

# TOOLS & INSTALLATION GUIDELINES

## TOOL & JAW COMPATIBILITY

Streamline® ACR Press Fittings are compatible with the Milwaukee® Streamline® ACR Press Jaws and full-sized press tools such as Milwaukee® M18™ Force Logic™ Press Tools for 1/4" to 1-1/8" OD.

## DISTANCE BETWEEN JOINTS PRESSING NEAR AN EXISTING PRESS CONNECTION

TUBE DIAMETER	MINIMUM DISTANCE REQUIRED	
OD INCH	INCH	MM
1/4"	1/4"	7
3/8"	1/4"	7
1/2"	1/4"	7
5/8"	1/4"	7
3/4"	1/4"	7
7/8"	1/4"	7
1-1/8"	1/4"	7

## SOLDERING OR BRAZING NEAR AN EXISTING PRESS CONNECTION

Brazing near Streamline® ACR Press Fittings should be avoided. The installer should take precautions to keep the press connection cool. These methods may include:

1. Wrapping the press connection with a cold wet cloth.
2. Fabricating solder connections prior to installing the press fitting.
3. Applying heat barrier spray, gels, or putty to avoid heat transfer to the press fitting.

TUBE DIAMETER	SOLDERING	BRAZING	
	MINIMUM DISTANCE	MINIMUM DISTANCE WET WRAPPED	MINIMUM DISTANCE UNPROTECTED
OD INCH	INCH	INCH	INCH
1/4"	1-1/2"	5"	10"
3/8"	1-1/2"	5"	10"
1/2"	1-1/2"	5"	10"
5/8"	1-1/2"	6"	12"
3/4"	2-1/4"	7"	14"
7/8"	3"	8"	16"
1-1/8"	4"	11"	22"

## PRESSING NEAR AN EXISTING SOLDERED OR BRAZED CONNECTION

It is important that there is no foreign debris or residual brazing on the tubing to be inserted into the Streamline® ACR Press fitting. The surface condition on the area of press joint should be clean and free from debris and comply with ASTM-B280 or ASTM-B88 type K or L. The area of the braze joint shall be cooled down before insertion.

TUBE DIAMETER	MINIMUM DISTANCE REQUIRED	
OD INCH	INCH	MM
1/4"	3"	25.4
3/8"	3"	25.4
1/2"	3"	25.4
5/8"	3"	25.4
3/4"	3"	25.4
7/8"	3"	25.4
1-1/8"	3"	25.4

## ELECTRICAL CONTINUITY

Streamline® ACR Press Fittings maintain ground continuity without the need for additional ground continuity straps. The fittings must not be used as a source of electrical ground.

## UNDERGROUND BURIAL

Streamline® ACR Press fittings are approved for underground installation in accordance with the latest applicable building codes for the state and local jurisdiction. In addition, underground joints should be wrapped in 3M™ Scotchrap™ Tape 50, Shurtape® PW100 or a comparable impermeable coating system designed to protect joints from moisture, debris, corrosion and other soil stresses.

When the system is embedded in concrete, tubing must be covered a minimum of 3/4 inch and installation must comply with IBC Section 1906.3 or UBC Section 1906.3, as applicable.

**TESTING INSTRUCTIONS FOR STREAMLINE® ACR PRESS FITTINGS:**

After installing Streamline® ACR Press fittings, the system shall be tested for leaks. This can be done by pressurizing the system with dry nitrogen to a minimum of 50% of the system maximum operating pressure, up to 700 PSI. If holding pressure for extended periods (up to 24 hours), then temperature impacts may need to be taken into account. System leaks can be detected by using a soapy water spray or by utilizing a tracer gas and electronic leak detector.

Any leaks that are identified will need to be cut out and replaced. When replacing a fitting, installers should carefully inspect the surface of that tube before using another fitting to ensure a longitudinal scratch or other surface defect will not result in another leak. It is not allowable to braze the end of a leaking fitting. Always conduct a subsequent pressure test after any repairs are made. Federal, state, and local codes and regulations governing installation and testing must always be followed.

