



ZURN PEX®

Preassembled QuickPort Manifold

Installation Guide



US 1.855.ONE.ZURN CANADA 1.877.892.5216
ZURN.COM

Preassembled QickPort® Manifold Installation Guide

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Installation Warnings

This booklet contains information regarding the proper installation of a Preassembled QickPort® Manifold using Zurn PEX™ pipe 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 Manifold, pipe, and fittings per these instructions and all local codes.

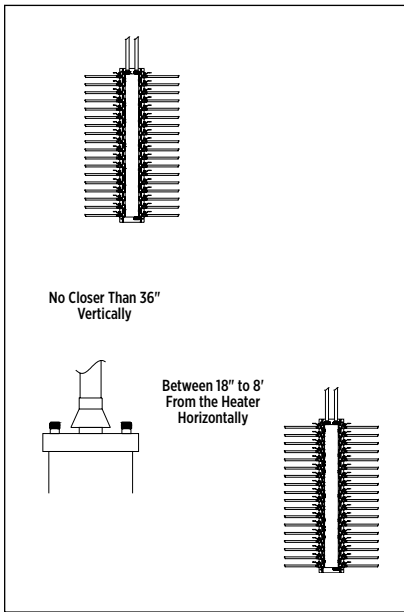
- The QickPort Manifold should be left in the shipping box until it is ready to be installed. This will protect the manifold from jobsite debris such as sawdust, joint compound, paint, etc. Care should be taken to protect the QickPort Manifold from paint and other chemicals after installation is complete.
- The QickPort Manifold is factory assembled and cannot be disassembled by the contractor or homeowner.
- The QickPort Manifold is made of polysulfone plastic and should not be subjected to direct flame or any excessive heat or failure will occur.
- The QickPort Manifold needs to be installed in an accessible area where it will not be exposed to freezing temperatures.

Installation Warnings, continued

- Care needs to be taken to not allow water to freeze inside the QickPort Manifold or the connected pipes.
- The fittings for the QickPort Manifold use rubber or plastic cone seals. **Do not use pipe dope, thread tapes, or other sealants on the QickPort Manifold threads.**
- The QickPort Manifold cannot come in contact with PVC or CPVC cements or cleaners, solder fluxes, or any harmful chemicals.
- The male threads on the QickPort Manifold are straight pipe threads. **Do not** use standard NPT pipe fittings on these threads. All connections to the QickPort Manifold need to be approved Zurn QickPort Manifold fittings.
- The distribution pipes must connect to the QickPort Manifold in a straight line, perpendicular to the manifold. The distribution pipes must not apply bending stress to the outlets of the manifold and must be securely strapped within 4" to 6" of the manifold with pipe straps that don't allow any pipe movement through the strap during expansion and contraction of the pipe.
- The main supply pipes for the QickPort Manifold must connect in a straight line parallel to the manifold. The supply pipes must not apply bending stress to the inlets of the manifold and must be securely strapped within 4" to 6" of the manifold with pipe straps that don't allow any pipe movement through the strap during expansion and contraction of the pipe.
- 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 pipe.
- 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.

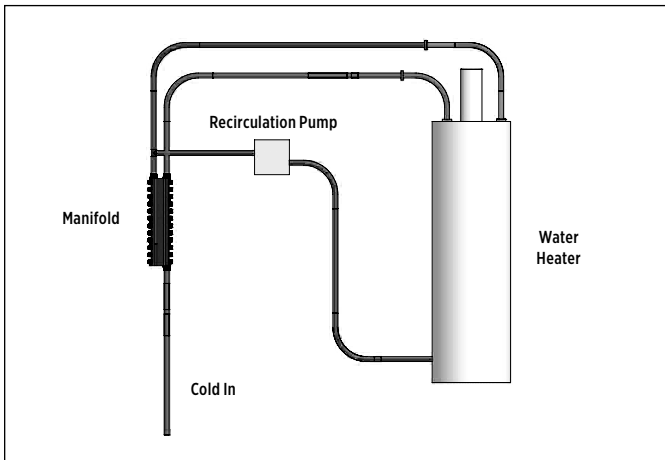
Step 1: Locating the QuickPort Manifold

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



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

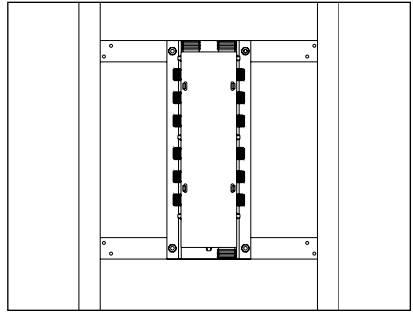
If the manifold must be more than 8 feet from the water heater, we recommend the installation of a circulatory loop between the water heater and manifold. This loop must tee off before the manifold so the recirculation doesn't flow through the manifold. The water temperature in the loop must be less than 140°F and the chlorine must be less than 2 ppm. The velocity of the water in the loop must not exceed 2 feet per second.



