

# **EVOPEX**® A PEX Push-to-Connect System



# Reliance Worldwide Corporation®

Reliance Worldwide Corporation® (RWC) is a market leader and manufacturer of water control systems and plumbing solutions for residential, commercial and industrial applications. Established in 1949, the RWC portfolio includes industry-leading brands: SharkBite® Push-to-Connect plumbing solutions; HoldRite® engineered plumbing and mechanical solutions; Cash Acme® control valves; John Guest® fittings and fluid dispense products and StreamLabs® smart water technologies. Engineered for quality and efficiency, the portfolio of products from the RWC brands work together to create an end-to-end solution from meter to fixture, floor to ceiling.



# Deliver

Our innovations are designed to improve job site performance and efficiency with a full range of plumbing solutions for installing an entire potable water plumbing system from meter to fixture. floor to ceiling using a single source manufacturer.



# Control

We offer an extensive range of reliable solutions for providing precise control of water safety, efficiency and performance, including pressure, thermostatic and temperature control valves designed to safeguard water systems in all types of facilities.



# **Optimize**

Our smart water technology enables the tracking of water consumption and provides real-time alerts on possible leaks, as well as giving visibility to water usage and habits, helping identify ways to conserve.



# Solve

We provide intelligent pipe and connection solutions to move liquid and air for specialist industries across the world. Our technologies serve industries such as plumbing, drink dispense. pneumatics. compressed air and water purification.

# One family of brands, one complete solution.

# **Deliver**



# Push-to-connect system

A complete push-toconnect plumbing system for hot and cold water and central heating applications.



# **Engineered solutions**

Secondary pipe supports, acoustic noise and vibration plumbing solutions, sleeving, firestop systems, DWV testing solutions, and water heater accessories

# Control

# **CashAcme**

# Water control valves

World leading temperature and pressure control valves for the precise, reliable and safe delivery of water to residential, commercial and industrial properties.

# **Optimize**



# Smart home water monitor

Smart home water monitor and leak detection technology to protect homes from water damage.

# Solve



# Specialist industry solutions

Push-to-connect technology for the movement of fluid, air and data.

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# Quality in every component

# **Standard Body**

#### Body •

Acudel® modified PPSU provides toughness and chemical resistance along with excellent anti-decay and dimensional stability.



# **Body Components**



# **O-Ring**

EPDM provides resistance to extreme heat, ozone, UV, alkali, and mild acidic and oxygenated solvents as well as high resistance to chloramine at high temperatures. The EvoPEX O-ring seals on the inside of the pipe for a water-tight connection.



# **Grab Ring**

Stainless Steel 316 with highest corrosion resistance and strength. The grab ring has teeth that "bite" on the pipe exterior.



### **Indicator Ring**

Provides visual assurance of proper insertion depth and connection.



#### Spacer

Strong polymer with dimensional stability and chemical resistance for additional support while guiding the pipe into the fitting.



#### Collet

20% glass fiber reinforced Grilamid provides high impact strength, chemical resistance, and high dimensional stability.



#### **Collet Retainer**

Stainless Steel 304 provides excellent corrosion resistance and holds the collet together on the body for a professional appearance.