**SPECIFICATION LANGUAGE:**

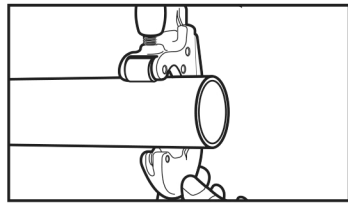
Mechanical ACR Press Fitting: Shall conform to material requirements of ASME B16.22 and be listed to UL 207. Primary and secondary sealing rings for press fittings shall be HNBR and factory installed.

- a. Continuous Operating Pressure: 700 PSI / 48 BAR Max
- b. Continuous Operating Temperature: -40°F / -40°C to 250°F / 121°C
- c. Factory Installed HNBR Engineered Sealing Ring
- d. Sealing Ring Temperature Rating: -40°F / -40°C to 300°F / 149°C

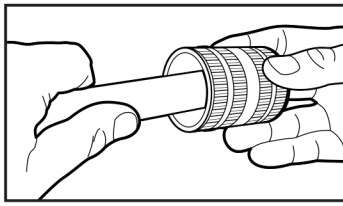
-OR-

Mechanical ACR pressed copper shall conform to the approved jointing manufacturers listed below.

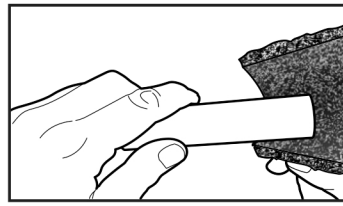
- 1. Mueller Streamline® ACR Copper Press Fittings



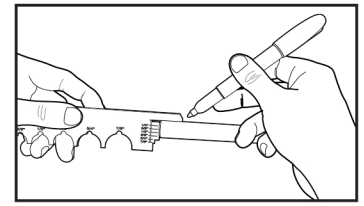
**1** Cut tube square using a tube cutter or fine tooth saw.



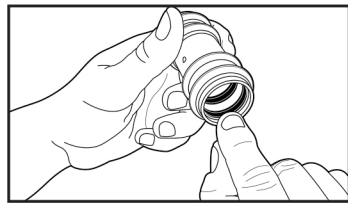
**2** Deburr tube ID & OD using a deburring tool. Ensure tube ends are free of any burrs or sharp edges.



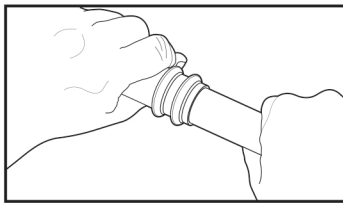
**3** Clean and smooth tube surface using abrasive pad. Tube surface should be free of indentation, scratches and deformations.



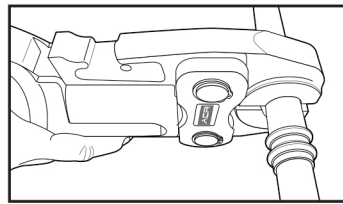
**4** Mark tube to proper fitting insertion depth with the Streamline® ACR Press Gauge or use the insertion depth chart below.



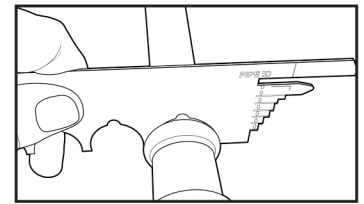
**5** Check both fitting beads to ensure two seals per cup are present.



**6** Slightly rotate the fitting while sliding it onto tube. Slide all the way to insertion mark & make contact with stop.



**7** Place press jaw over both beads at a right angle to the tube. Start the pressing process. See tool manufacturer for tool instruction.



**8** Verify connection is secure using the Streamline® ACR Press Gauge between o-ring beads. Rotate gauge to avoid interference with flashing.

**Streamline® ACR Press Fitting Insertion Depth Chart (1/4" - 1-1/8")**

Tube Size (OD)	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1-1/8"
Insertion Depth	1"	1-1/16"	1-3/16"	1-5/16"	1-3/8"	1-7/16"	1-1/2"

Failure to follow all instructions could affect joint/system integrity and may lead to property damage. Call Customer Service at 1-800-FITTING if you have any questions or need assistance.



**Eye and hand protection must be worn.**

### **⚠ WARNING**

With approved press tool & jaws, such as the Milwaukee® Streamline® ACR Press Jaws. Failure to use correct jaws will affect joint/system integrity & may lead to property damage. Please see specific tool manufacturer for tool instruction.