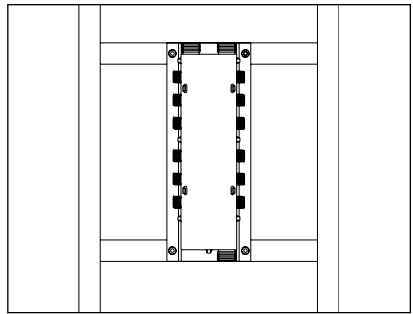
STEP 2: Mounting the QickPort Manifold

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

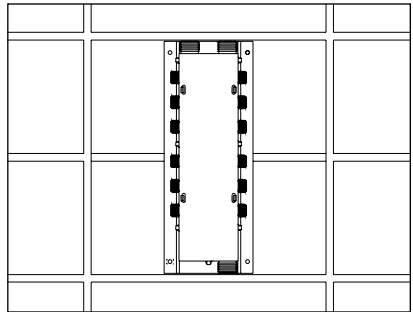
Option 1: Attach the assembled QickPort Manifold to the QPMB brackets (optional). Screw the QPMB brackets to the studs of the manifold cavity. (Fasteners supplied by others.)



Option 2: Attach the assembled QickPort Manifold to 1 x 4's that are secured between the studs. (Fasteners supplied by others.)



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

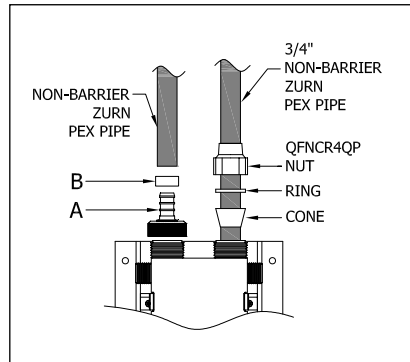


Step 3: Connecting Service and Distribution Piping to the QuickPort Manifold

QuickPort Manifold

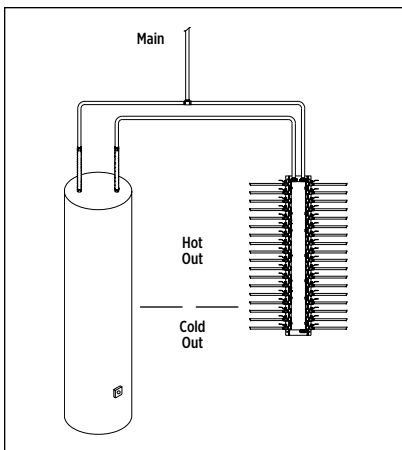
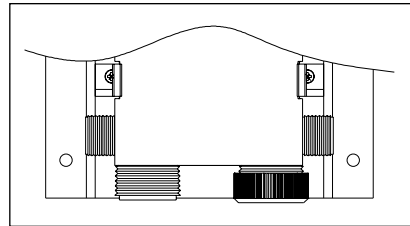
Service Piping

Water can be supplied to the QuickPort Manifold by 3/4" or 1" Zurn PEX piping. These inlet connections are straight pipe thread and require specific Zurn QuickPort Manifold 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.

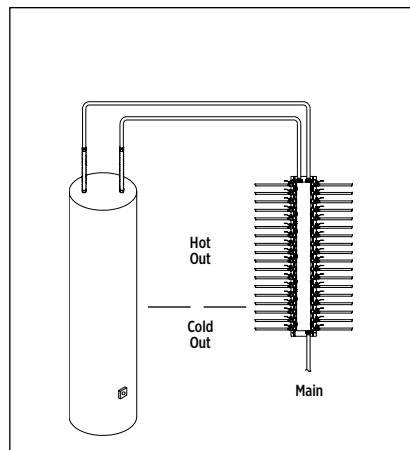


	3/4" NON-BARRIER ZURN PEX PIPING	1" NON-BARRIER ZURN PEX PIPING
A	QQSFC45GX (XL Brass Crimp x Swivel Nut) or QQPSFC45X (CR Polymer Crimp x Swivel Nut)	QQSFC55GX (XL Brass Crimp x Swivel Nut) or QQPSFC55X (CR Polymer Crimp x Swivel Nut)
B	QCR4X or QCR4XPC or QSSRPG4X (Crimp Ring)	QCR5X or QCR5XPC or QSSRPG5X (Crimp Ring)

Some QuickPort Manifolds have four 1" Main Supply ports, two for the Hot and two for the Cold. Some have one Main port for the Hot and two for the Cold. The QuickPort Manifold for Homes with Water Conditioners has one Main Supply port for Hot Soft, one for Cold Soft and one for Non-Conditioned. The unused 1" main ports need to be sealed using a 1" brass cap (Part No. QTC5FBG).



Supplying the water heater and the manifold from the main.

