



Preassembled
QuickPort Manifold
Installation
Guide



Preassembled QickPort® Manifold

Installation Guide

August 2006

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Installation Warnings

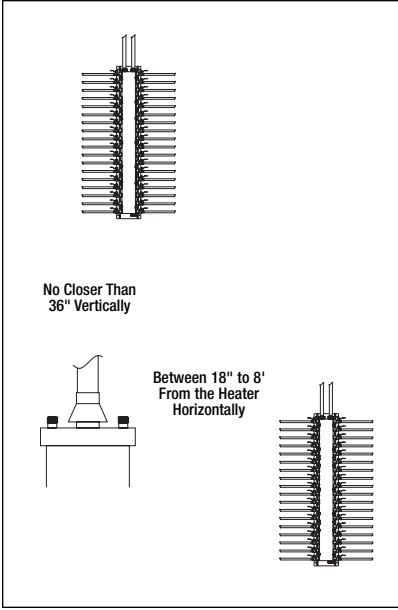
This booklet contains information regarding the proper installation of a Preassembled QickPort® Manifold using Zurn PEX™ tubing and fittings. The following pages give guidelines on where to locate the manifold and what fittings can be used to install a potable water distribution manifold. The installer is responsible for installing the QickPort, tubing, and fittings per these instructions and all local codes.

- The QickPort should be left in the shipping box until it is ready to be installed. This will protect the manifold from jobsite debris such as sawdust, joint compound, paint, etc. Care should be taken to protect the QickPort from paint and other chemicals after installation is complete.
- The QickPort is factory assembled and cannot be disassembled by the contractor or homeowner.
- The QickPort is made of polysulfone plastic and should not be subjected to direct flame or any excessive heat or failure will occur.
- The QickPort needs to be installed in an accessible area where it will not be exposed to freezing temperatures.
- Care needs to be taken to not allow water to freeze inside the QickPort.
- The fittings for QickPort use rubber or plastic cone seals. **Do not use pipe dope, thread tapes, or other sealants on the QickPort threads.**
- The QickPort cannot be in contact with PVC or CPVC cements or cleaners, solder fluxes, or any harmful chemicals.
- The male threads on the QickPort are straight pipe threads. **Do not** use standard NPT pipe fittings on the QickPort. All connections to the QickPort need to be approved Zurn fittings.
- The distribution lines must connect to the QickPort in a straight line, perpendicular to the manifold. The distribution lines must not apply bending stress to the outlets of the manifold.
- The main supply lines for the QickPort must connect in a straight line parallel to the manifold. The supply lines must not apply bending stress to the inlets of the manifold.
- Care should be taken to not over or under tighten the fittings as leaks in the system will occur.
- The QickPort plumbing manifold cannot be used in systems where chlorine exceeds acceptable levels (2 ppm) for PEX tubing.
- The QickPort plumbing manifold system should be installed per all local and national building and plumbing codes.
- This is an installation guide and may not address every situation that might be encountered in the field. Failure to follow the principles described in this guide may cause leaks. Zurn is not responsible for leaks or property damage caused by installations that do not follow the principles of this guide.

STEP 1: Locating the QickPort Manifold

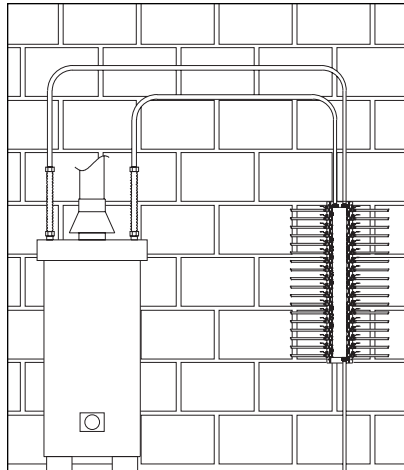
The manifold should be installed in an accessible area very near the water heater, but not closer than 18" from the hot water heater outlet.

In a typical installation, the QickPort should be no closer than 18" from the water heater outlet.