# Certifications

**ASSE 1061** NSF/ANSI/CAN 61 CSA B137.5

NSF/ANSI 14

**ASTM F877** 

**ASTM E84\*** ASTM E119



Refer to QAI Laboratory Listing #P343-1

# **New Construction** Residential

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Washing Machine/Ice

push-to-connect fittings

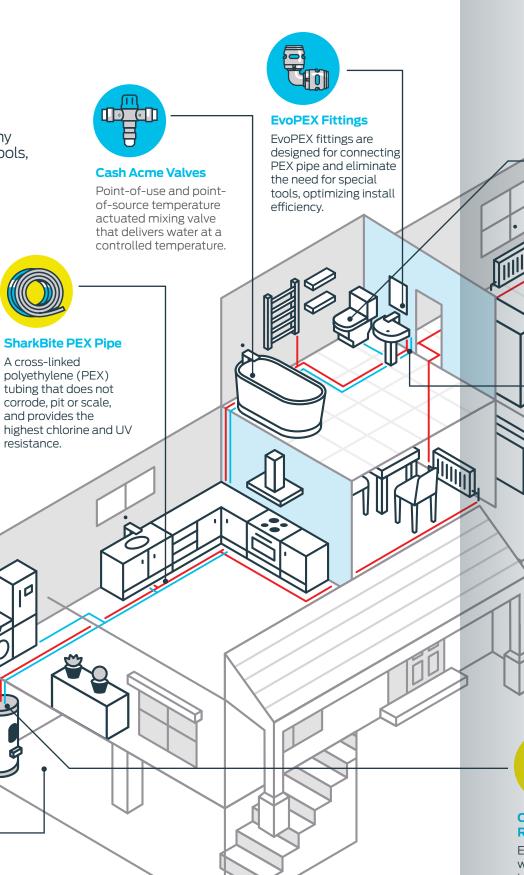
allow for quick and easy

installation of appliances. Available with or without water hammer arrestor.

Outlet boxes with SharkBite

**Maker Outlet Boxes** 

Plumb an entire home without the need for any special tools. No crimp, clamp, or expansion tools, and no soldering or glue are required.



#### **Quarter Turn Supply Stops**

Full range of stops to control water flow to fixtures. Push-toconnect ends eliminate the need for bulky tools when installing in tight spaces. Solutions available for PEX, Copper, CPVC and PERT installations.



#### **HoldRite Pipe Supports & Brackets**

Versatile brackets ideal for sink, lavatory, shower and toilet plumbing solutions.



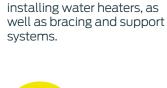
#### **Frost-Free Sillcocks**

Protects the valve from freezing conditions, and from potential back pressure and contaminated water flowing back into the main line. Push-toconnect inlet enables quick installation.



### **Cash Acme Pressure Regulating Valves**

EB45 and EB25 PRVs with a wide range of connections, including SharkBite push-toconnect.



#### **Cash Acme Tank Booster Pro**

**Water Heater Accessories** 

Wide offering of solutions for

Easy to install water heater mixing valve that mixes hot water with cold to deliver tempered water at 120°F (49°C). Increases usable hot water capacity by up to 100%.