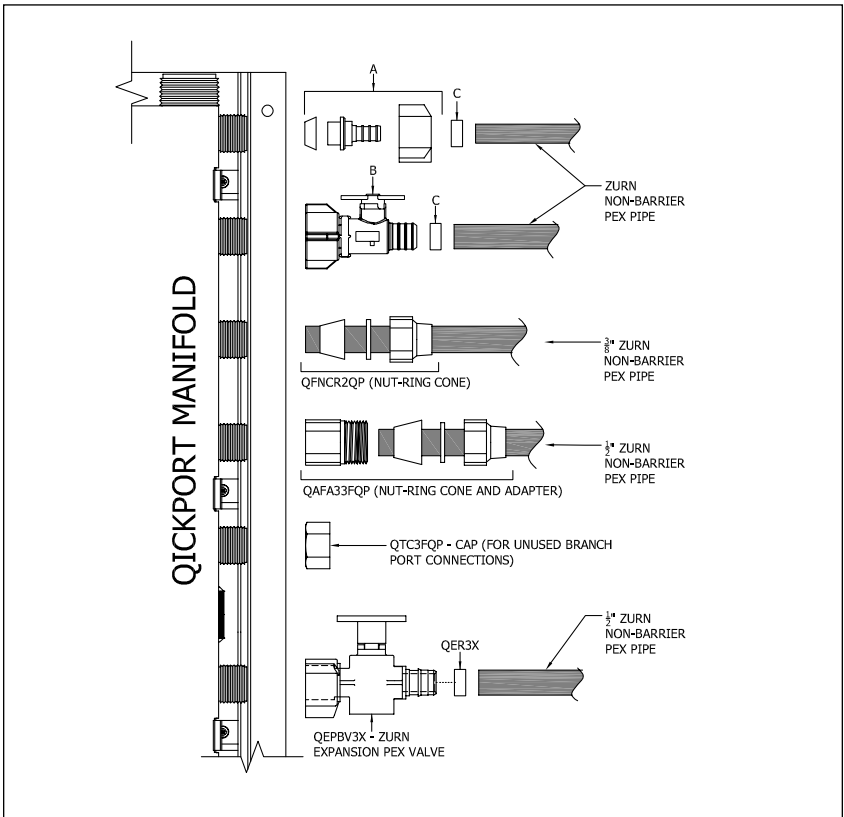


Supplying the water heater from the manifold.

STEP 3: Connecting Service and Distribution Piping to the QickPort Manifold, continued

Distribution Piping

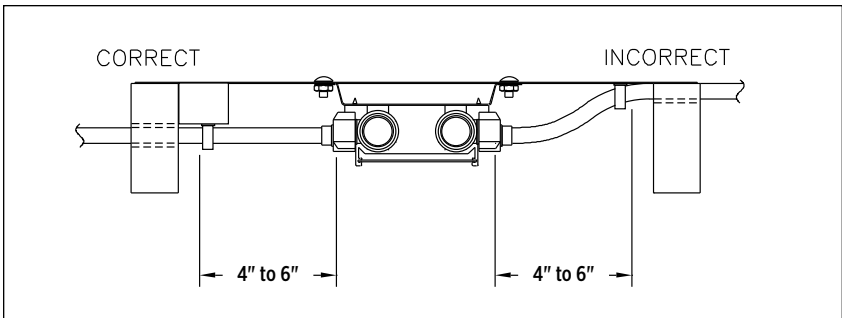
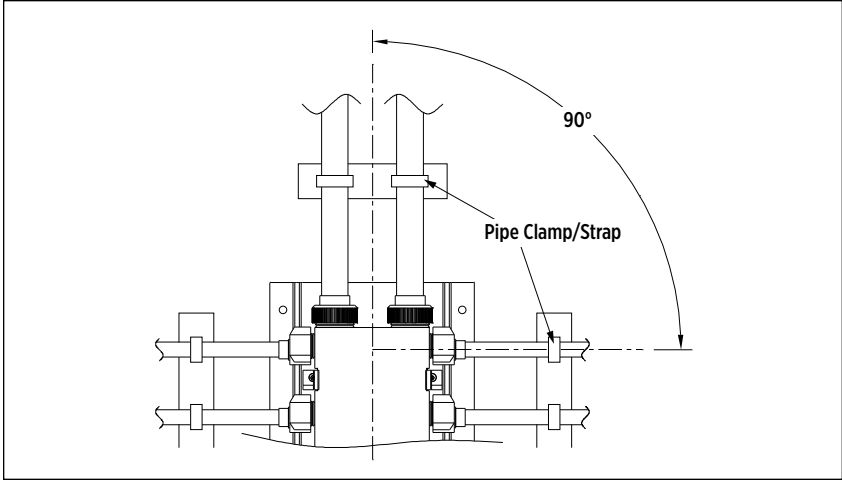
There are a number of options for the installer to choose from when connecting Zurn PEX piping to the QickPort Manifold Distribution Ports. These options depend on local codes, crimp/expansion tool availability, and installer/homeowner preference. The following drawing shows some of the connection options available through Zurn. All of the Zurn PEX fittings shown below can be found in the Zurn PEX Product Catalog.