If the manifold must be more than 8 feet from the water heater, we recommend the installation of a circulatory loop between the water heater and manifold. The water temperature in the loop must be less than 140°F and the chlorine must be less than 2 ppm.

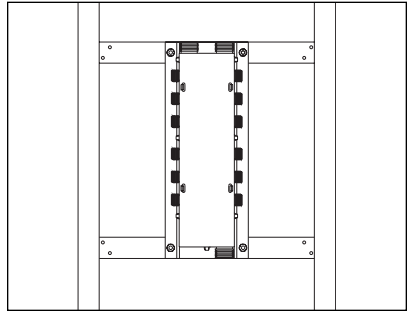
The QickPort must be located in an area that will not be covered permanently with sheetrock, plywood, or paneling. The QickPort must also be protected from freezing temperatures.



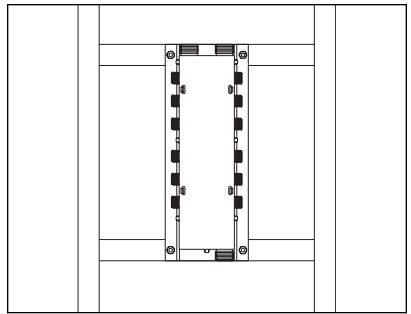
STEP 2: Mounting the Manifold

The QickPort can be secured to a wall in a variety of ways.

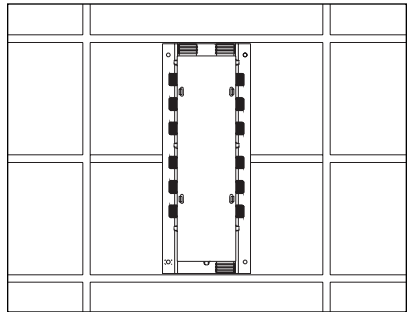
Option 1: Attach the assembled QickPort to the QPMB2 bracket (optional). Screw the QPMB2 bracket to the studs of the manifold cavity. (Fasteners supplied by others.)



Option 2: Attach the assembled QickPort to a 1 x 4 that is secured between the studs. (Fasteners supplied by others.)



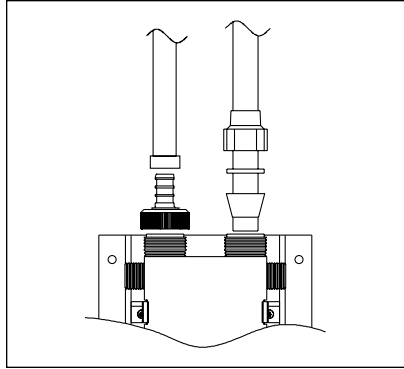
Option 3: Attach the assembled QickPort directly to a block wall. (Fasteners supplied by others.)



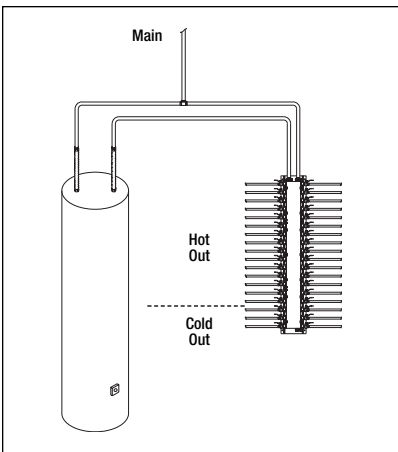
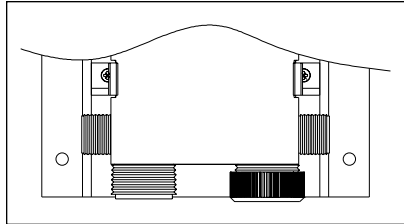
STEP 3: Connecting Service Lines

Water can be supplied to the QickPort by 3/4" or 1" Zurn PEX tubing. These inlet connections are straight pipe thread and require specific Zurn fittings to seal properly. Standard NPT fittings will not seal on these connections. These connections do not require pipe thread sealant and none should be used. All connections to the manifold use a rubber or plastic cone seal.

