



OVERBUILT IS AN UNDERSTATEMENT<sup>®</sup>



*SharkBite*<sup>®</sup>  
Connection System



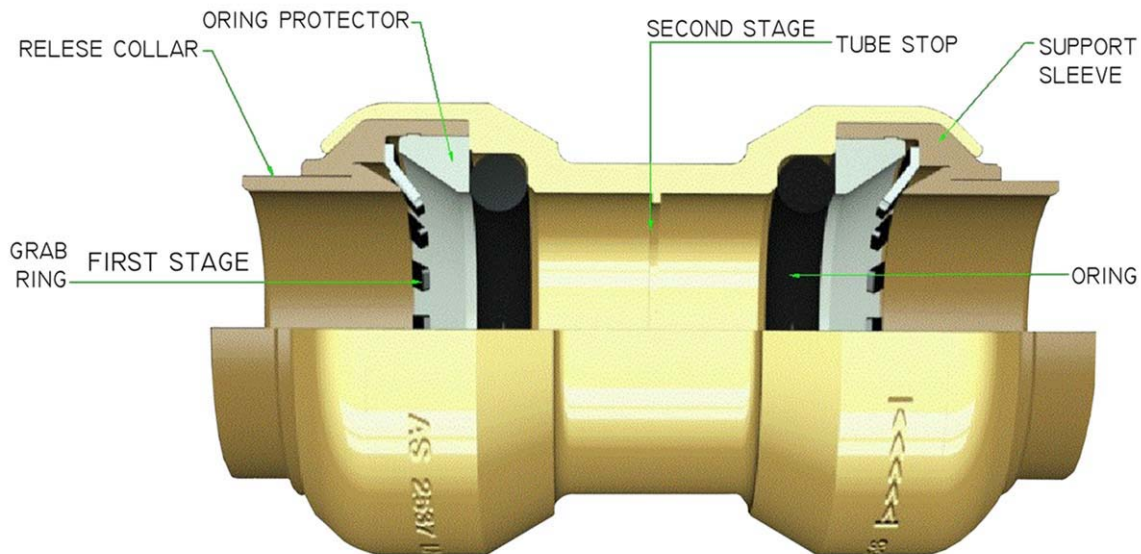
# Installation Instructions

## SharkBite<sup>®</sup> Connection System

### The SharkBite<sup>®</sup> System

The SharkBite<sup>®</sup> connection system uses an advanced push-fit design that works in two stages. When the tube is inserted into the fitting it passes the first stage through a release collar and then through a stainless steel grab ring. The grab ring has teeth that open out and grip onto the tube.

At the second stage the tube is pushed through an o-ring protector which aligns the tube. A specially formulated o-ring is then compressed between the wall of the fitting and the tube before the end of the tube reaches the tube stop.



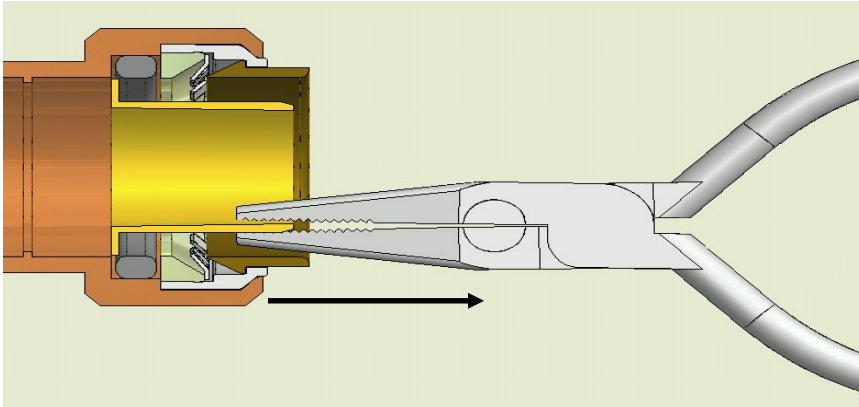
Only when the tube has passed through the o-ring and reached the tube stop, is a secure joint created.