QICKPORT MANIFOLD BRANCH CONNECTIONS		
	3/8" NON-BARRIER ZURN PEX PIPING	1/2" NON-BARRIER ZURN PEX PIPING
A	QQSFC23GXP (XL Brass Crimp x Swivel Nut) or QQP5FC23X (CR Polymer Crimp x Swivel Nut)	QQSFC33GXP (XL Brass Crimp x Swivel Nut) or QQP5FC33X (CR Polymer Crimp x Swivel Nut)
B	QPBV2X - Valve (CR Polymer Crimp x Swivel Nut)	QPBV3X - Valve (CR Polymer Crimp x Swivel Nut)
C	QCR2X (Copper Crimp Ring) or QSSRPG2X (Stainless Steel Crimp Ring)	QCR3X (Copper Crimp Ring) or QCR3XPC (Copper Crimp Ring w/ Positioning Cap) or QSSRPG3X (Stainless Steel Crimp Ring)

Step 4: Proper Pipe Strapping near the QickPort Manifold

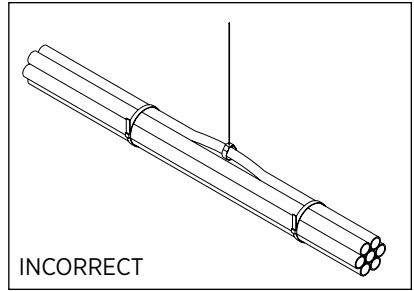
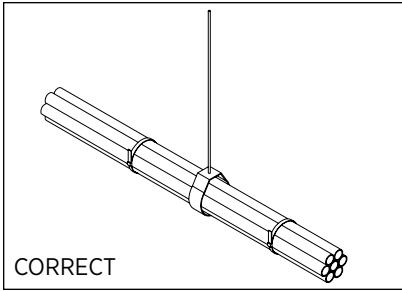
All Zurn Manifold PEX Piping must leave the manifold in a straight line. The distribution piping must be perpendicular to the long axis of the manifold. All piping must be clamped or strapped within 4" to 6" of the manifold and before the first change of direction to keep any bending stress from being applied to the manifold connection. Be sure that the clamp or strap keeps the pipe on the same plane as the manifold connection. The pipe clamp or strap must be the type that holds the pipe securely in place and does not allow pipe movement through it during expansion and contraction of the pipe.



STEP 5: Bundling Zurn PEX Distribution Pipes

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

The hot and cold distribution pipes 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 pipe in the bundle. This will allow the pipes to slide inside the sheet.

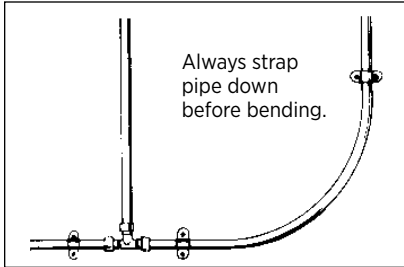


Do not hook one pipe to support the entire bundle. Straps should go around the entire bundle.

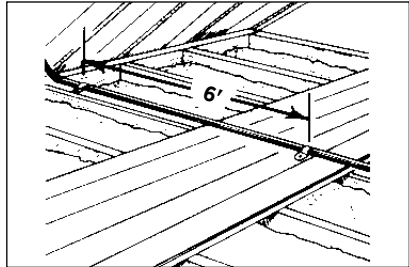
STEP 6: Supporting Zurn PEX Distribution Pipes

Zurn PEX should be supported or strapped every 32" or less when hung from floor joists or running across rafters.

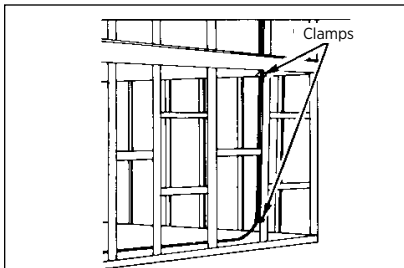
Installing Zurn PEX Pipe



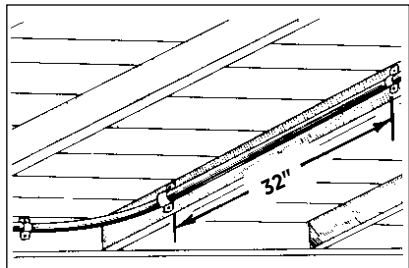
Zurn PEX straps and hangers hold pipe in position and prevent strain on fittings when the pipe is bent.



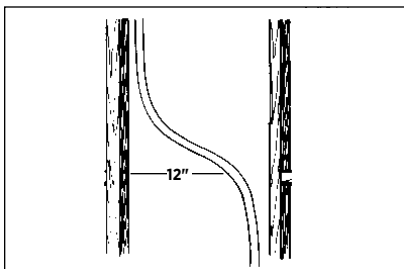
Straps can be as far as 6 feet apart if the pipe is continuously supported.



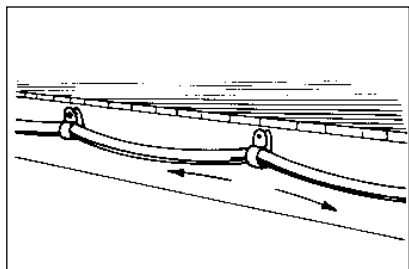
Vertical runs need support at every floor level.



Horizontal runs should be supported every 32 inches or less.



