

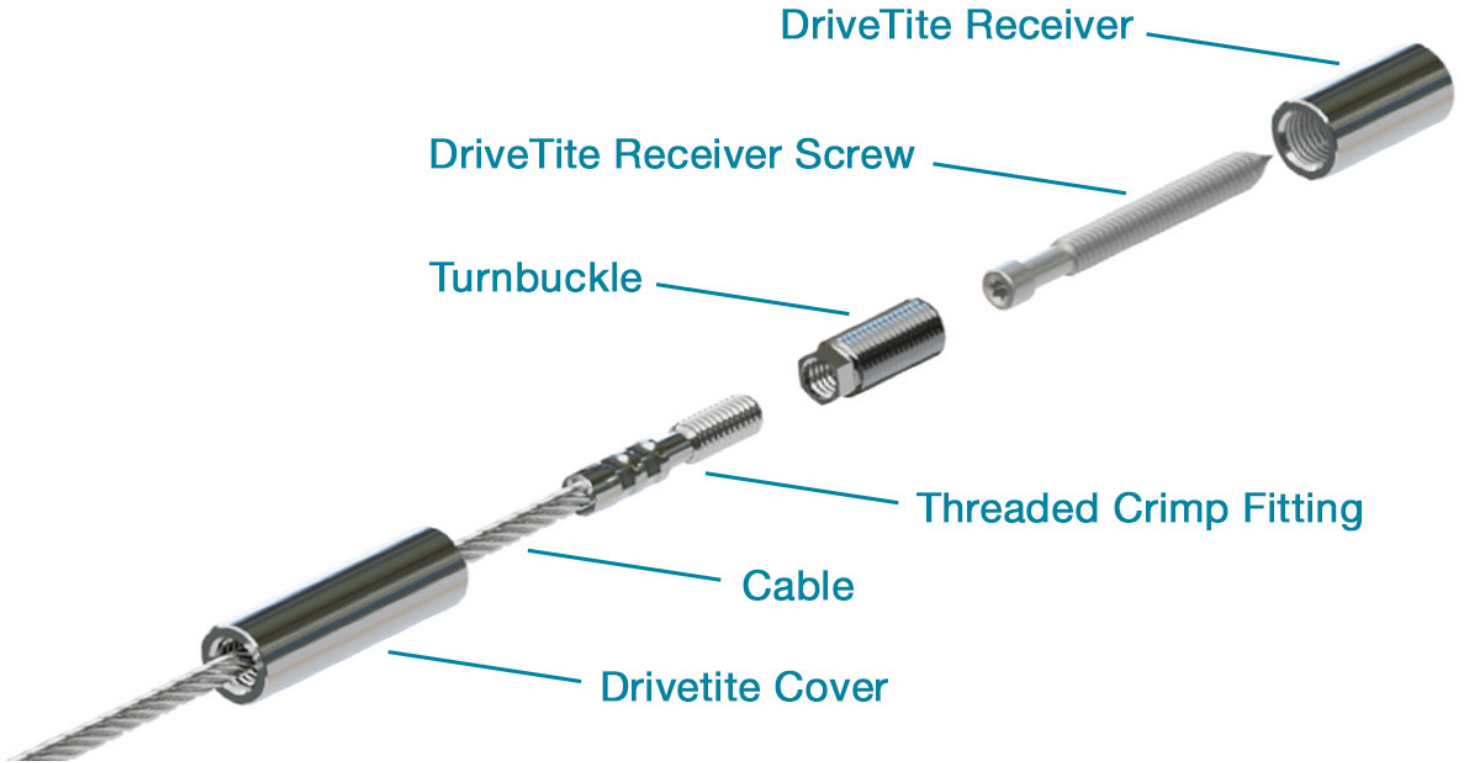


Look for this sticker on hardware bags



# Cable DriveTite - Level Run Installation Guide

## Level Cable DriveTite Assembly



### Tools and Supplies Needed for Installation

- Multi-Function Hand Tool
- Drill
- $\frac{3}{16}$ " Drill Bit
- T25 Torx Bit
- Tape Measure
- Custom DriveTite Wrench (*Available Through Viewrail*)
- Pencil
- Painter's Tape

### Things to Know Before You Get Started

- Ensure that your posts and handrail are properly installed before beginning your cable installation
- For systems using both wood post as well as Viewrail metal posts, match the hole spacing from the Viewrail metal posts
- Tip: Open your cable spool inside a 5 gallon bucket. This will help contain the cable as it expands.
- It is suggested that this be a 2 person project
- Cable DriveTite Kits are designed to fasten into wood with a Janka Rating of 690 and above - See Page 3