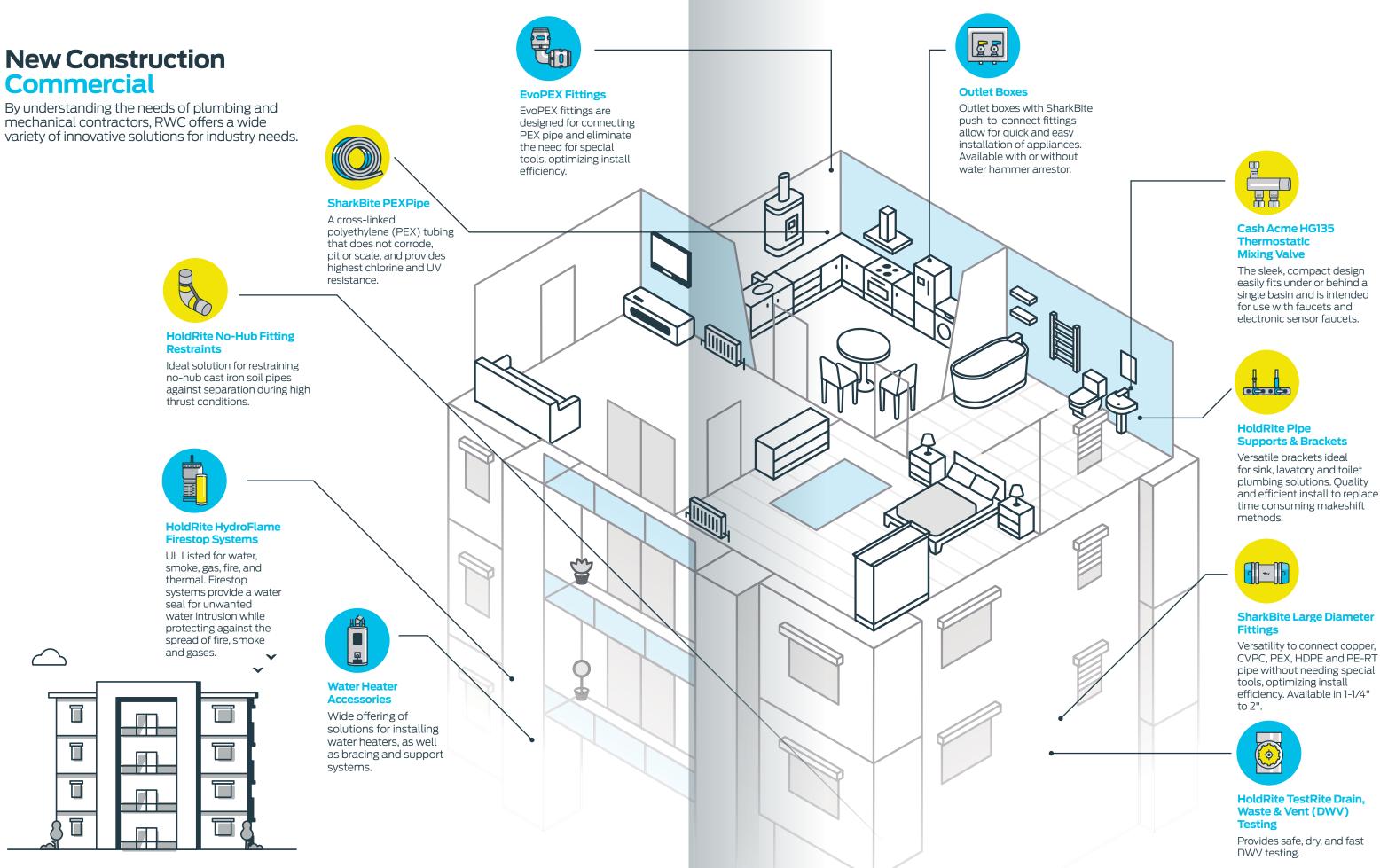
Convenient single lever control makes it easy to use and shut-off the water supply. Can be rotated after assembly for easier installation in tight spaces.

**Ball Valves** 

A cross-linked

resistance.





# Plumbing a Better Job site

SharkBite EvoPEX push-to-connect fittings and SharkBite PEX pipe delivers the ability to plumb an entire potable water system from meter to fixture without the need for special tools. This revolutionary system provides a faster, safer, and more reliable installation for long-term performance and satisfaction.



#### Efficiency

No special tools, soldering, glue or crimping, optimizing install time and efficiency. Fittings can be rotated after installation for quick alignment and faster installation.



#### **Peace of Mind**

A green visual indicator on the fittings provides assurance that a secure connection has been made, reducing the risk of install errors and potential leaks, providing a minimal learning curve.



#### **Health & Safety**

No soldering, glues, or solvents required for installation, which keeps potentially dangerous chemicals out of your potable water supply and eliminates potential risk of fire from use of torches on the job site.



#### Quality

Push-to-connect technology does not add any external stress to the fitting connection or alter the shape/integrity of the pipe as other tool-based PEX fittings, which provides assurance of long-term quality performance.



#### **Proven & Guaranteed**

SharkBite PEX pipe has been around for more than 35 years with over 850 million feet in North America. Over 1.5 million connections are made a week with SharkBite fittings and is thus the most trusted brand for push-to-connect technology.



#### Made in the USA

EvoPEX fittings and SharkBite PEX pipe are manufactured domestically in Cullman, AL. RWC is the largest PEX manufacturer utilizing the silane method.



#### **Efficient Water Delivery**

The SharkBite EvoPEX system is resistant to corrosion and mineral build-up to maintain full flow of water and efficient hot water delivery.



#### Reliability

25-year system warranty\* including 10 year consequential damage coverage to provide years of protection and satisfaction.



#### **Durability**

SharkBite PEX pipe is tested to the highest level of chlorine resistance standards and is certified to meet ASTM F876 requirements for continuous hot water recirculation. SharkBite PEX pipe also has the highest UV resistance at 6 months to meet the 5306 ASTM standards.