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

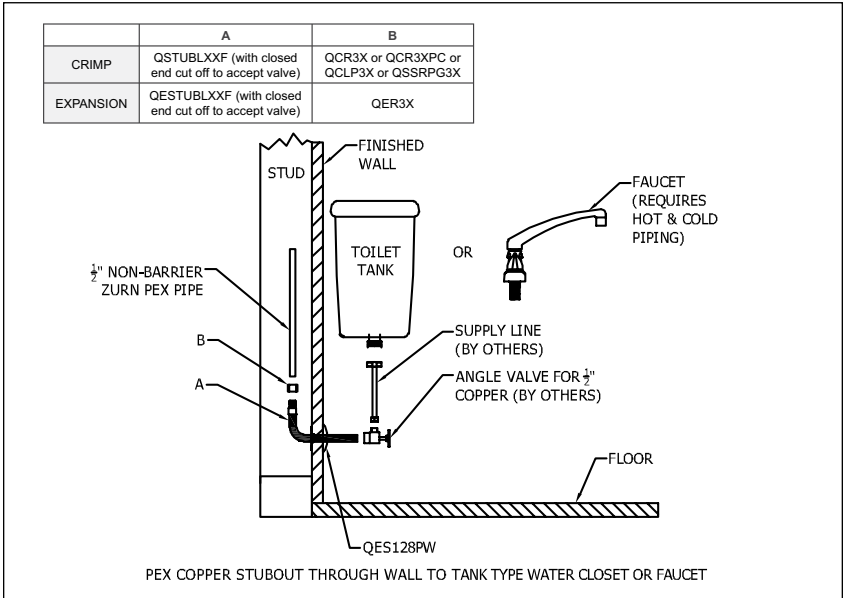
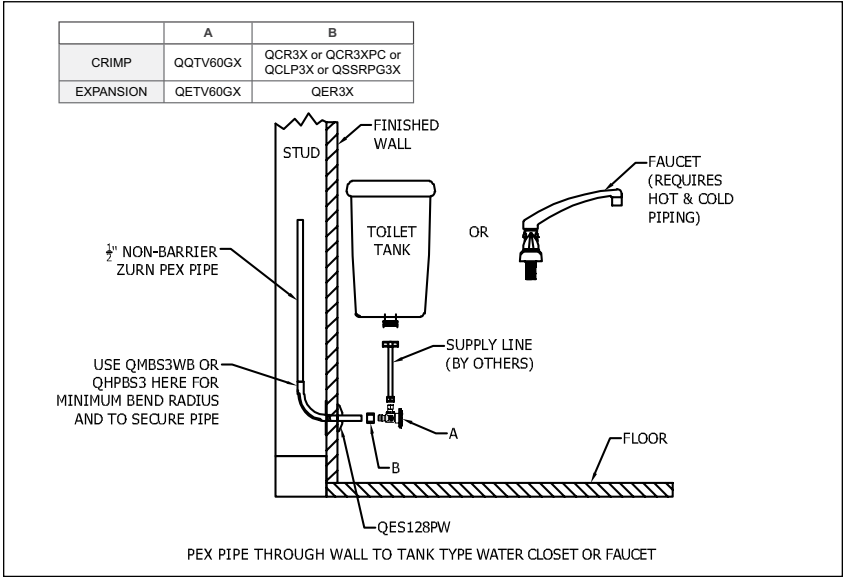


Always cut the pipe longer than necessary to allow some slack for any contraction in the pipe. Adding 1/8" per foot of slack is enough for installations with temperatures from 35°F - 160°F.

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

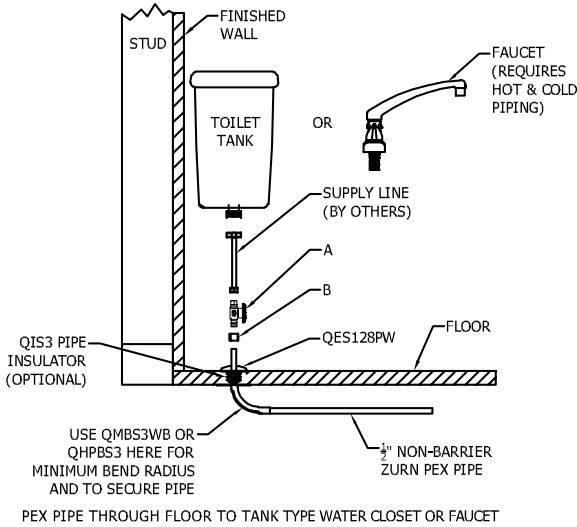
STEP 7: Connecting Zurn PEX to Endpoints

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 code requirements and fixture type. The following drawings are some of the options available through Zurn. All of the Zurn PEX fittings shown below can be found in the Zurn PEX Product Catalog.

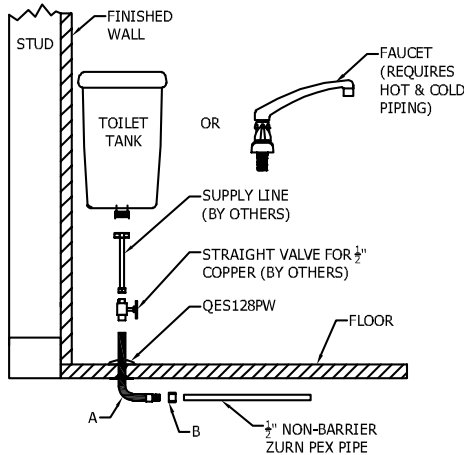


STEP 7: Connecting Zurn PEX to Endpoints, continued

	A	B
CRIMP	QQTV60SGX	QCR3X or QCR3XPC or QCLP3X or QSSRPG3X
EXPANSION	QETV60SGX	QER3X



	A	B
CRIMP	QSTUBLXXF (with closed end cut off to accept valve)	QCR3X or QCR3XPC or QCLP3X or QSSRPG3X
EXPANSION	QESTUBLXXF (with closed end cut off to accept valve)	QER3X



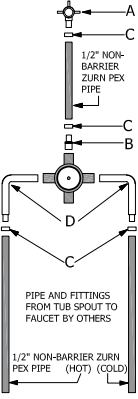
CAUTION: Zurn PEX has a minimum bend radius of six times the outside diameter of the tubing when bending with the natural curvature of the coil. If the tubing is bent against the natural curvature of the coil, multiply the value by three.