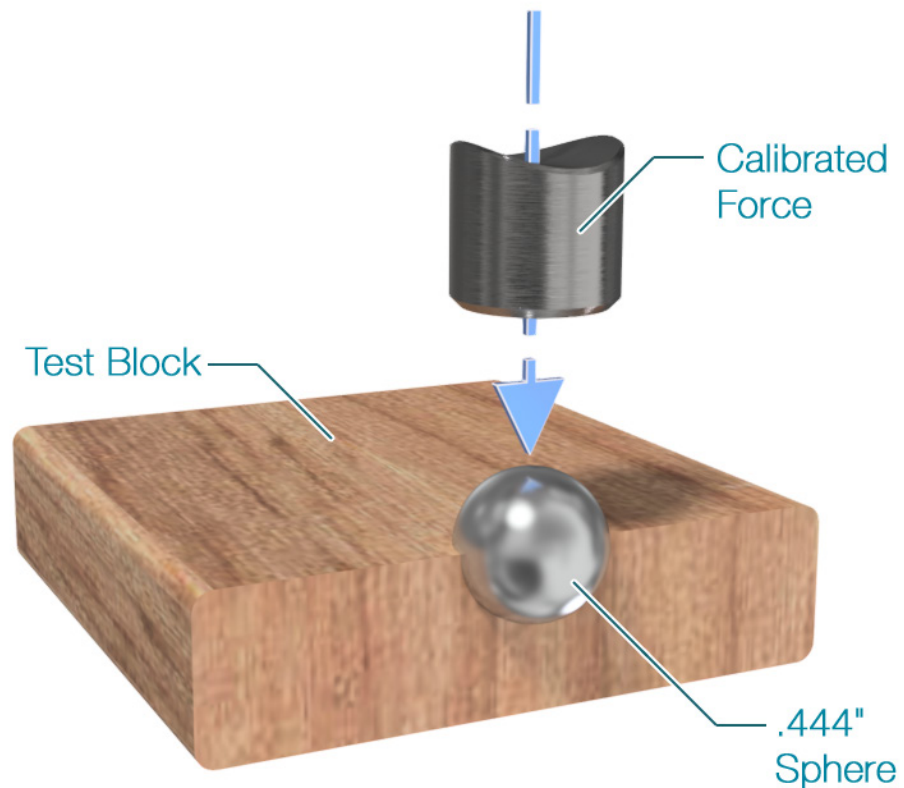
# Janka Scale

The Janka Hardness Scale was developed in the early 1900s as a way to test the density of a wood species, or specifically the resistance to denting of that wood species. To determine the Janka rating, a 0.444" steel ball is pressed into the surface of a 2" x 6" piece of wood with a moisture content of about 12%. The LBF (Pounds-Force) required to embed half the sphere's body into the piece of wood is the "Janka Rating." For example, it would take 950 LBF to embed half of the steel ball into a piece of American Cherry.

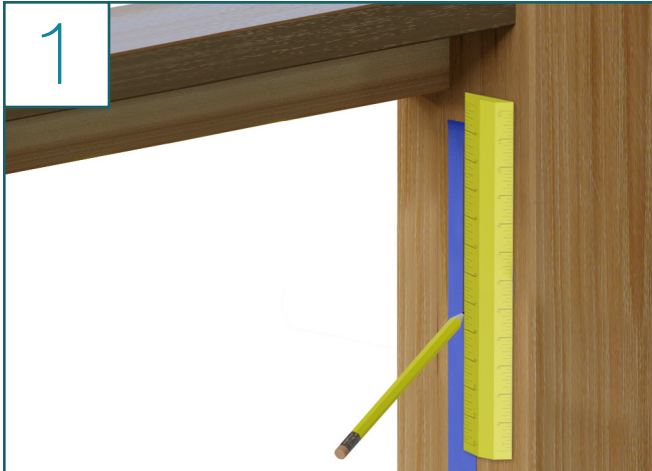
This rating is highly used in the construction industry and is most used when referring to hardwood flooring or similar applications. It is a great indicator of how resistance to denting a wood species is when considering repetitive foot traffic and the potential impact from dropped objects. Which is why it is very important to choose a wood species with a high Janka rating for your stair treads. Typically, a rating of 900 or above is acceptable for treads and hardwood flooring.

When considering our DriveTite or RodTite product, it is recommended that you use a wood species with a Janka Rating of 690 or above.

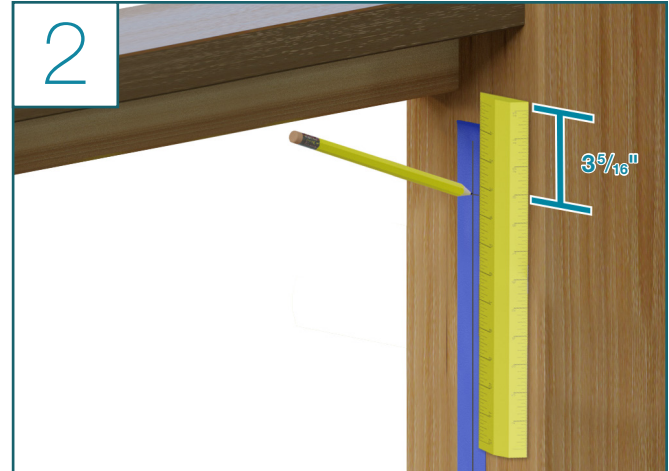
|                        |      |
|------------------------|------|
| Cedar:                 | 320  |
| White Pine:            | 420  |
| Redwood:               | 420  |
| Yellow Poplar:         | 540  |
| Alder:                 | 590  |
| Douglas Fir:           | 660  |
| Yellow Pine:           | 690  |
| Pressure Treated Pine: | 690  |
| American Cherry:       | 950  |
| Soft Maple:            | 950  |
| Black Walnut:          | 1010 |
| African Mahogany:      | 1070 |
| Teak:                  | 1155 |
| Red Oak:               | 1290 |
| Ash:                   | 1320 |
| White Oak:             | 1360 |
| Bamboo:                | 1380 |
| Hard Maple:            | 1450 |
| Sapele:                | 1510 |
| Hickory:               | 1820 |
| Tigerwood:             | 2160 |
| Santos Mahogany:       | 2200 |
| Brazilian Cherry:      | 2350 |
| Ipe:                   | 3680 |



## Level Cable DriveTite Installation Steps



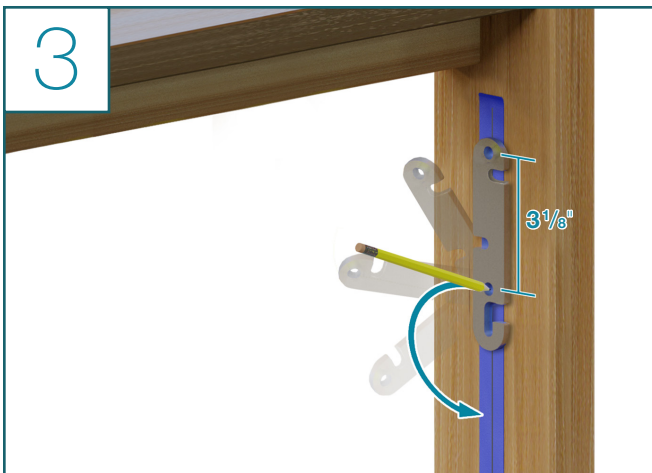
- Apply a strip of painter's tape vertically in the center of the post for marking and to protect the finish
- Run a pencil line down the center of the post