# **EvoPEX System** Comparison

	EvoPEX	Crimp	Expansion
No special tools required to make a fitting connection	✓	X	×
No calibration or maintenance required for proper function of tool	✓	×	×
Green indicator ring for confirmation of secure connection.	✓	×	×
High performance polymer with great chemical and chloramine resistance	✓	✓	✓
Fittings and PEX Pipe manufactured in the USA	✓	×	✓
Immediate pressure testing	<b>✓</b>	<b>✓</b>	X
25 Year System Warranty	<b>✓</b>	<b>✓</b>	<b>✓</b>
No rings required for proper fitting connection	<b>✓</b>	X	×
Easy install with minimal learning curve	<b>✓</b>	×	×

<sup>\*</sup>For full warranty details, please visit **sharkbite.com** 



# **EvoPEX Fittings**





Part no	Size	Pack Qty	Min. Order Qty
K008WP3	1/2"	3	1
K016WP3	3/4"	3	1
K020WP2	1"	2	1

Reducing Couplings



K058WP3 3/4" x 1/2"	3 1
<b>K060WP2</b> 1" x 3/4"	2 1

## Female Adapters



Part no	Size	Pack Qty	Min. Order Qty
K072WP3	1/2" x 1/2" FNPT	3	1
K088WP3	3/4" x 3/4" FNPT	3	1
K094WP2	1" x 1" FNPT	2	1

#### Male Adapters

Male Elbows



Part no	Size	Pack Qty	Min. Ord Qty
K120WP3	1/2" x 1/2" MNPT	3	1
K134WP3	3/4" x 3/4" MNPT	3	1
K140WP2	1" x 1" MNPT	2	1

#### Elbows



Part no	Size	Pack Qty	Min. Order Qty
K248WP6	1/2" x 1/2"	6	1
K256WP6	3/4" x 3/4"	6	1
K260WP2	1" x 1"	2	1

### Reducing Elbows

Drop-Ear Elbows



Part no	Size	Pack Qty	Min. Orde Qty
K274WP3	3/4" x 1/2"	3	1
K277WP2	1" x 1/2"	2	1

# Plumbing solutions for a wide range of applications.

SharkBite EvoPEX is an evolutionary push fit plumbing system that enables an entire potable water system to be plumbed without needing special tools, glue, crimping or solder. It is designed to help installers optimize install times and improve productivity, while minimizing the risk of leaks from installation errors.



Part no	Size	Pack Qty	Min. Orde Qty
K280WP2	1/2" x 1/2" MNPT	2	1

### Female Elbows



Part	Size	Pack	Min. Order
no		Qty	Qty
K308WP2	1/2" x 1/2" FNPT	2	1

no		Qty	Qty	
K334WP3	1/2" x 1/2" FNPT	3	1	
K340WP2	3/4" x 3/4" FNPT	2	1	

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# **EvoPEX Fittings Cont'd**

# Tees

Part no	Size	Pack Qty	Min. Orde Qty
K362WP3	1/2" x 1/2" x 1/2"	3	1
K370WP3	3/4" x 3/4" x 3/4"	3	1
K374WP2	1" x 1" x 1"	2	1

# Reducing Tees



Part no	Size	Pack Qty	Min. Orde Qty
K408WP3	1/2" x 1/2" x 3/4"	3	1
K412WP3	3/4" x 3/4" x 1/2"	3	1
K413WP2	3/4" x 3/4" x 1"	2	1
K414WP2	1" x 3/4" x 3/4"	2	1
K415WP2	1" x 1" x 1/2"	2	1
K416WP2	1" x 1" x 3/4"	2	1
K418WP2	1" x 3/4" x 1"	2	1
K419WP2	1" x 3/4" x 1/2"	2	1
K444WP3	3/4" x 1/2" x 3/4"	3	1
K454WP3	3/4" x 1/2" x 1/2"	3	1

# Reducing Street Tees



Part no	Size	Pack Qty	Min. Ord Qty
K4483WP3	3/4" x 3/4" x 1/2"	3	1
K4485WP2	1" x 1" x 1/2"	2	1

### **End Caps**



Part no	Size	Pack Qty	Min. Order Qty
K514WP6	1/2"	6	1
K518WP6	3/4"	6	1
K520WP2	1"	2	1