STEP 7: Connecting Zurn PEX to Endpoints, continued

Tub Shower Faucets

EXPANSION	
A	QEDE33BFGX (Drop Ear Elbow)
B	QE650GX (Male Sweat x PEX Adapter)
C	QER3X (Ring)
D	QEMCEA33S4 or QEMCEA33S6 (Copper Tub Elbow)

CRIMP	
A	QQDE33BFGX (Drop Ear Elbow)
B	QQ650GX (Male Sweat x PEX Adapter)
C	QCR3X or QCR3X-PC or QSSRPG3X (Ring)
D	QQMCEA33 or QQMCEA33S (Copper Tub Elbow)



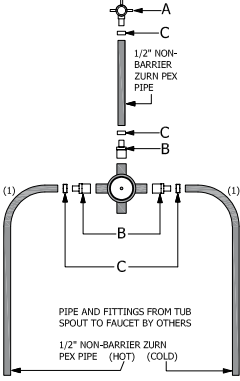
PIPE AND FITTINGS FROM TUB SPOUT TO FAUCET BY OTHERS

1/2" NON-BARRIER ZURN PEX PIPE (HOT) (COLD)

FAUCET THAT HAS 1/2" FEMALE SWEAT CONNECTIONS

EXPANSION	
A	QEDE33BFGX (Drop Ear Elbow)
B	QEMC33GX (Male Thread x PEX Adapter)
C	QER3X (Ring)

CRIMP	
A	QQDE33BFGX (Drop Ear Elbow)
B	QQMC33GX (Male Thread x PEX Adapter)
C	QCR3X or QCR3X-PC or QSSRPG3X (Ring)



PIPE AND FITTINGS FROM TUB SPOUT TO FAUCET BY OTHERS

1/2" NON-BARRIER ZURN PEX PIPE (HOT) (COLD)

(1) - Use Bend Support or PEX Elbow if tight bend

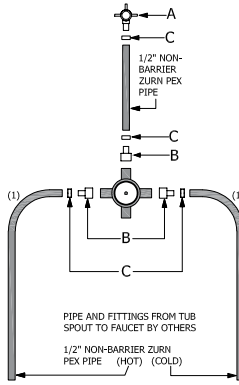
FAUCET THAT HAS 1/2" FEMALE THREADED CONNECTIONS

STEP 7: Connecting Zurn PEX to Endpoints, continued

Tub Shower Faucets

EXPANSION	
A	QEDE33BFGX (Drop Ear Elbow)
B	QEUF33GX (Female Thread x PEX Adapter)
C	QER3X (Ring)

CRIMP	
A	QEDE33BFGX (Drop Ear Elbow)
B	QEUF33GX (Female Thread x PEX Adapter)
C	QCR3X or QCR3X-PC or QSSRPG3X (Ring)

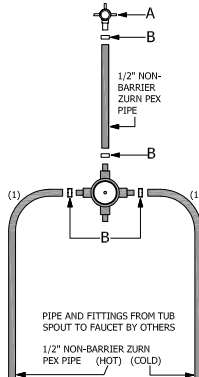


(1) - Use Bend Support or PEX Elbow if tight bend

FAUCET THAT HAS 1/2" MALE THREADED CONNECTIONS

EXPANSION	
A	QEDE33BFGX (Drop Ear Elbow)
B	QER3X (Ring)

CRIMP	
A	QEDE33BFGX (Drop Ear Elbow)
B	QCR3X or QCR3X-PC or QSSRPG3X (Ring)

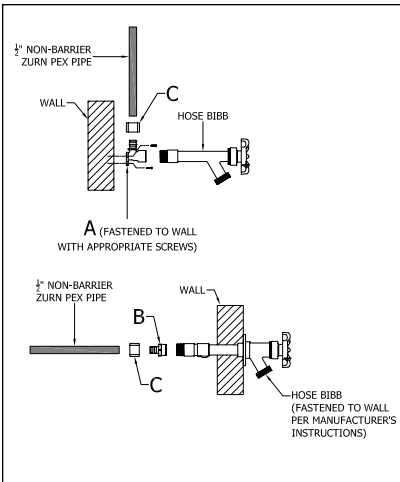


(1) - Use Bend Support or PEX Elbow if tight bend

FAUCET THAT HAS 1/2" PEX CONNECTIONS

Step 7: Connecting Zurn PEX to Endpoints, continued

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.