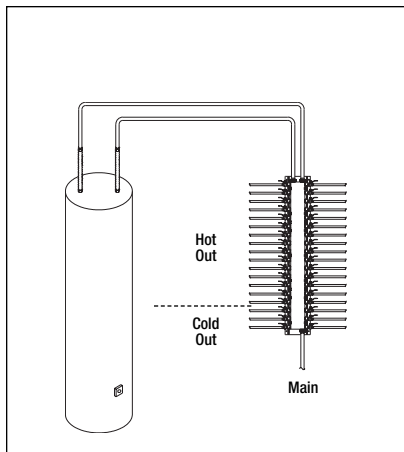
Connect the supply tubing to the appropriate header using one of the approved Zurn fittings. The tubing can be attached with a crimp x swivel adapter or with a 3/4" nut-ring-cone connector.



The 1" outlets can be fitted with a crimp x swivel or nut-ring-cone connector. These can then be used to supply high flow rate fixtures such as whirlpool baths, hose bibbs, etc. The unused 1" outlets need to be sealed using a 1" brass cap (Part No. QTC5FB).



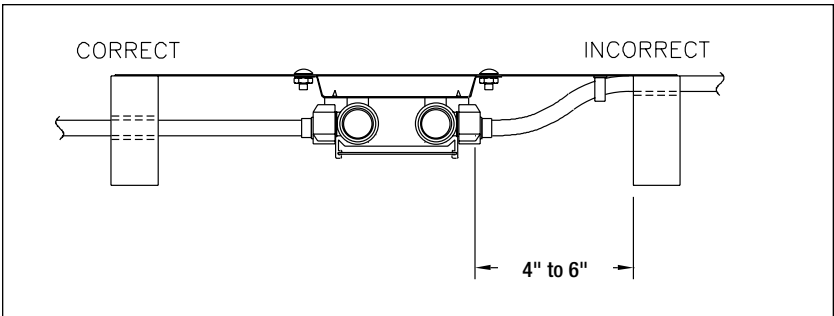
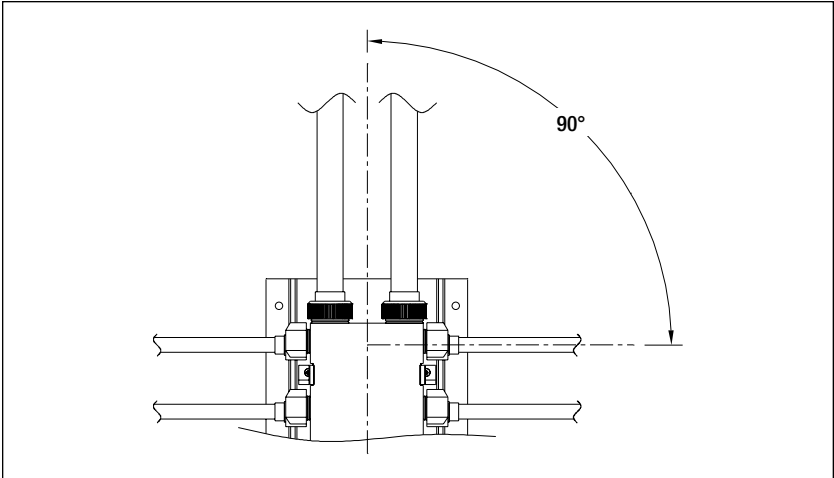
Supplying the water heater and the manifold from the main.



Supplying the water heater from the manifold.