# PEX Stub-Outs



Part no	Description	Length	Min. Orde Qty
K24650WP	1/2"	6"	25
K25581WP12	1/2" with elbow	6"	12
K25722WP12	1/2" with elbow	10"	12
K25722WP	1/2"	10"	25

# PEX Stub-Outs



Part no	Description	Length	Min. Order Qty
K24649WP	1/2"	6"	25
K25578WP12	1/2" with elbow	6"	12
K25721WP12	1/2" with elbow	10"	12
K25723WP	1/2"	20"	25

# Ball Valves



Part no	Size	Min. Order Qty
K22222	1/2" x 1/2"	12
K22185	3/4" x 3/4"	12
K22223	1" x 1"	6

# Supply Stops



Part no	Size	Туре	Min. Order Qty
K23036	1/2" x 3/8" Comp	Angle	12
K23037	1/2" x 3/8" Comp	Straight	12

#### Chamfer Tool



Part no	Description	Min. Orde Qty
25829	1/2" x 3/4" x 1" Chamfer Tool	1

# Customizing with SharkBite EvoPEX Street Tees







The maximum number of street tees that can be joined together is based on sizing requirements of the code. The maximum WSFU that can be fed off of the trunk line is limited to the requirements in the code based on available pressure, total developed length, residual pressure requirements and water supply fixture unit load.



# Installation Requirements

## **Pressure Testing EvoPEX Systems:**

Consult your local codes for system testing requirements. Testing must be completed prior to concealing fittings with concrete or by other means. Use only dishwashing liquid soap and water to detect plumbing leaks. Avoid using 'Leak Detector' spray products.

**Water Testing:** The test pressure applied to the system must meet the pressure testing requirements of local code, but cannot be lower than the system operating pressure. The pressure with water cannot exceed the following pipe listings: 73.4°F (23°C) at 160psi 180°F (82.2°C) at 100psi 200°F (93.3°C) at 80psi It is recommended to test at a pressure of 80psi.

#### Air Testing:

When air is used for pressure testing, consult local codes to ensure proper testing methods are followed.



- · Square cut, perpendicular to length of tubing
- Cut SharkBite PEX Pipe using a quality PEX cutter with a sharp blade.



Step 3 Push the pipe into the fitting firmly.

- · A twisting action reduces insertion force.

# Making an EvoPEX Connection





Step 2 **Examine the EvoPEX fitting and** SharkBite PEX tubing

• Ensure that both are free of debris and damage in preparation for making a connection.



Step 4 Verify that the pipe is pushed into the fitting fully and engaged properly.

· Check that the green indicator ring is fully visible.



Take care to avoid inserting pipe at an angle.

# **EvoPEX Facts**

**EvoPEX push-to-connect fittings can only be used with PEX pipe.** EvoPEX fittings have been designed to
be used with SharkBite PEX pipe. We control the OD,
and more importantly the ID, of our PEX pipe to more
rigorous tolerances than the ASTM standards. This
enables us to optimize o-ring sealing and provide a long
fitting life.

**EvoPEX fittings cannot be installed on copper or CPVC pipe due to the inner pipe seal.** The fittings will fit on alternate pipe materials but the o-ring seal will not occur due to ID pipe dimensions. Using EvoPEX fittings on any pipe other than PEX will void all warranty.

EvoPEX fittings can be rotated after assembly and will not affect the integrity of the connection.

EvoPEX fittings and SharkBite PEX pipe are certified for potable water installations, Propylene Glycol mix up to 100% and non-potable applications such as hydronic and potable heating.

In freezing temperatures, SharkBite PEX water systems are less susceptible to burst due to the pipe's ability to expand.

The outside temperature does not affect installation of EvoPEX fittings and can be tested immediately once all connections are made.

SharkBite PEX pipe for potable water applications is certified by NSF International to meet the latest ASTM F876 oxidative-resistance requirements for continuous recirculation, as indicated by the PEX 5306 designation on white, red, and blue tubing. SharkBite PEX pipe meets the highest chlorine resistance rating that indicates suitability for use in continuous recirculation systems where tubing is exposed to hot (up to 140°F), chlorinated water 100 percent of the time.

