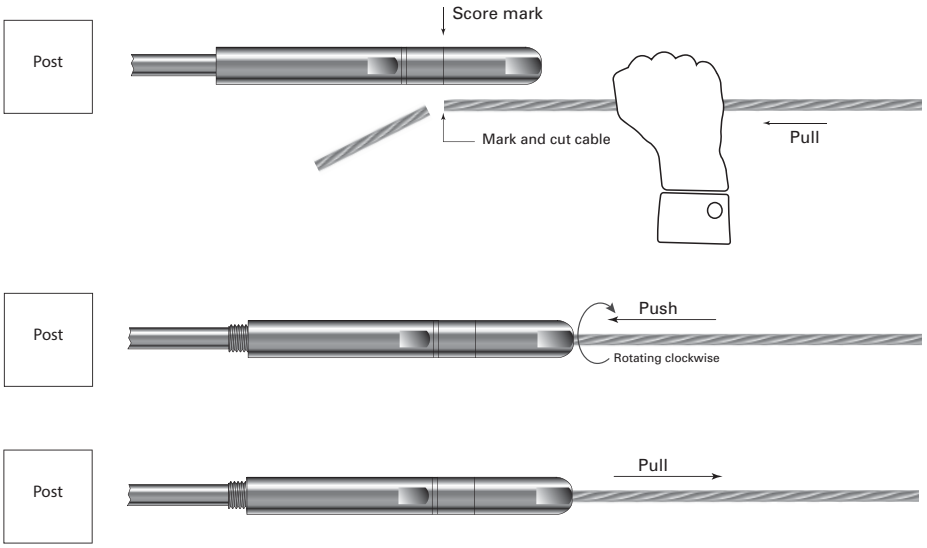
3. Push the cable into the hole in the fitting as far as it will go (approximately 1-1/16”). Twist the cable clockwise as you push it into the fitting. You will feel it slide through the jaws inside the fitting. FULL INSERTION OF THE CABLE IS CRITICAL TO FITTING PERFORMANCE UNDER TENSION. (If applicable, you will receive a PL-Key with your order. This may aid in your cable installation. Please see instructions for use of the PL-Key at the end of this section).



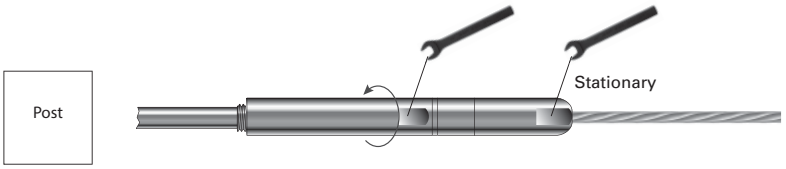
Note: If you have trouble inserting the cable into the fitting, it may be because the locking wedges have become stuck. This is not a defect! Here’s what you can do to “free the wedges” — For non-tensioning fittings for 1/8" cable, using either a RFXPL-KEY or 1/4" diameter bolt, insert the RFXPL-KEY or bolt into the hole and press until the wedges move freely. Perform the same operation for 3/16" non-tensioning fittings, 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!

E. Tension Cables

1. Feed bare end of cable through intermediate posts and repeat same steps to insert cable into pre-attached swageless tensioning fittings as non-tensioning fittings.



2. After successfully attaching the non-tensioning fitting, tension cable by holding tensioner body at 3/8" wrench flat nearest cable (do not let this section rotate while cable is inserted) and rotating female threaded section of fitting with a 3/8" open-end wrench onto threads.



3. 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" as the wedges seat.