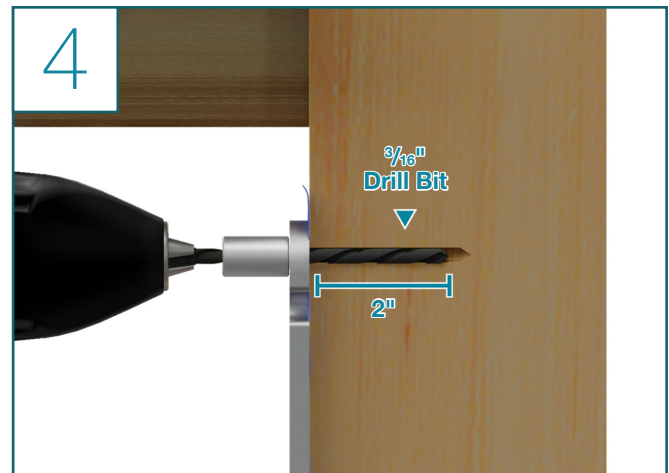
- Measure  $3\frac{5}{16}$ " from the bottom of the handrail to mark the top hole location
- This location will be used as a reference point for the next hole - And that hole, a reference for the following one, etc.



*Building Code: The space between the handrail & top cable, between each cable, and between the bottom cable & the floor, must be less than 4"*

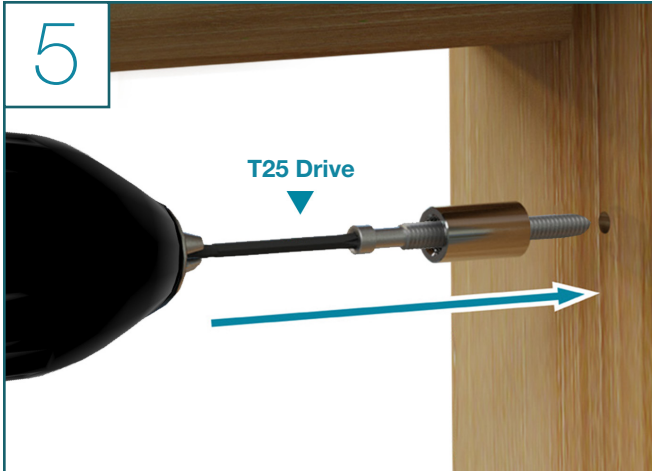


- If you purchased the Custom DriveTite Wrench, center one of the holes of the wrench on the top hole you marked in Step one
- With the wrench hanging down as shown, mark the next hole placement
- Continue down the post using the holes in the wrench to produce a  $3\frac{1}{8}$ " gap between marked locations

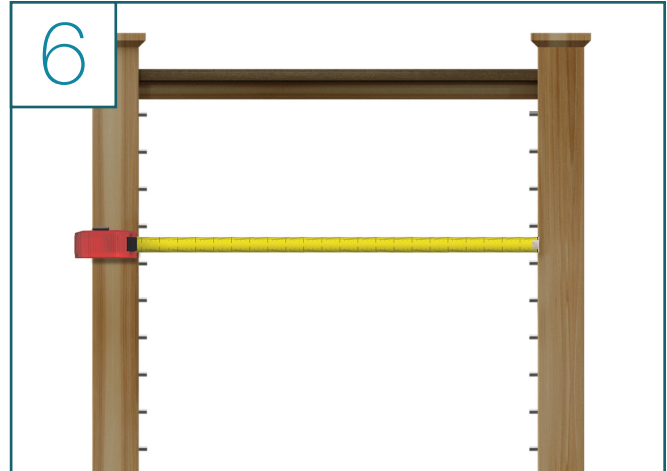


- Using a  $\frac{3}{16}$ " drill bit, drill a 2" pilot hole into the post for each run of cable you marked in Step 3

Level Cable DriveTite Installation Steps (Continued)



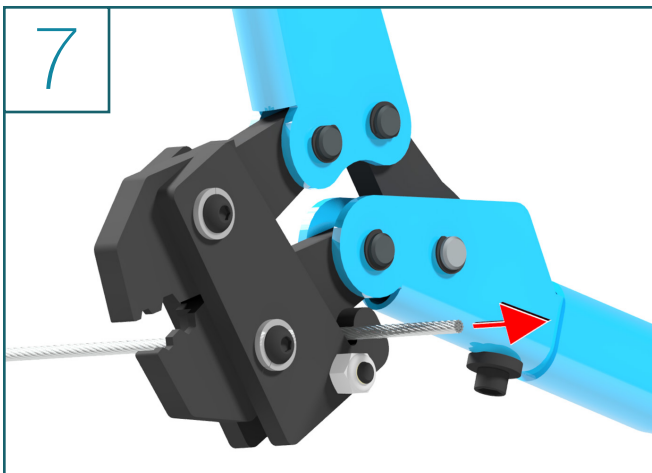
- Slide the DriveTite Receiver on to the DriveTite Screw
- Using a T25 bit, fasten the screw into the pilot holes, securing the Receiver to the post



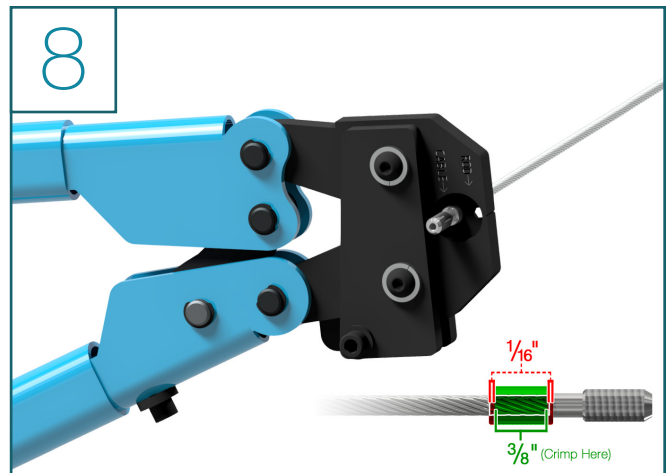
- Measure the distance between posts

Surface mounted DriveTite Receivers

- Subtract 3 1/2" from the measurement
- This will be the "Needed Cable Length"

