Safety Information

-Be sure to work from secure and safe platforms and ladders
-Secure area underneath your work space to make sure nobody gets hurt in case you drop something
-Edges of cut copper are sharp; be sure to wear propper gloves when handling cut gutter
-When cutting copper, be sure to wear approved safety goggles
-Never install or work on damaged roof material or structure
-When you install gutters, make sure the collected water can run off without causing damages
-Never modify parts without consulting a professional or Slate and Copper's technical support team
-Dispose of leftovers and off-cut safely and in accordance with best practices
-Never leave any parts or tools unsecured on your roof, they might fall down causing serious damage or injury
-Never do installation work alone- always work in a team
-Check for power lines
-Never install on icy or slippery roofs or in windy conditions

-IF YOU DO NOT FEEL YOU CAN COMPLETE THIS WORK SAFELY, CALL A LOCAL CONTRACTOR

WARNING:
Copper is a sharp metal and will bite you if you let it. Firmly and securely hold all pieces when working with them. Do not slide your hands or fingers along any straight or finished edges. This is partly the reason why we wore gloves in our demonstration. Wearing gloves will also help minimize the fingerprint marks on the gutter system. The best gloves to use especially for grip are ones with the palm and fingers coated with a rubber or latex material.

Installing Downspout

Tools Required:

* Tape Measure
* Metal Scribe
* Cutting Tool- this could consist of combinations of many things (and here are two)
* Hack Saw with new blade (preferably)
* Miter Box (handy for straighter cuts)
* Compound Miter Saw with either:
* Solid Carbide Metal Cutting Blade (this blade leaves burrs, so you will need a utility knife with a curved or "Hook Blade" as it's known to help scrape off the burrs)
* Slate and Copper's Gutter Cutting Blade (gives you that factory cut every time, effortlessly).

Tools Required if Riveting the Downspout together:

* Cord or Cordless Drill (3/8" size drill is perfect)
* 1/8" Drill Bit for Drill
* Pop Rivet Gun
* 1/8" Diameter Copper Rivets

Slate and Copper's Plain Round Seamless Downspout sections are very easy to install. How you ask? Because much like the elbows the downspout is flanged on one end, so they slide right into each other making installation easier.

Part 1

Part 1-joining two pieces of downspout

Picture step 1 shows the two pieces of downspout we are joining together, but it wouldn't matter if they were longer pieces it's just as easy. Simply line the downspout up, and insert it into each other (pictures Step 2 & Step 3). The only thing left to do is to put a rivet on each side of the downspout to lock the two pieces together. You do not need to solder the seam since there is sufficient overlap. If you wanted to make the pipe a solid one piece unit by soldering it together, then you certainly could if you wanted to. We also recommend lining up the welded seams on any overlapped downspout sections so they are facing the wall, making it the back of the downspout.

step 1

In reality cutting a downspout to length, and/or joining two downspouts together to make a taller downspout is a little more involved. Firstly; we have the easy issue, the overlap of downspout into another downspout, or downspout into a downspout connector consideration to account for on tall downspouts.

Part 1

Depending on what size downspout is being used, and weather you are joining into the top flange of the downspout, or into a downspout connector into a small cut section of downspout, they each have different overlap dimensions and you need to know them. So keep this in mind when measuring, and before you cut any downspout to length. To figure the overlap do the following; securely slide the bottom of the downspout into a downspout connector, or the flanged end on the top of a piece of downspout, and make a mark on the side of the downspout where the two pieces join together. When making a mark on the side of the downspout make it small but visible, and use a metal scribe or a nail will work for this too. Secondly; unless you are fortunate enough to always be using two top sections of downspout (flanged ends) every time to join together to make taller downspouts, then the smaller cut section of downspout will need to have a downspout connector installed at some point.

step 2

For example; if we have two downspout locations (11' and 15') that are taller than one 10' section of downspout we need to cut one piece of downspout to use as a short section to join into the full piece of downspout to make our taller downspout. As long as the two locations equal less than or right around 30' we would use 3 full pieces of downspout total, 2 full pieces, and the third to make our two cut sections. One of our cut sections of pipe will be utilized for its top flange. For the other cut section we will need a downspout connector to be able to join it into the bottom of a full downspout piece.

Part 1

A few last things to take into consideration before cutting the downspout to length; are you draining the bottom of the downspout onto the ground, are you draining the bottom of the downspout into a drainage pipe, or are you using an inline cleanout at the bottom of the downspout. If you are draining the bottom of the downspout onto the ground, then you have a little more freedom with the measurement. Remember, an elbow is typically installed at the bottom of the downspout to kick the water away from the building. If you are draining into an underground drainage pipe at the bottom of the downspout, then you will need to account for a couple of inches of overlap down into the drainage pipe sticking up out of the ground. If you are using an inline cleanout at the bottom of the downspout, then you need to take those overlap measurements into consideration as well. One last thing to remember before cutting the downspout to length; it is easier to cut a little bit off, but it is much harder to add it back on. The natural overlap of the pieces into each other allows for a little bit of play or movement if needed.

To be able to correctly measure for the height of the downspout we need to have our downspout brackets installed and our elbow offset built. Why? Because in order to figure out our elbow offset we need to know what our distances and measurements are. In order to build the elbow offset we need to know how far off the wall the downspout is going to be, and how far up or down the wall our elbow offset is going to put us.

step 3