The SharkBite<sup>®</sup> fittings can only be used with pipe/tubing certified to the following specifications:

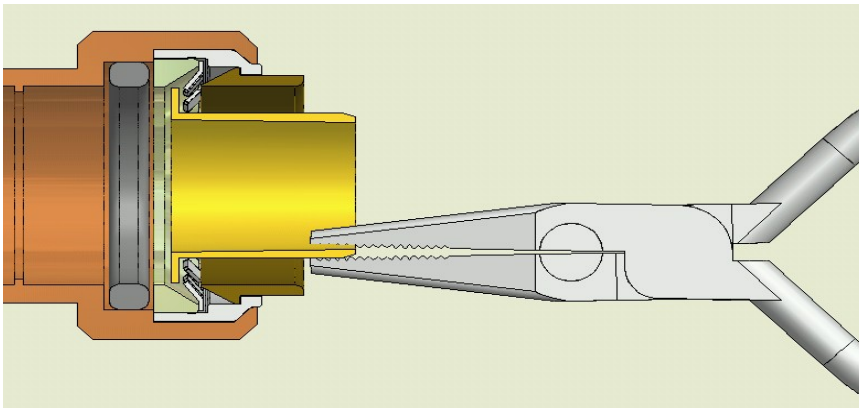
- **PEX** (ASTM F876, CSA B137.5)
- **Copper** (ASTM B 88)
- **CPVC** (ASTM D 2846, CSA B137.6)

The SharkBite<sup>®</sup> fittings have an integral Tube Support Liner that is effective in supporting PEX tubing to ensure the o-ring seals correctly on the outside of the PEX tubing. The Tube Support Liner is not required for use with CPVC and copper tubing; however these two types of tubing fit over the Tube Support Liner easily and hold it against the tube stop.

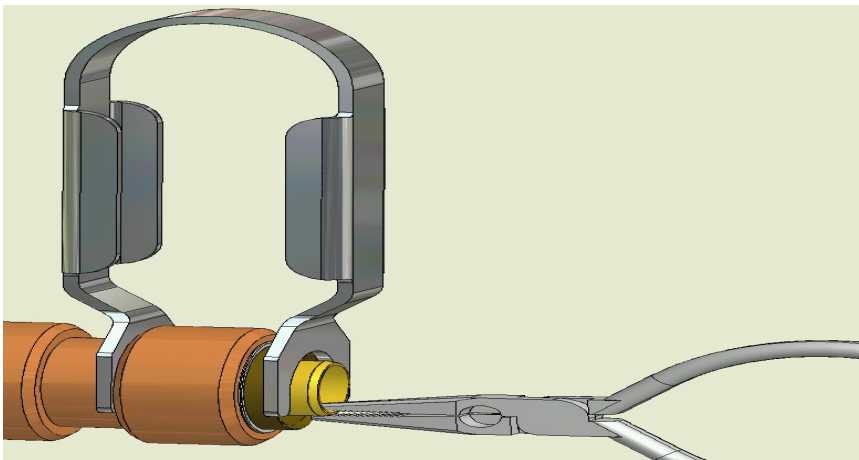
The tube liner can be easily removed by pulling it past the o-ring, then with the aid of the SharkBite® disassembly clip or fork tool (both sold separately), the Tube Support Liner can drop out of the fitting as it can move freely past the grab ring. Needle nosed pliers may be used to pull the Tube Support Liner out.