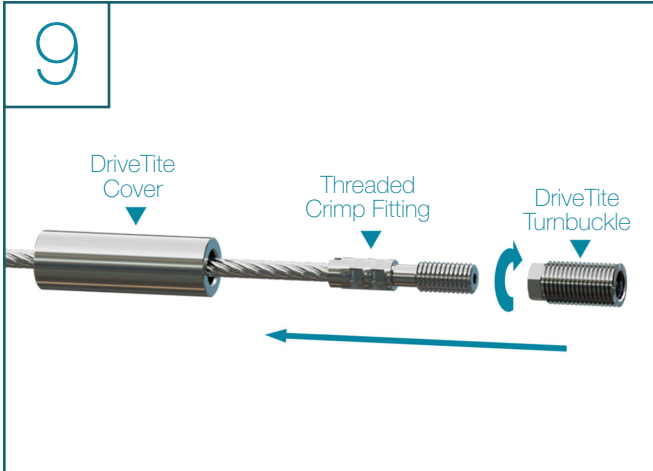


- Cut the cable to the "Needed Cable Length" measured in Step 6

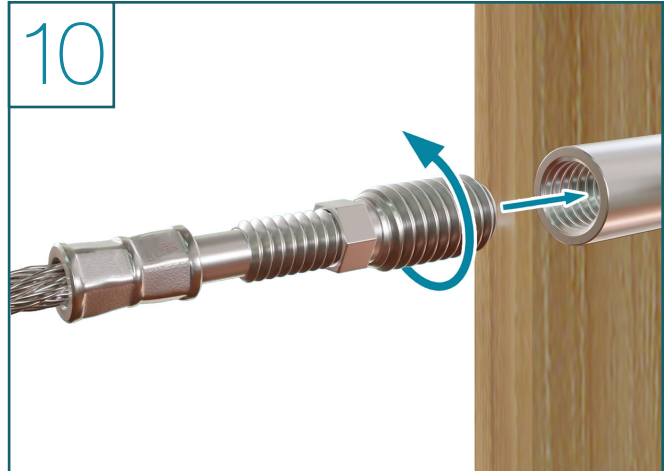


- Slide the Cover onto the cable. You can tape the cover further up the cable run with painters tape to keep it out of the way
- Insert the Threaded Crimp Fitting onto the cable, make sure it is fully seated
- Crimp the fitting onto the cable

### Level Cable DriveTite Installation Steps (Continued)



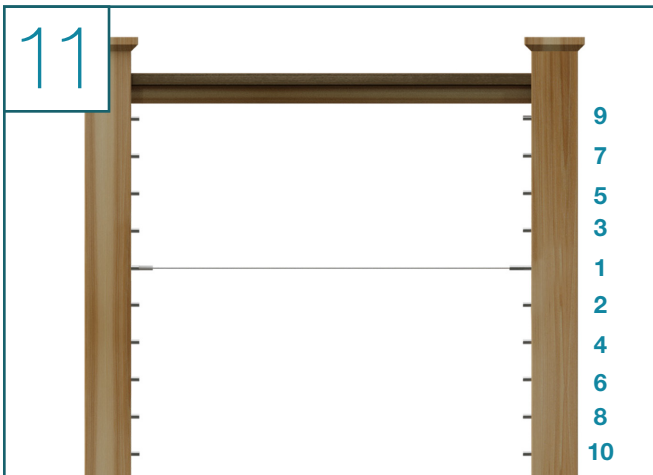
- Screw the DriveTite Turnbuckle on to the Threaded Crimp Fitting a couple of rotations



- Begin to screw the Turnbuckle into the Receiver
- Use the DriveTite Wrench to tighten the Turnbuckle
- As the Turnbuckle tightens into the Receiver, the Threaded Crimp Fitting will be pulled further into the Turnbuckle

**Note**

To help prevent the cable from spinning, you will need to use rubber sleeve and pliers to hold the cable so the turnbuckle pulls in the threaded crimp and itself rather than spinning the cable. If you are finding that is not working, then you can use Threadlocker Blue to help prevent them from spinning.