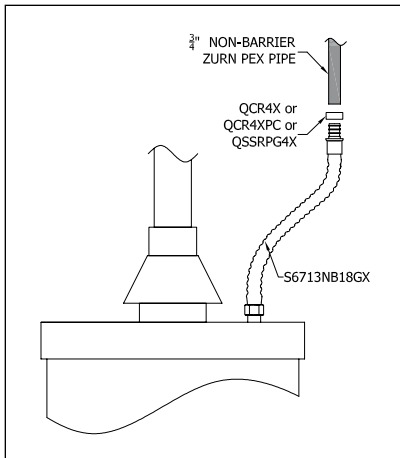
EXPANSION

- A QEDE33BFGX (Drop Ear Elbow)
- B QEUF33GX (Female Thread x PEX Adapter)
- C QER3X (Ring)

CRIMP

- A QQDE33BFGX (Drop Ear Elbow)
- B QQUF33GX (Female Thread x PEX Adapter)
- C QCR3X or QCR3XPC or QSSRPG3X (Ring)

Water Heater Supplies



CAUTION: Zurn PEX cannot supply directly to a gas water heater if the connection puts the tubing too close to a very hot flue pipe. 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.

Professional Installation Limited Warranty

Subject to the terms and conditions of this Limited Warranty, and relating to Zurn PEX Plumbing and Radiant Heating and Fire Protection Systems, Zurn PEX, Inc. warrants only to the owner of the real property when installed by licensed professional contractors or authorized distributors who purchase and properly install in a potable plumbing system and/or radiant heating system and/or fire protection system its:

1. Zurn PEX Non-Barrier cross-linked polyethylene piping (PEX) and Zurn PEX CR poly expansion fittings, and Zurn PEX XL brass expansion fittings, when installed as a system with Zurn PEX Non-Barrier cross-linked polyethylene piping (PEX), for a period of twenty-five (25) years, and
2. Zurn PEX Non-Barrier and Performa® Barrier cross-linked polyethylene piping (PEX) and Zurn PEX CR poly insert fittings, and Zurn PEX XL brass insert fittings, and Zurn PEX copper crimp rings when installed as a system with Zurn PEX Non-Barrier and Barrier cross-linked polyethylene piping (PEX), for a period of twenty-five (25) years, and
3. Zurn PEX Non-Barrier and Performa Barrier cross-linked polyethylene piping (PEX) and Zurn PEX CR poly insert fittings, and Zurn PEX XL brass insert fittings, and Zurn PEX QuickClamp™ crimp rings when installed as a system with Zurn PEX Non-Barrier and Barrier cross-linked polyethylene piping (PEX), for a period of twenty-five (25) years, and
4. Zurn PEX Non-Barrier cross-linked polyethylene piping (PEX) and Zurn Z-Bite™ Fittings when installed as a system with Zurn PEX Non-Barrier cross-linked polyethylene (PEX) piping, for a period of twenty-five (25) years, and
5. Zurn PEX hyPE-RTube PE-RT tube for a period of twenty-five (25) years, and
6. Zurn PEX Non-Barrier and Performa Barrier cross-linked polyethylene piping (PEX) and Zurn PEX XL brass insert fittings, and Zurn PEX CR poly insert fittings, and stainless steel clamps when installed as a system with Zurn PEX Non-Barrier and Barrier cross-linked polyethylene piping (PEX), for a period of fifteen (15) years, and
7. Zurn Z-Bite fittings when installed with copper tube meeting ASTM B88 or CPVC tube meeting ASTM D2846 or PEX tube meeting ASTM F876 from another manufacturer for a period of five (5) years, and
8. Zurn PEX Performa Barrier cross-linked polyethylene piping (PEX), for a period of thirty (30) years, and
9. Zurn PEX Alumicor® PEX-AL-PEX (cross-linked polyethylene-aluminum- crosslinked- polyethylene) piping for a period of twenty-five (25) years, and
10. Zurn PEX Non-Barrier and Barrier cross-linked polyethylene piping (PEX) for a period of twenty-five (25) years, and
11. Zurn PEX XL brass insert, and Zurn PEX CR poly insert fittings when not installed with Zurn PEX Non-Barrier and Barrier cross-linked polyethylene piping (PEX) and installed with PEX piping that meets the ASTM F876 requirements for a period of five (5) years, and
12. Zurn PEX XL brass expansion fittings, and Zurn PEX CR poly expansion fittings when not installed with Zurn PEX Non-Barrier cross-linked polyethylene piping (PEX) and installed with PEX piping that meets the ASTM F1960 requirements for a period of five (5) years, and
13. QuickClamp crimp rings when not installed with Zurn PEX Non-Barrier and Barrier cross-linked polyethylene piping (PEX) and installed with PEX piping that meets the ASTM F876 requirements, for a period of five (5) years, and
14. Zurn PEX Alumicor PEX-AL-PEX brass compression fittings when used with another manufacturer's piping that meets the requirements of ASTM F1281 for a period of ten (10) years, and
15. QuickPort® plumbing manifolds, under normal conditions of use, for a period of ten (10) years, and
16. Zurn PEX riser tubes and supplies, if installed properly, for a period of one (1) year from the date of installation, and
17. The associated hardware and accessories, including manifolds, distribution headers, valves, electrical controls, and miscellaneous fittings, for a period of two (2) years from the date of installation, and
18. Zurn PEX Crimp Tools, if properly used under normal conditions, for a period of six (6) months from date of purchase.