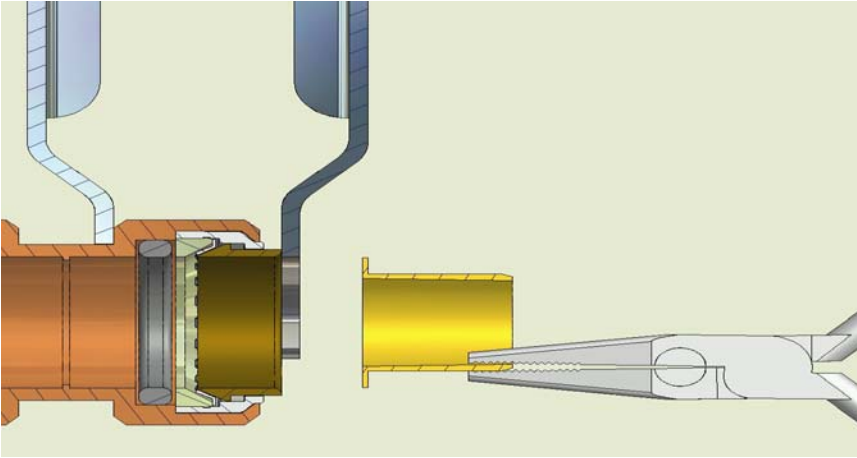
Gently work the Tube Support Liner past the o-ring



Stop once the Tube Support Liner has been pulled past the o-ring, the Tube Support Liner cannot be pulled out any further due to the grab ring.



Put the disassembly tongs (or clip) in place and squeeze them together. This will cause the grab ring teeth to spread



Once the disassembly tongs are squeezed and the grab ring teeth are spread, the Tube Support Liner can be easily removed

### **Connecting a SharkBite® Joint**

The following instructions must be followed to assemble the SharkBite Connection System. Ensure all fitting installations comply with local plumbing and building codes.

#### **Preparation**

Select the correct size fitting and tubing for the job. Check that fittings and tubing are clean, in good condition and are free from damage and foreign objects.

Cut the tube so that the ends are square. Ensure that there are no burrs or damage to the cut end. Wherever possible proper tube cutting tools such as rotary tube cutters (copper tubing) or tube shears (for plastic tubing) should be used.

Once the tubing end is cut square and clean, use the SharkBite® Depth Gauge (sold separately) and a scribe to mark the insert depth on the outside of the tubing. This mark is used to ensure that the joint is assembled correctly. To assemble correctly, the tubing needs to be pushed into the fitting until it meets the tube stop.

Follow the following three steps to insert the tubing into the fitting.

1. Insert the tube through the release collar to rest against the grab ring.
2. Push the tube firmly with a slight twisting action until it reaches the tube stop.
3. To ensure that the tube is correctly inserted, check that the depth mark is within 0.05 in (1.3 mm) of the end of the release collar.

**Note:** Some materials, such as concrete can corrode brass. If the SharkBite fittings are to be buried in concrete, cover the fitting to prevent contact with the cement. Chloride-free tape or tightly wrapped and sealed insulation works well. (Check with local codes to verify this is acceptable).

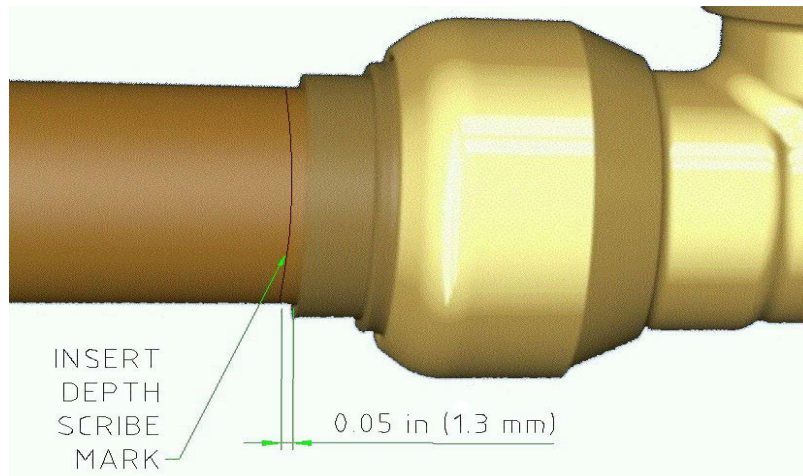




Insert the tube through the release collar to rest against the grab ring.