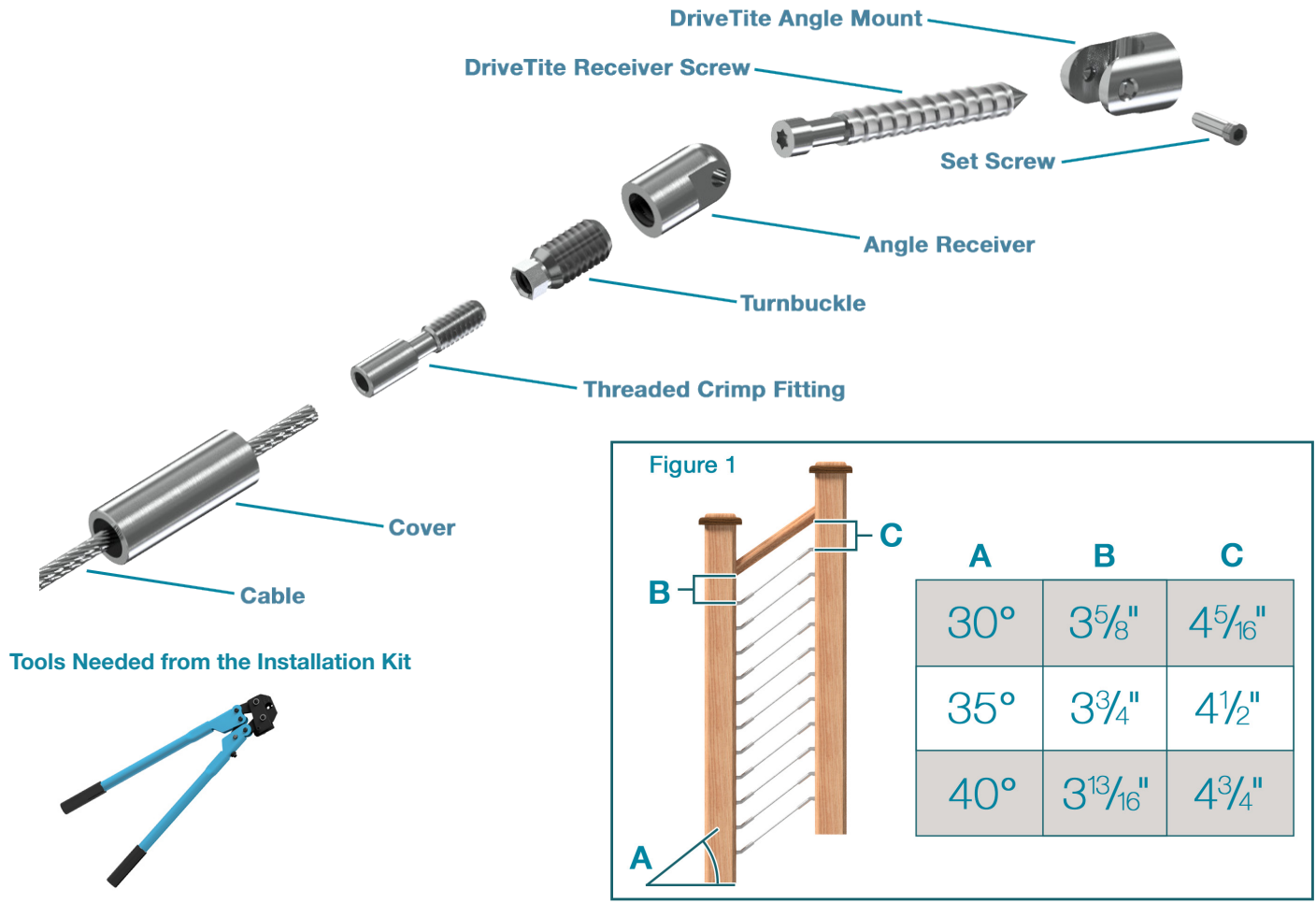
- After all cables are ready, tension in sequence

Congratulations!  
You're done with this section.

We'd love to see your work! Snap a few pics with your phone and send them to [pictures@viewrail.com](mailto:pictures@viewrail.com). Thanks for choosing Viewrail. Enjoy your new installation!

# Cable DriveTite - Angle Run Installation Guide

## Angle Cable DriveTite Assembly



### Tools Needed from the Installation Kit



Multi-Function Hand Tool

### Other Tools and Supplies Not Included in the Installation Kit

- Drill
- 1/8" Drill Bit
- T25 Torx Bit
- Tape Measure
- 7/64" Allen Wrench
- Custom DriveTite Wrench (Available Through Viewrail)
- Pencil
- Marker
- Painter's Tape

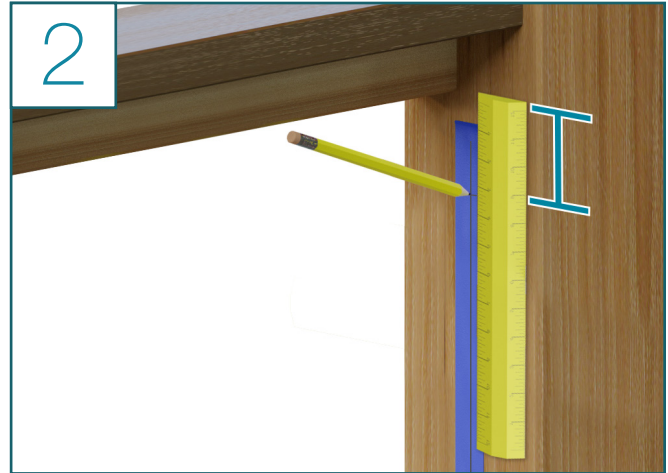
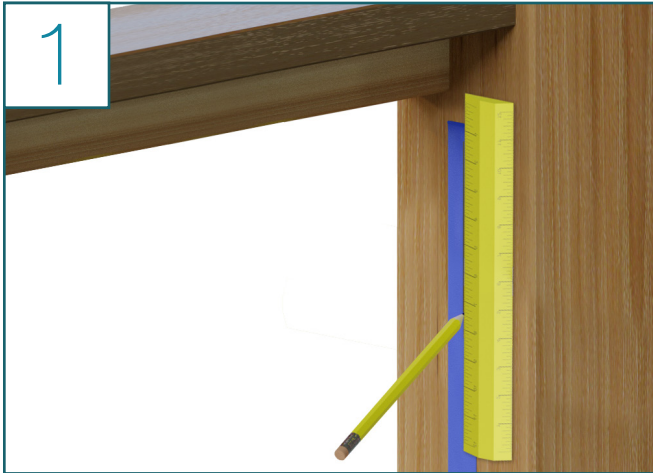
### Things to Know Before You Get Started

- Ensure that your posts and handrail are properly installed before beginning your cable installation
- For systems using both wood post as well as Viewrail metal posts, match the hole spacing from the Viewrail metal posts
- Tip: Open your cable spool inside a 5 gallon bucket. This will help contain the cable as it expands.
- It is suggested that this be a 2 person project

Visit our YouTube channel to watch helpful installation videos  
[youtube.com/viewrail](https://youtube.com/viewrail)




