

# ChamFlex® “Class A” Fire Rated Push-To-Connect Hose Installation Instructions

- A) All applications should be checked to ensure that the proper hose assembly lengths are being installed:
- Hose assemblies should not be installed in a “stretched” (taut) fashion. Some expansion and contraction of the hose assembly can occur due to temperature variation, system pressures, and system cycling (see Figure #1).
  - All hose assemblies should be routed properly to avoid contact with other surfaces that could possibly cause “chafing” (abrasion of the wire braided reinforcement).
  - The use of elbows and adapters should be considered to relieve hose “strain” (see Figure #2). Do not use plastic fittings or adapters.
  - Hose assemblies should not be “bent” past the minimum bend radius requirements listed in the chart below. Hose assemblies showing evidence of “kinking” (being bent beyond the recommended bend radius) should not be installed (see Figure #3).
- B) All hose assemblies should be installed in the following fashion so that no “twisting” occurs:
- Solid male pipe thread (NPT) ends should be installed first unless they are being connected to a “swivel” female (NPT). The entire hose assembly must rotate during the tightening of this connection in order to avoid hose tube damage.
  - The flared adapter on the “union” (female swivel) end should be removed with the male pipe (NPT) end of the adapter connected to the appropriate port first. Thread sealant or thread tape should not be used on “flared” connections. A watertight seal between male and female JIC connections is achieved by a metal-to-metal seal. Additional thread sealant or thread tape should not be applied to male pipe thread (NPT) ends where factory installed thread sealant is already present.
  - The last step is to reconnect the flared swivel female coupling to the flared end of the adapter in a manner that ensures that the hose assembly is not twisted (see Figure #4).
- C) The use of dielectric unions is at the sole discretion of the end user.

## Push-To-Connect Fitting Assembly Procedure

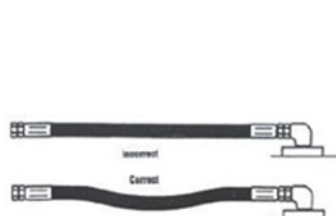
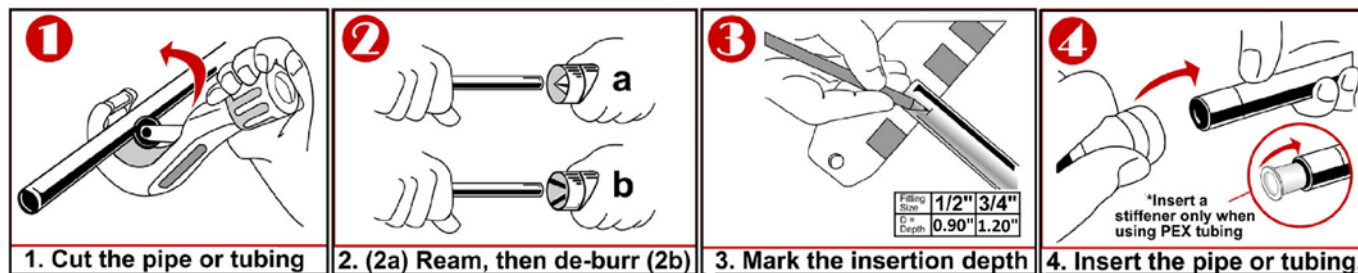


FIGURE 1 — HOSE AND MACHINE TOLERANCES

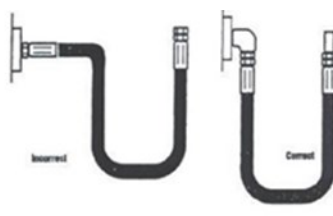


FIGURE 2 — ELBOWS AND ADAPTERS

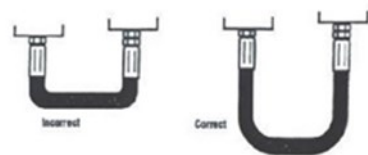


FIGURE 3 — MINIMUM BEND RADIUS

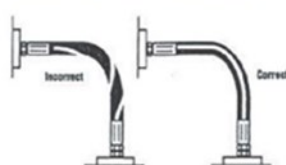


FIGURE 4 — TWIST ANGLE AND ORIENTATION

## Push-To-Connect Specifications

- Tube end conforms to ASSE 1061
- IAPMO Listed
- Working Pressure: up to 200 PSI
- Temperature Range: 0°F to 200°F

## Push-To-Connect Approved Tubing

- ASTM B88 tube types K, L, M Drawn copper tube and annealed copper tube
- CPVC water tube per ASTM D2846/2846M-99
- PEX water tube that meets the requirements of ASTM F876, F877 with tube support

## **CAUTION:**

- Hoses are not rated for potable water or open-loop systems.
- Disconnect sweat adapters from hose prior to soldering onto piping; Allow all sweat fittings/adapters/tubing to cool prior to hose installation
- Chamberlin recommends maintaining appropriate water treatment & chemistry, system straining, and routine maintenance/inspection
- Avoid exposure to excessive heat or cold, salt water, chemicals, flux and solder drips, or other contaminants. Shield hoses when necessary
- Parallel insertion of Push-To-Connect fittings on a length of solder-free, squarely cut, completely round, burr-free tubing is critical.



**NO PIPE DOPE — NO THREAD TAPE**

**DO NOT PUT ANYTHING ON THE**

**JIC FITTINGS**



**DO NOT EXCEED BEND RADIUS**

**ChamFlex**<sup>®</sup> hose assemblies have superior flexibility due to their unique construction but everything has its limits. Please refer to the installation instructions for the minimum bend radius of your hose assembly.



**PROTECT YOUR HOSE FROM  
FLUX & SOLDER**

**ChamFlex**<sup>®</sup> hose assemblies will be damaged if flux & solder is allowed to drip onto them during installation. Be sure to protect your hose assemblies to prevent future problems.

To insure proper installation, hose assemblies must be installed according to instructions. Chamberlin Rubber Company, Inc. will not be responsible for failed hose assemblies and/or subsequent damage that occurred by failing to follow the provided Installation Instructions as well as the Safety Guide. Because Chamberlin cannot control conditions and methods of application, the purchaser/end user must make the final determination of product compatibility, fit, application, and design requirements as well as conformance to local, state, and federal regulations.