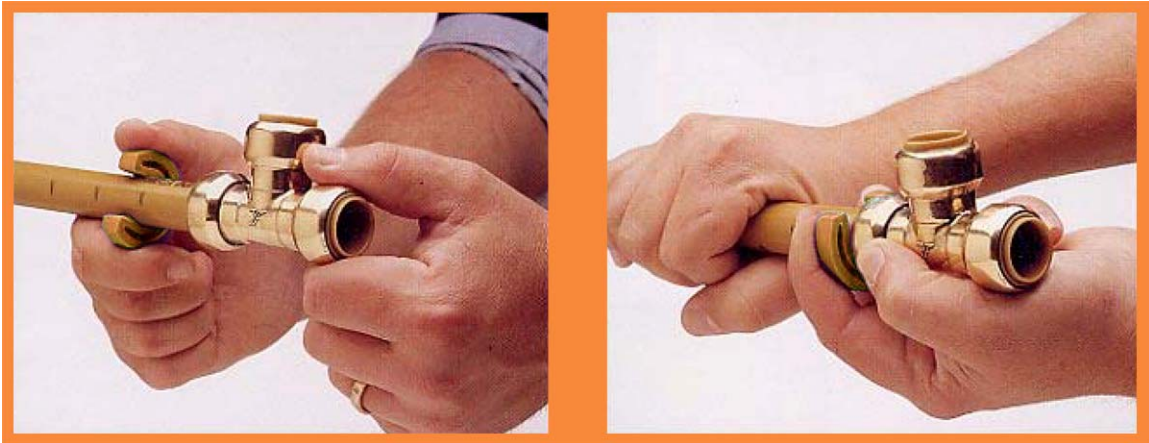
Push the tube firmly with a twisting action until it reaches the next Safe Seal Indicator Mark.



## **Disconnecting a Joint**

Disconnection of the joint can only occur by using either the SharkBite® disassembly clip or the SharkBite® disconnecting fork tool. By applying pressure to the release collar with the clip or the fork tool, the grab ring teeth are splayed. This action releases the tube, allowing it to be removed from the fitting.

1. Place the SharkBite® disassembly clip around the tube with the non-branded face against the release collar. If using the SharkBite fork tool, place the forks around the fitting assembly. The fork end with the SharkBite brand logo should be positioned around the tube and the other end around the neck of the fitting.
2. Push the clip against the release collar and pull the tube with a twisting action to release the tube. If using the SharkBite® fork tool, squeeze the tool with one hand and pull the tube with a twisting action to release the tube.
3. Check the fitting and tube end for damage. The fitting should be free of damage and foreign objects. The tubing should be free of damage and marks on the outside diameter. If the tubing is damaged or marked, then cut and use a new section of tubing.



**Proposition 65 Warning:** This product contains chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.  
**Notice to Installer/Contractor:** California law requires this notice be provided to the consumer/end user of this product

## Limited Warranty

Subject to the terms and conditions provided below, Cash Acme warrants that each Cash Acme SharkBite fitting (herein referred to as the "product") will be free from defects in materials and workmanship for a period of 25 years from the date of manufacture shown on the product (the "Warranty Period"). For any product defect discovered within the Warranty Period and reported to Cash Acme as provided below, Cash Acme in its sole discretion will repair or replace the defective product without charge. This limited warranty extends only to the person installing the product and/or the person for whom the product was installed and is not transferable to any other person, business or legal entity.

### Conditions:

This limited warranty shall apply only if all of the following conditions are satisfied:

1. The product must be installed by a licensed professional contractor, only in potable water distribution systems and/or hydronic heating systems, and in strict compliance with all applicable plumbing and/or building codes and the installation instructions, which are provided with the product and also available at [www.cashacme.com](http://www.cashacme.com).
2. The water pressure and temperature for the operating environment in which the product is installed shall never exceed the maximum pressure and temperature limits specified in the installation instructions for the product.
3. The product must be used only with PEX, Copper or CPVC pipe/tubing certified to the following specifications and meeting the dimensions as specified in the applicable product standard: PEX (ASTM F876, CSA B137.5); copper (ASTM B 88); and CPVC (ASTM D 2846, CSA B137.6).
4. All pipe/tubing used with the product must have a smooth surface finish free of gouges, cuts, scratches, tar, kinks, grease, flux, fading or discoloration, and be vertically and horizontally supported, as required by applicable plumbing and/or building codes.
5. The product shall not be installed if it appears defective or damaged, whether by accident, abuse, misuse, neglect or otherwise.
6. If the product is to be installed in a concealed location, the applicable local authority must have inspected the system or section of the system to be concealed prior to installation and confirmed the absence of any leaks.
7. Any disinfection of the water distribution system in which the product is to be installed must be in accordance with applicable building code and industry standards for potable water systems.
8. Local authorities and Cash Acme shall be consulted concerning unresolved questions or uncertainties about the product before installation.

### Exclusions:

This limited warranty shall not apply if:

1. Any alterations are made to the product by any person;
2. The product was installed improperly or not for its intended use, or was abused or otherwise misused following installation;
3. The product was installed in a hydronic system and any fluids other than water or water diluted with alcohol or glycol were used in that system; (Mixture should not exceed 50% glycol)
4. The product was installed in any part of a building sewer system; or,
5. The product defect arose out of or in any manner related to: vandalism, negligence, foreign matter in the system, peculiar water conditions, sabotage, acts of terrorism or any other acts or omissions by any person; earthquakes, natural disasters, weather-related incidents and other acts of God; or any other circumstances over which Cash Acme has no control.

**Making a Warranty Claim.** Cash Acme has no liability or obligation under this limited warranty unless and until all of these conditions are satisfied. Any warranty claim must:

1. Be made to Cash Acme within ten (10) days after discovery of the alleged defect or deficiency.
2. Include the allegedly defective product, along with a short section of the tubing/pipe connected to and immediately adjacent to the product.
3. Include information establishing the product was installed, used and maintained in accordance with Cash Acme Installation Instructions, all applicable plumbing code provisions and the terms and conditions of this limited warranty. At a minimum, any warranty claim shall include the following information related to the system/operating environment in which the product was installed/exposed: system water pressure; system water temperature; date the product was installed/commissioned in the system; location of installation; nature of installation; date product failed; a description of the product failure; and, if the product was installed in a concealed location, proof that the system or section of the system concealed was properly inspected or tested for leaks by the local authority before concealment.

**Limitation of Warranty.** THIS LIMITED WARRANTY IS IN LIEU OF AND CASH ACME HEREBY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY ARISING FROM COURSE OF DEALING, CUSTOM OR USAGE OF TRADE, ALL SUCH OTHER WARRANTIES BEING HEREBY EXPRESSLY DISCLAIMED. THIS LIMITED WARRANTY SUPERSEDES ANY OTHER REPRESENTATION OR PROMISE, WHETHER WRITTEN OR ORAL, MADE BY ANY EMPLOYEE, AGENT OR REPRESENTATIVE OF CASH ACME.

THIS LIMITED WARRANTY SETS FORTH ALL OBLIGATIONS OF CASH ACME CONCERNING, AND THE REMEDY PROVIDED HEREIN IS THE CUSTOMER'S SOLE AND EXCLUSIVE REMEDY FOR, DEFECTS IN MATERIALS OR WORKMANSHIP OF PRODUCTS SUPPLIED BY CASH ACME.

IN NO EVENT SHALL CASH ACME BE RESPONSIBLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, CONTINGENT OR CONSEQUENTIAL DAMAGES OR ANY ECONOMIC LOSS, INCLUDING WITHOUT LIMITATION DAMAGES OR OTHER COSTS ARISING FROM LOSS OF USE, DELAY, PERSONAL INJURY, LABOR CHARGES, INTERRUPTION OF BUSINESS, NEGLIGENCE, LOST PROFITS OR REVENUE, OR ANY OTHER INJURY WHATSOEVER TO PERSON OR PROPERTY, IN CONNECTION WITH THIS LIMITED WARRANTY.

Applicable in USA and Canada only.



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