## 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 INLINE CLEANOUT**

#### **Tools Required:**

\* Tape Measure\* Metal Scribe

Tools Required for Riveting the ILCO to the Downspout:

\* Cord or Cordless Drill (3/8" size drill is perfect)

- \* 1/8" Drill Bit for Drill
- \* Pop Rivet Gun
- \* 1/8" Diameter Copper Rivets

The installation of the inline cleanout is one of the easiest pieces to install. In picture Step 2 we show a small downspout section and the ILCO. The top of the cleanout is flanged, like the top of the downspout, to make it very easy to slide a downspout section of any length into it (see picture Step 3). Picture Step 4 shows the inline cleanout installed at the bottom of a downspout section. The only thing left to do, is to put two rivets on each side of the ILCO to secure the cleanout to the downspout.



step 1

The inline cleanout (ILCO) is use as a leaf and debris catcher, and helps keep most of the leaves and debris from entering into the underground drainage system. The ILCO can be installed anywhere inline with the downspout as an easy access clean out bin. Typically, they are installed at/ or near the bottom of the downspout because this is one of the easiest access points to open the trap door (see picture Step 1).

## PART 1

#### Four things to keep in mind when installing this piece:

1. Before cutting the downspout to length make sure to account for the correct height of the ILCO. Since we are basically replacing a piece of downspout with the inline cleanout.

2. Make sure to account for the overlap of the downspout into the ILCO. To do this: securely slide the ILCO onto the bottom of a piece of downspout, and make a mark on the downspout where the two pieces join together see arrow in picture Step 4Arrow. When making the mark on the downspout use a metal scribe, a nail will work for this too. Make the mark small but visible in a inconspicuous place on the downspout near the welded seam since the welded seam should be the back of the pipe anyway. Take the ILCO off the downspout and measure from the bottom of the downspout to the mark. What ever that measurement is you will need to add that number to the downspout before you cut the downspout to length.



step 2



step 3

Part 1

3. Make sure to account for the overlap at the bottom of the ILCO down into your drainage pipe coming up out of the ground. Typically, newer underground drainage systems are a PVC material, and there is a pipe that comes up out of the ground so a downspout pipe can be slid down inside of it for drainage. Normally, downspout can either be slid down inside the PVC pipe a couple of inches, or a cap piece can be put over the pipe and a hole is drilled into the cap piece so the downspout or ILCO can slid down inside of the cap piece. If you notice at the bottom of the ILCO there is a ring, and this ring is designed to slide down into and rest on top of a capped piece of pipe. Provided of course, a hole the size of the downspout is drilled or cut out of the cap, so a pipe or ILCO can slide down inside of it.

4. Before you secure the ILCO to the downspout with rivets, install the ILCO in such a way so the trap door can be open completely for cleaning out the debris. Keep in mind any landscaping that may conceal any drainage pipes sticking up out of the ground and/or future overgrowth of the landscaping preventing you from opening the ILCO fully.



step 4



step 5