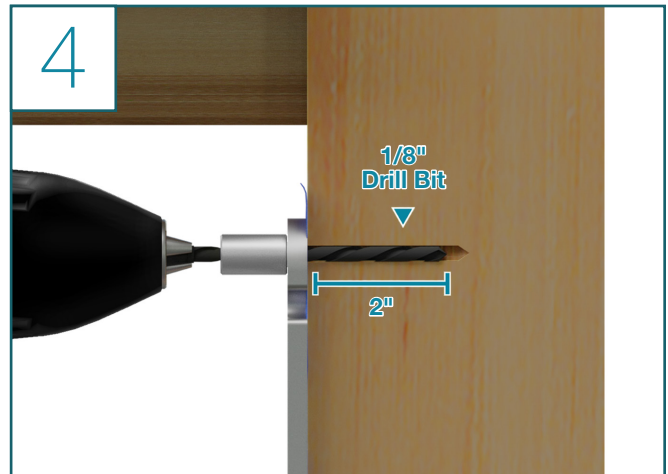
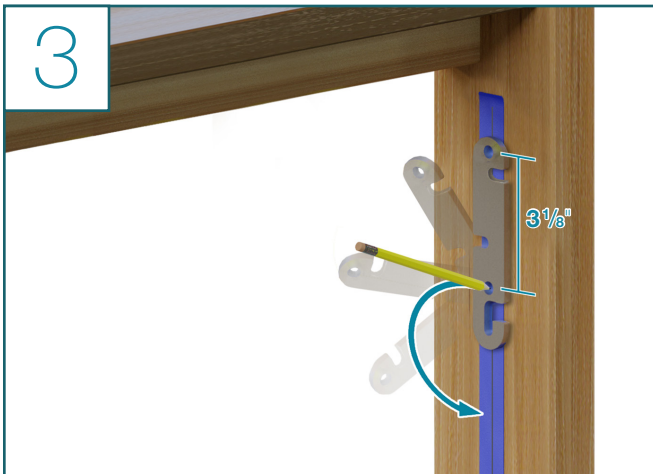
## Angle Cable DriveTite Installation Steps



- Apply a strip of painter's tape vertically in the center of the post for marking and to protect the finish
- Run a pencil line down the center of the post

- To determine your DriveTite locations, refer to **Figure 1** on the previous page
- **Column A** refers to the angle of your stairs
- **Column B** shows how far down you need to mark from the underside of the handrail on the lowest post on the run
- **Column C** shows how far down you need to mark from the underside of the handrail on the highest post on the run
- Once you have your B and C marks, each of the remaining holes will be spaced  $3\frac{1}{8}$ " down

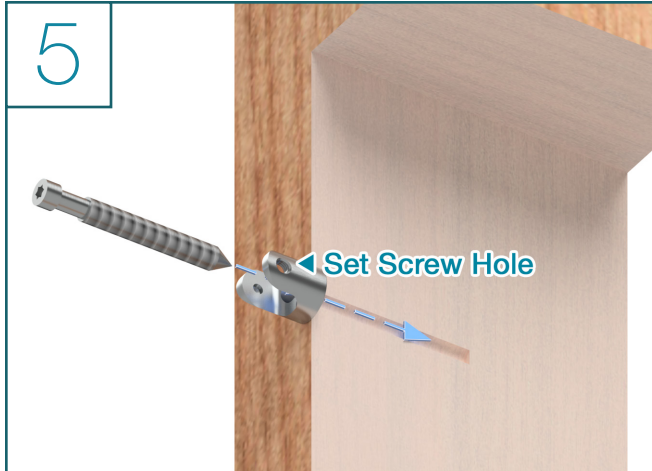
 **Building Code:** The space between the handrail & top run of infill, between each run of infill, and between the bottom run of infill & the floor, must be less than 4"



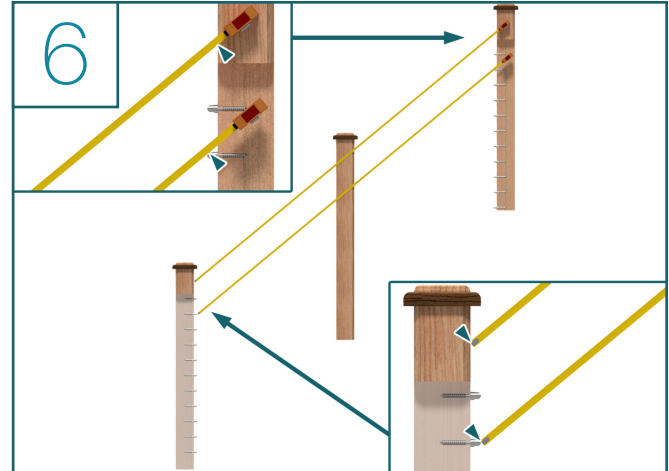
- If you purchased the Custom DriveTite Wrench, center one of the holes of the wrench on the top hole you marked in Step one
- With the wrench hanging down as shown, mark the next hole placement
- Continue down the post using the holes in the wrench to produce a  $3\frac{1}{8}$ " gap between marked locations

- Using a  $\frac{1}{8}$ " drill bit, drill a 2" pilot hole into the post for each run of cable you marked in Step 3

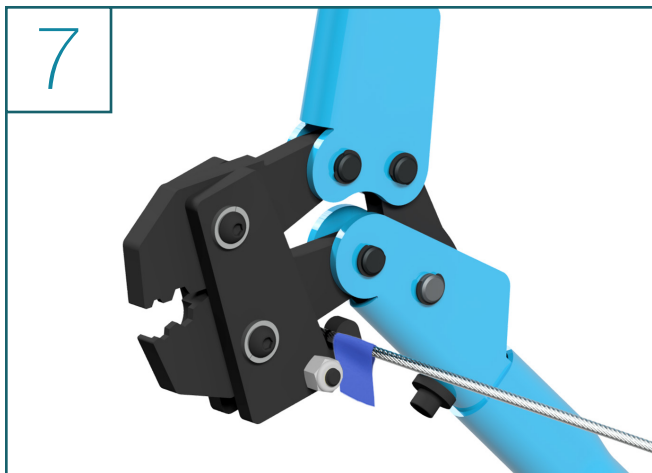
### Angle Cable DriveTite Installation Steps (Continued)