STEP 4: Zurn PEX Distribution Lines

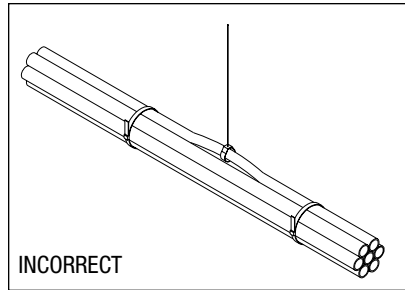
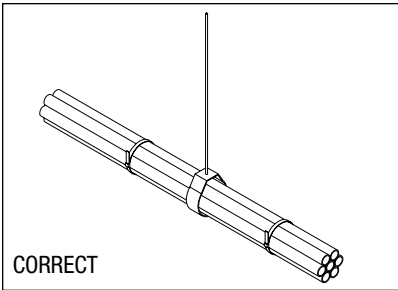
The 3/8" or 1/2" Zurn PEX distributions lines must leave the manifold in a straight line that is perpendicular to the long axis of the manifold. The tube must be clamped or strapped between the manifold and the first change of direction to keep any bending stress from being applied to the manifold outlet. Be sure that the clamp or strap keeps the tube in the same plane as the manifold.



STEP 5: Bundling Zurn PEX Distribution Lines

The distribution lines are run in the most direct route to the endpoint fixture. If the tubing is not immediately connected to the manifold, both ends of the tubing should be labeled.

The hot and cold distribution lines can be bundled together if local codes will allow. Bundles should be wrapped with a heavy gauge plastic sheet at locations where fasteners are attached. This sheet may be fastened using tape or nylon wire ties. Apply the tape to the plastic sheet, not the tubing bundle. This will allow the tubing to slide inside the sheet.

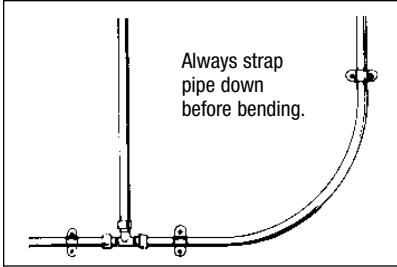


Do not hook one tube to support the entire bundle. Tubing run on a continuous support such as a floor in an attic, may be strapped at six-foot intervals.

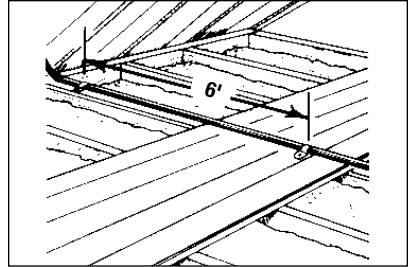
STEP 6: Supporting Zurn PEX Distribution Lines

Zurn PEX should be supported or strapped every 32" when hung from floor joists or running across rafters. When supporting tube bundles, use a strap to support the entire bundle.

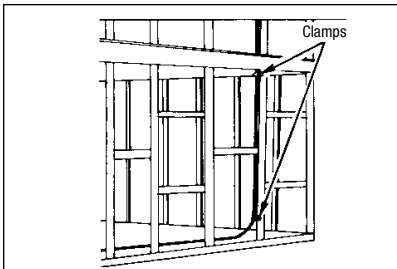
Installing Zurn PEX Pipe



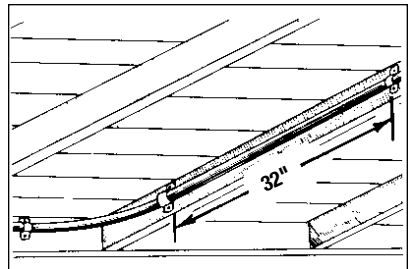
Zurn PEX straps and hangers hold pipe in position and prevent strain on fittings when the pipe is bent.



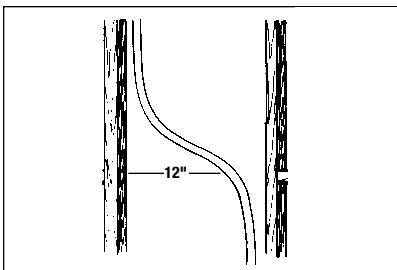
Straps can be as far as 6 feet apart if the pipe is continuously supported.