In order for this Limited Warranty to apply, the above referenced products must be installed by a licensed professional meeting all applicable code requirements and good plumbing practices.

FAILURE TO INSTALL ZURN PEX PRODUCTS ACCORDING TO MANUFACTURER'S INSTRUCTIONS WILL VOID ALL APPLICABLE WARRANTIES AND MAY RESULT IN SEVERE WATER DAMAGE.

Professional Installation Limited Warranty, continued

Under this warranty, you only have a right to reimbursement if the alleged failure is determined to be a direct result of the product(s) as covered in this warranty and occurred during the warranty period. This warranty does not apply and you do not have a right of reimbursement if the failure or resulting damage is caused by:

- I. freezing during or after the installation or inadequate freeze protection;
- II. damage due to tear, breaks, or other external damages before, during or after installation;
- III. components not manufactured or sold by Zurn PEX, Inc.;
- IV. exposure to temperatures and pressures beyond the specified range for Zurn PEX products as specified on the product in the Zurn PEX Design Manual and Installation Guide;
- V. any form of corrosion;
- VI. exposure to ultraviolet light;
- VII. damage or wear from abnormal operating conditions, accident, abuse, misuse, or unauthorized alterations or repair or damage attributable to water discharged as part of a system's normal operating process;
- VIII. exposure to harmful, unauthorized, or unanticipated chemicals or substances;
- IX. failure to install, inspect, or test Zurn PEX Fire Protection Systems in accordance with applicable code requirements, Zurn PEX Residential Fire Protection Systems Installation Guide instructions at the time of installation, and accepted industry practices including, but not limited to, NFPA13D.
- X. malfunction or otherwise improper function of sprinkler(s) installed with a Zurn PEX Fire Protection System, which are not manufactured by Zurn PEX, Inc.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES OR OBLIGATIONS, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ZURN PEX DOES NOT GUARANTEE OR IN ANY WAY WARRANT THE INSTALLATION OF ZURN PEX PRODUCTS DUE TO THE WIDE VARIANCE IN INSTALLATION PRACTICES AND OTHER CONDITIONS BEYOND OUR CONTROL. IN NO EVENT SHALL ZURN PEX, INC. BE LIABLE IN TORT OR CONTRACT OR UNDER ANY OTHER LEGAL OR EQUITABLE THEORY OF LAW FOR ANY INCIDENTAL SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES.

If you believe that a product fails to meet the above Limited Warranty, you should notify us in writing within 30 days of an alleged failure and prior to expiration of the applicable warranty period set forth above, at the following address:

Zurn PEX, Inc.
116 Maple Street
Commerce, TX 75428
Attention: Product Claims

Notification should include a description of the product, the failed part, model number (if available), date of purchase and/or date of installation, and how the product fails to meet the above warranty. Upon receipt of a written claim under this Limited Warranty and evidence/identification of the date of manufacture of product, and after inspection by an authorized Zurn PEX representative and determination of a manufacturing defect, Zurn PEX, Inc. will reimburse the property owner for reasonable repair or replacement charges, to include drywall and painting as well as damages to real property and the premises within which the product is installed, resulting from the failure or leak. At our option, and in our sole discretion, we will either repair or replace the product with a Zurn PEX product of the same or similar type, size, and like quantity. THESE REMEDIES ARE THE EXCLUSIVE REMEDIES FOR BREACH OF WARRANTY. UNDER NO CIRCUMSTANCES WILL ZURN PEX, INC. BE LIABLE FOR ANY OTHER INJURY, LOSS, DAMAGE OR EXPENSE WHETHER DIRECT, INDIRECT, CONSEQUENTIAL, EXEMPLARY OR PUNITIVE, INCLUDING BUT NOT LIMITED TO LOSS OF USE, INCOME, PROFIT, PRODUCTION OR INCREASED COST OF OPERATION, SPOILAGE OR DAMAGE TO MATERIAL, OR CHANGE OUT COSTS. In order to qualify for a labor allowance to repair or replace defective material, you must contact Zurn PEX in advance and receive written authorization for this allowance. Except as specified above, we will not pay any costs (labor or otherwise) associated with removing previously installed product(s), installing replacement product(s) or return of a product.

If, as determined by Zurn PEX, Inc. in its sole discretion, that repair or replacement of the product is not commercially practicable, or cannot be completed in a timely manner, we may refund the ultimate purchase price paid for the product upon verification by providing a copy of your purchase order, invoice, receipt, or bill of sale. No action on the part of Zurn PEX, Inc. under this warranty shall be construed as an admission of liability or that the product is not fit for its intended use.

⚠ **WARNING:** Cancer and Reproductive Harm - www.P65Warnings.ca.gov
⚠ **ADVERTENCIA:** Cáncer y daño reproductivo - www.P65Warnings.ca.gov
⚠ **AVERTISSEMENT:** Cancer et effets néfastes sur la reproduction - www.P65Warnings.ca.gov