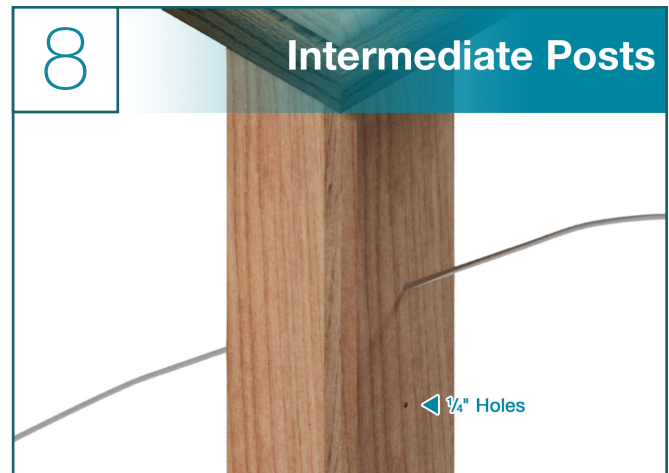
- Using the T-25 Bit, fasten the DriveTite Screw through the DriveTite Angle Mount and into the post
- Make sure the ears are vertical. You will likely have to hold the Angle Mount to keep it from turning.
  - For elevated areas, it would be best to keep the set screw hole of the Angle Mount on the inside of the run where it is easily accessed
- Fasten tightly



- There are two ways to measure for your cable cut length
- Measure from the inside face of each end post and subtract  $4\frac{1}{8}$ "
- Because the Angle Mount could depress into the wood when tightening, you can also measure from the face of each Angle Mount and subtract  $2\frac{3}{4}$ "
- These two measurements should equal the same cut length



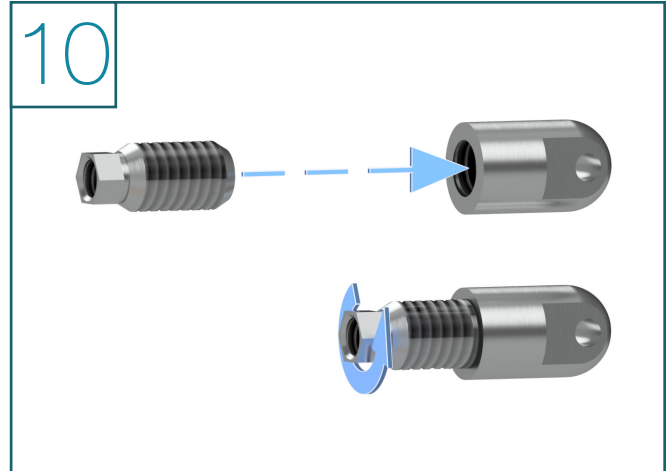
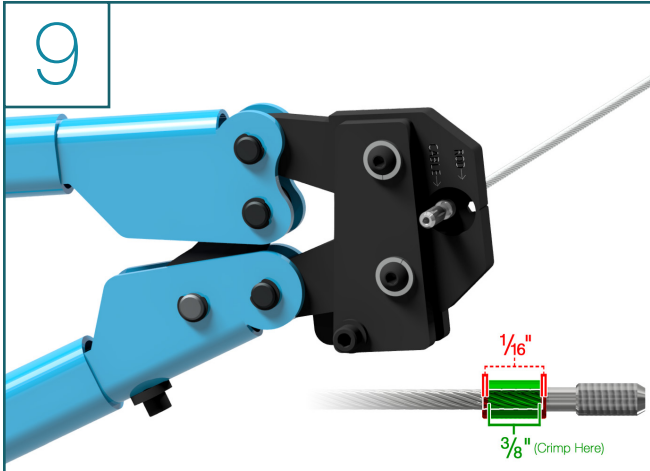
- Cut the cable to the measurement indicated in Step 6



- If you have any intermediate posts on the run, drill out the pass through holes to the diameter desired
- The cable is  $\frac{5}{32}$ " thick - It is recommended that the diameter of the holes be  $\frac{1}{4}$ "
- Run your cable through any intermediate holes
- Apply any intermediate post hardware at this point

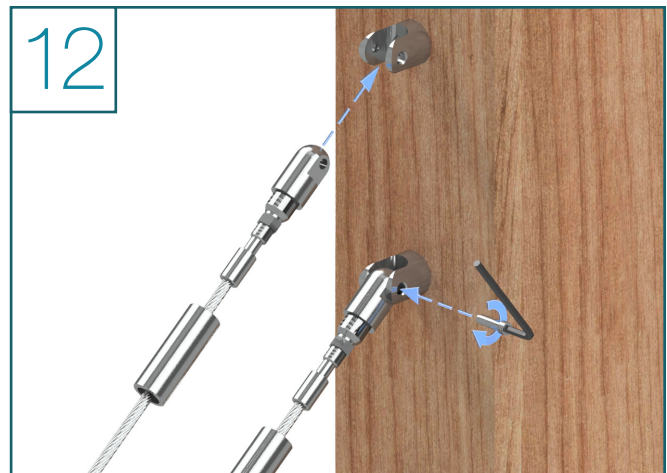
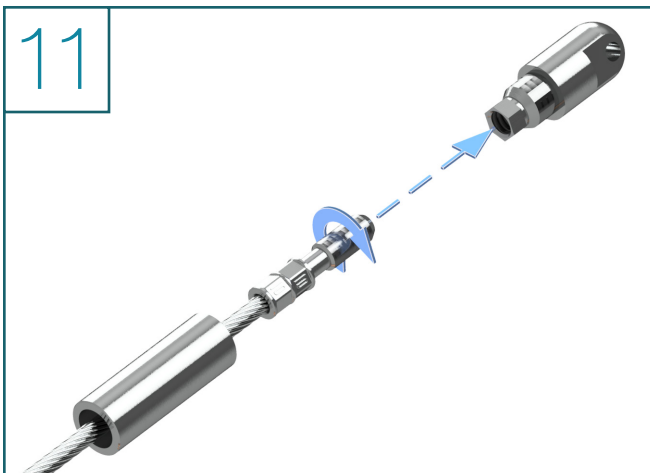


### Angle Cable DriveTite Installation Steps (Continued)



- Slide the Cover onto the cable. You can tape the cover further up the cable run with painters tape to keep it out of the way
- Insert the Threaded Crimp Fitting onto the cable, make sure it is fully seated
- Crimp the fitting onto the cable