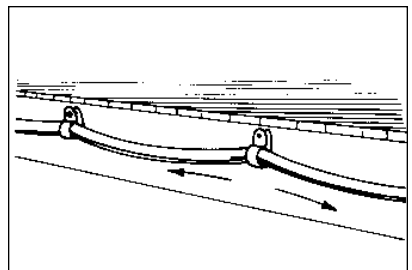
Vertical runs need support at every floor level.



Horizontal runs should be supported every 32 inches.



Since Zurn PEX tubing expands or contracts one inch for every 100 feet of pipe for every 10° of temperature change, you must allow for expansion and contraction in long runs with a 12-inch horizontal offset.



Always cut the pipe longer than necessary to allow some slack for any contraction in the pipe.

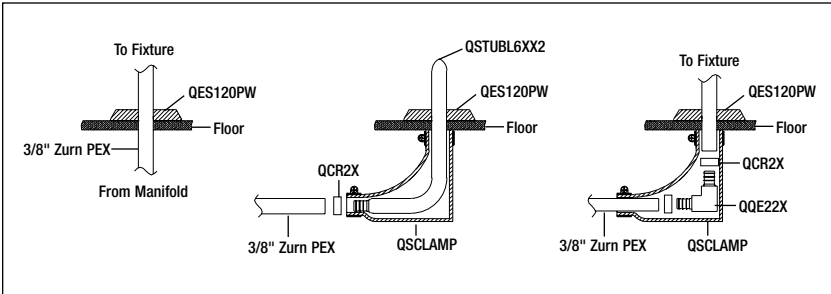
Strapping support should be firm but loose enough to allow the pipe to move back and forth as it expands and contracts.

STEP 7: Connecting Zurn PEX to Endpoints

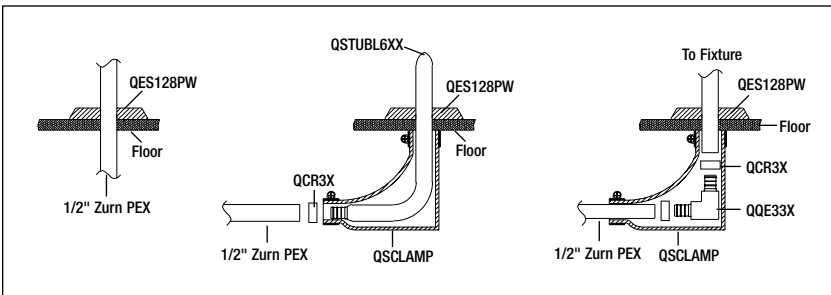
There are a number of options for the installer to choose from when connecting Zurn PEX to the endpoint fixture. These options depend on local codes and fixture type. The following drawings are some of the options available through Zurn. All of the fittings shown below are available through the Zurn PEX Product Catalog.

CAUTION: Zurn PEX tubing expands and contracts one inch for every 100 feet of pipe for every 10° of temperature change. You must allow for expansion and contraction in long runs with a 12" offset.

