

SharkBite Max™

Installation Guide

The Total Plumbing Solution



Cut.

Cut the pipe square, removing rough edges and debris. Mark the pipe to the correct insertion depth.



Push.

Push pipe and fitting together up to the depth mark.



Done.



*Using the disconnect clip, fittings can be easilv removed.

SharkBite Max Pipe Insertion Depth				
SharkBite Fitting Size	Nominal Pipe Size	Pipe OD	Pipe Insertion Depth (in.)	Pipe Insertion Depth (mm.)
1/2 in.	1/2 in. CTS	5/8 in.	1 in.	25
3/4 in.	3/4 in. CTS	7/8 in.	1-1/4 in.	32

The SharkBite Max™ Connection System

The SharkBite connection system is certified for potable water and radiant heating. SharkBite uses an advanced push-to-connect design that works in two stages. When the pipe 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 pipe. At the second stage, the pipe is pushed through an o-ring protector, which aligns the pipe. A specially formulated o-ring is then compressed between the wall of the fitting and the pipe before the end of the pipe reaches the tube stop.



Only when the pipe has passed through the o-ring and reaches the tube stop is a secure joint created. SharkBite 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)

PE-RT (ASTM F 2769)

HDPE (SDR-9 ASTM D2737)

Certifications:

ASSE 1061 CSA B125.3 NSF/ANSI 14 NSF/ANSI/CAN 61

NSF/ANSI/CAN 372

For listing information, please visit rwc.com.

Connecting a SharkBite Joint

The following instructions must be followed to assemble the SharkBite connection system.

Preparation

Select the correct fitting size and pipe for the job. Check that fittings and pipe are clean, in good condition and are free from damage and foreign objects. Also check that the pipe is round and free from scratches, cuts or gouges. Cut the pipe so that the ends are square. Ensure that there are no burrs or damage to the cut end. Wherever possible, use proper pipe cutting tools, such as rotary pipe cutters (copper tubing) or pipe shears (for plastic pipe) should be used.

Once the pipe end is cut square and clean, use the SharkBite depth deburr gauge (sold separately) and a permanent marker to mark the insert depth on the outside of the pipe. To assemble correctly, the pipe needs to be pushed into the fitting until it meets the tube stop. Follow these three steps to insert the pipe into the fitting.



- Insert the pipe through the release collar to rest against the grab ring.
- Push the pipe firmly with a slight twisting action until it reaches the tube stop.
- To ensure that the pipe is correctly inserted, check that the depth mark is within 0.005 in. (0.13 mm.) of the end of the release collar.

Disconnecting a SharkBite Joint

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



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

Installation Requirements

SharkBite Burial

SharkBite Max fittings are suitable for burial in most applications; however care is required when using fittings in applications that require burial to ensure the correct installation practices are used and due care is given to any environmental factors that may have a detrimental effect on the life expectancy of the fittings and pipe.

The installation of SharkBite Max fittings in applications that will require the burial of the fitting must comply with all local plumbing code requirements.

SharkBite Max fittings and SharkBite PEX are not suitable for use in areas where the soil is or may become contaminated,* including the soil used for backfilling. All SharkBite Max fittings with brass bodies must have an impervious barrier between the fitting and the surrounding soil. Selffusing, formaldehyde and chloride-free, fully cured silicone tape with a minimum thickness of 0.020 in. should be used for this purpose.

The soil used for backfilling must be free of rocks, debris or any sharp objects that may cause damage to the fitting or pipe through impact or abrasion.

SharkBite Silicone Tape for Burial

Make a SharkBite Max connection, ensuring pipe is inserted to proper depth. While leaving the protective film in place, measure the amount of tape needed to completely wrap the fitting. To ensure a proper seal, overlap tape by 1 in. past the end of the fitting on every end and 1/4 - 1/2 in. between/across the fitting. Wrap the fitting by pulling the tape tight and removing the protective film. Completely cover the fitting. The tape will bond to itself within a few hours, forming air-and water-tight seal.

SharkBite Fittings in Concrete

Do not allow joints within the slab. Use a continuous length of SharkBite PEX pipe within the slab and be sure to check for leaks before pouring concrete.

SharkBite Distance Between Fittings

Allow at least 1 in. of spacing between SharkBite Max fittings for removal purposes.

SharkBite Grounding on Copper Pipe

When connecting a SharkBite Max fitting to a copper piping system, install a copper jumper cable to ensure proper grounding. SharkBite Max fittings are not an electrically continuous fitting.

^{*} Examples of contamination include, but are not limited to, petrochemicals (reclaimed service station sites), high levels of nitrogen compounds (this could be caused by animal waste or fertilizer that may be found in some agricultural applications), low pH levels (below pH 6), high pH levels (above pH 8), run off from land fill, formatledyled compounds, and solvents. It of may are the compounds, and solvents is the compounds and solvents is the compounds and solvents are proposed to the compounds are proposed to the compound

Threaded Connectors

Teflon tape should be used with threaded SharkBite connectors to make a proper seal.

Galvanized Tubing

SharkBite Max fittings should not be installed (threaded or push-to-connect) on galvanized tubing.

SharkBite Soldering

When soldering is required near a SharkBite Max connection, make all solder joints first and then make the SharkBite connections. Flame can cause the pipe to reach high temperatures and should not be used close to a SharkBite Max fitting.

SharkBite Fitting Reuse

SharkBite Max fittings are intended to be a permanent connection and are not designed for repeated connection and disconnection after the initial install. If a fitting is installed incorrectly it can be removed given that proper care is taken, as detailed in the following steps.

- SharkBite disconnect tongs or SharkBite disconnect clips must be used when removing the fittings.
- The fitting must be inspected by the installer and be free of damage and debris.

- The initial pipe and the new pipe must be clean and free from scratches and hurrs
- 4. The insertion depth must be marked on the pipe.
- The connection must be pressure tested and inspected by the installer to verify that there are no leaks.

Working Pressure and Temperature

SharkBite Max fittings have a maximum temperature of 200°F and maximum pressure of 400 psi** when used on copper pipe. When using on PVC, CPVC, PEX, PE-RT or HDPE, refer to the maximum pressure temperature rating of the pipe.

**Please reference the specific product's specification sheet for temperature and pressure ratings as not all assemblies are rated for 400 psi and 200°F due to limitations of certain assembly components.



For more information, visit sharkbite.com

Connect with us









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