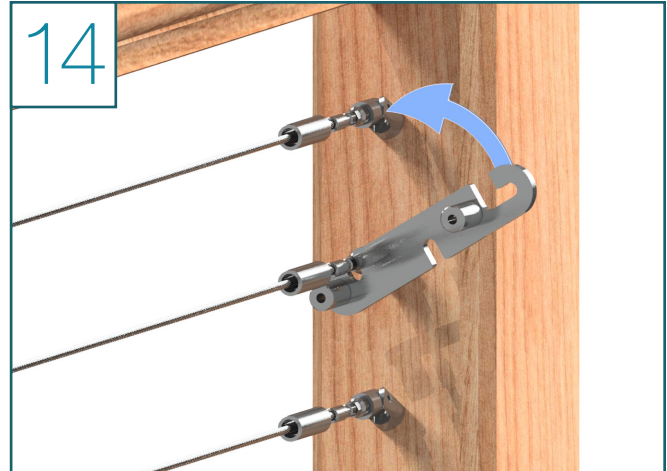
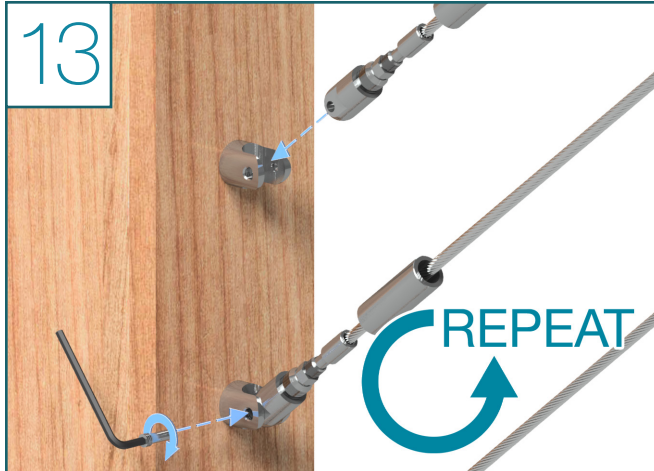
- Step 10-12 should be on one side of the run only
- Thread the Turnbuckle into the Angle Receiver 2 turns



- Thread the Turnbuckle/Receiver combo onto the Threaded Crimp Fitting about 7 turns
- There should be 2 threads visible on the Threaded Crimp Fitting still
- During the process, make sure the Turnbuckle is not threading further into the Receiver

- Take the assembled end and put the Angle Receiver inside the Angle Mount so that the set screw holes line up
- Using the  $\frac{7}{64}$ " Allen wrench, tighten the Set Screw through each
- Complete steps 8-10 for each cable on this side of the run

### Angle Cable DriveTite Installation Steps (Continued)

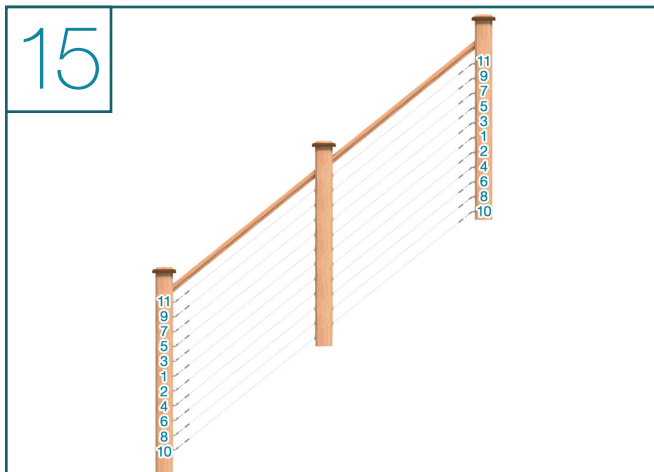


- Repeat steps 10-12 for each cable on the other side of the run
- Since one end is already fastened, if the cut length is slightly too long, tighten the threaded crimp fitting or turnbuckles marginally until the set screw fits
- If the cut length is too short, loosen the threaded crimp fittings slightly until the set screw fits

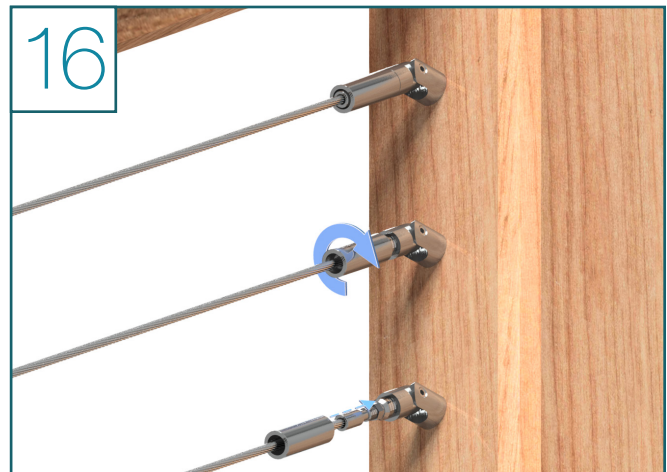
- Once both ends are attached, use the DriveTite Wrench to tighten the Turnbuckles' hex heads
- As the Turnbuckles tighten into the Receivers, because of the opposite threading, they will also pull in/tighten their corresponding Threaded Crimp Fittings
- Refer to Step 15 for the correct tightening pattern

**Note**

To help prevent the cable from spinning, you will need to use rubber sleeve and pliers to hold the cable so the turnbuckle pulls in the threaded crimp and itself rather than spinning the cable. If you are finding that is not working, then you can use Threadlocker Blue to help prevent them from spinning.



- Tighten each side in the represented sequence
- You can tighten one side and then the other until snug



- Once the Turnbuckles are tightened, remove any tape and slide each Cover up to the Turnbuckle
- Thread this onto the remaining exposed threads of the Turnbuckles for a tight seam

## Congratulations! You're done with this section.

We'd love to see your work! Snap a few pics with your phone and send them to [pictures@viewrail.com](mailto:pictures@viewrail.com). Thanks for choosing Viewrail. Enjoy your new installation!