Floor Stub-Out



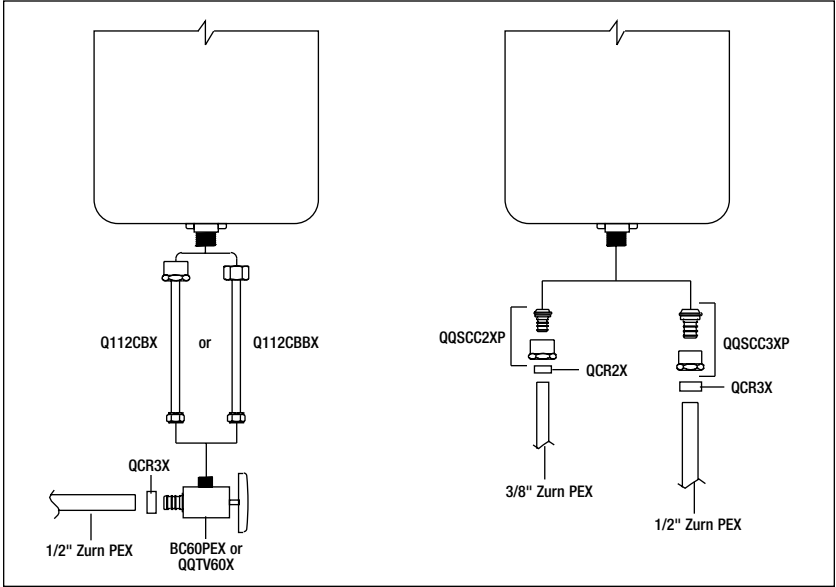
For 3/8" Distribution Lines



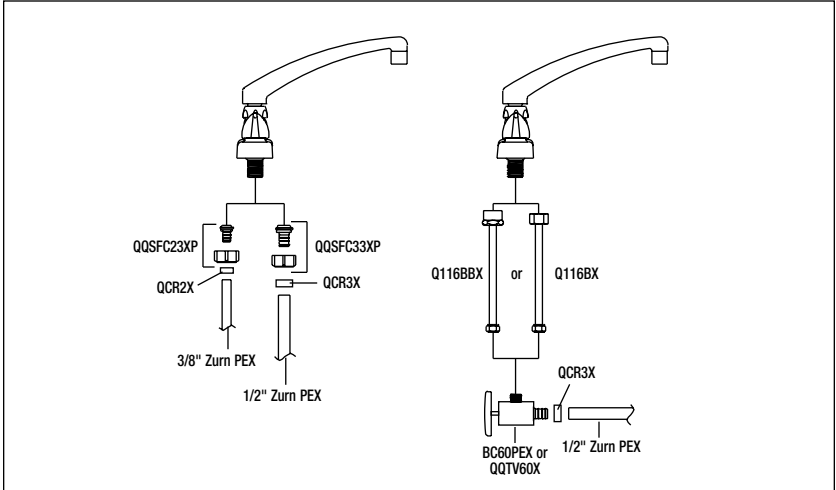
For 1/2" Distribution Lines

STEP 7: Connecting Zurn PEX to Endpoints, continued

Water Closet Fittings

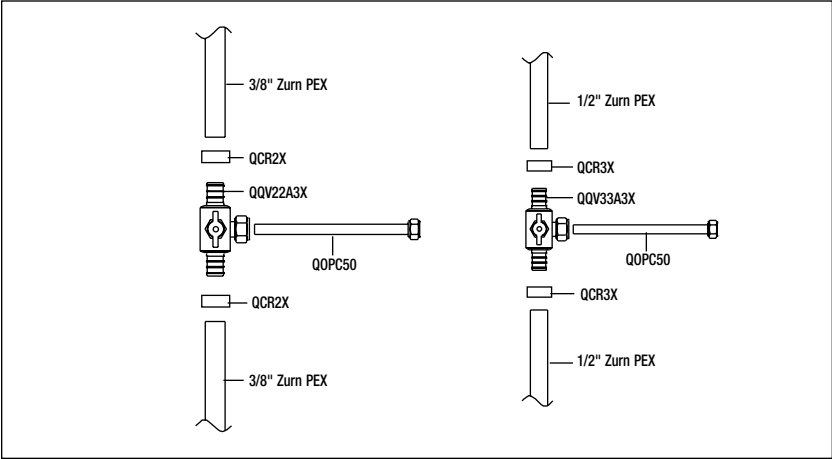


Faucet Fittings

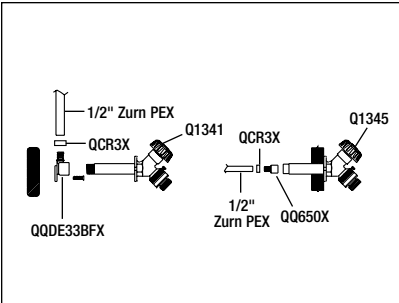


Step 7: Connecting Zurn PEX to Endpoints, continued

Icemaker Fittings



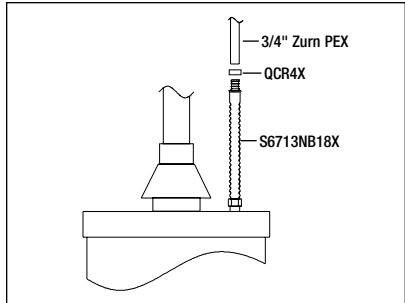
Hose Bibb Connection



CAUTION: Zurn PEX cannot support a hose bibb/hydrant. A drop-ear elbow or metal pipe must be used to support a hose bibb.

A hose bibb/hydrant supported by the structure can be supplied directly with Zurn PEX.

Water Heater Supplies



CAUTION: Zurn PEX cannot supply directly to a gas water heater. Zurn PEX must be at least 6" away from an exhaust vent of a gas water heater.

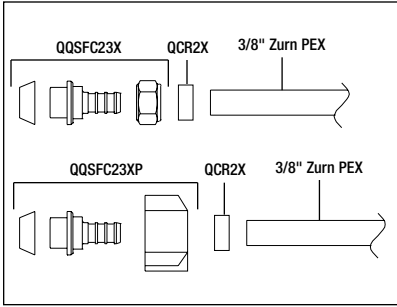
Zurn offers flexible water heater connectors to accomplish this application.

CAUTION: Zurn PEX has a minimum bend radius of six times the outside diameter of the tubing when bending with the natural curvature of the coil. If the tubing is bent against the natural curvature of the coil, multiply the value by three.

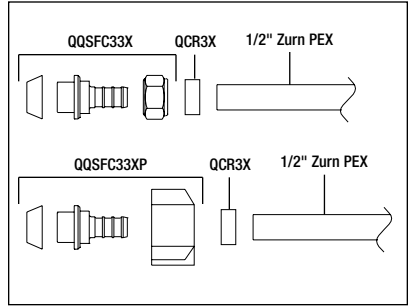
STEP 8: Connecting Zurn PEX Tubing to the QickPort Manifold

There are a number of options for the installer to choose from when connecting Zurn PEX tubing to the QickPort Manifold. These options depend on local codes, crimp tool availability, and installer/homeowner preference. The following drawings are some of the options available through Zurn. All of the fittings shown below are available through the Zurn PEX Product Catalog.

Qick/Sert 1™ Crimp Style Connections

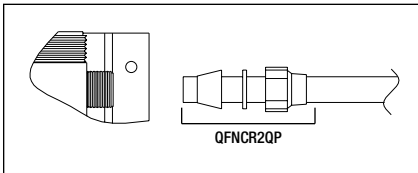


For 3/8" Distribution Lines

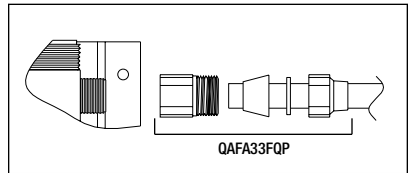


For 1/2" Distribution Lines

Qicktite Style Connections

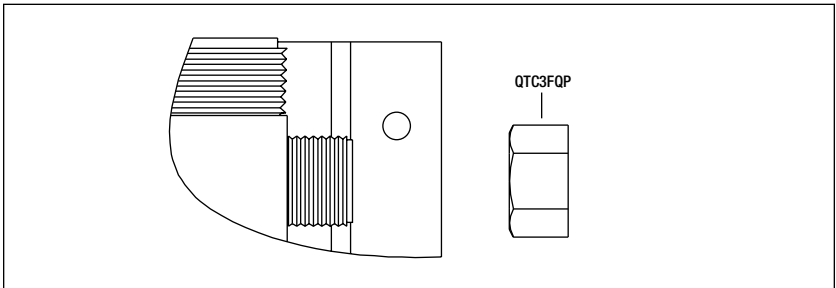


For 3/8" Distribution Lines



For 1/2" Distribution Lines

Unused Port Connections





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