**EvoPEX fittings are approved for underground burial.** EvoPEX fittings are certified for underground

applications without a wrapping material and have a 10-year warranty when buried. Brass EvoPEX fittings (adapters) must have an impervious barrier between the fittings and the surrounding soil. Self-fusing, formaldehyde and chloride-free, fully-cured silicone tape with a minimum thickness of 0.020" should be used.

All SharkBite Universal brass fittings must have an impervious barrier between the fitting and the surrounding soil. Self-fusing, formaldehyde and chloride-free, fully-cured silicone tape with a minimum thickness of 0.020" should be used.

EvoPEX fittings have a 30 day UV rating, while SharkBite PEX pipe has a 6 month UV rating.

**EvoPEX fittings have no space requirement between fittings.** Minimum cut length of pipe between fittings
should be long enough to fully engage the indicator ring
to ensure you have full insertion depth of the pipe into
the fitting. This will be visible by the green indicator ring
present in the collet windows.

EvoPEX fittings are suitable for attic applications with temperatures pressures of 80 PSI @ 200°F (93°C), 100 PSI @ 180°F (82°C), and 160 PSI @ 73.4°F (23°C) when installed as per the installation instructions and relevant plumbing codes.



# Flexible, freeze resistant pipe for residential and commercial installations.

SharkBite PEX pipe is a cross-linked polyethylene pipe approved for use in potable water installations. It provides the flexibility to bend around corners, reducing the number of fittings needed. SharkBite PEX pipe meets the highest chlorine resistance standards and has a six month UV rating.



# **Potable Water**

# **PEX Pipe**



Part no	Size	Length	Min. Order Qty
U860R25W	1/2"	25'	1
U860R50W	1/2"	50'	1
U860R100W	1/2"	100'	1
U860R300W	1/2"	300'	1
U860R500W	1/2"	500'	1
U860R1000W	1/2"	1000'	1





Part no	Size	Length	Min. Order Qty
U870R25W	3/4"	25'	1
U870R50W	3/4"	50'	1
U870R100W	3/4"	100'	1
U870R300W	3/4"	300'	1
U870R500W	3/4"	500'	1

# 1" Red Pipe

Part no	Size	Length	Min. Ordo Qty
U880R100W	1"	100'	1
U880R300W	1"	300'	1
U880R500W	1"	500'	1





Part no	Size	Length	Min. Order Qty
U860B25W	1/2"	25'	1
U860B50W	1/2"	50'	1
U860B100W	1/2"	100'	1
U860B300W	1/2"	300'	1
U860B500W	1/2"	500'	1
LI860B1000W	1/2"	1000'	1





Part no	Size	Length	Min. Orde Qty
U870B25W	3/4"	25'	1
U870B50W	3/4"	50'	1
U870B100W	3/4"	100'	1
U870B300W	3/4"	300'	1
U870B500W	3/4"	500'	1

# 1" Blue Pipe



Par no	t	Size	Length	Min. Orde Qty
U88	80B100W	1"	100'	1
U88	B0B300W	1"	300'	1
U88	80B500W	1"	500'	1

# 1/2" White Pipe



Part no	Size	Length	Min. Order Qty
U860W25W	1/2"	25'	1
U860W50W	1/2"	50'	1
U860W100W	1/2"	100'	1
U860W300W	1/2"	300'	1
U860W500W	1/2"	500'	1
U860W1000W	1/2"	1000'	1

# 3/4" White Pipe



Part no	Size	Length	Min. Order Qty
U870W25W	3/4"	25'	1
U870W50W	3/4"	50'	1
U870W100W	3/4"	100'	1
U870W300W	3/4"	300'	1
U870W500W	3/4"	500'	1

# 1"-2" White Pipe



no	Size	Length	Qty
W001W088U	1"	100'	1
W00EW088U	1"	300'	1
U880W500W	1"	500'	1
U885W100	1-1/4"	100'	1
U890W100	1-1/2"	100'	1
U895W100	2"	100'	1

# **Potable Water PEX Pipe Cont'd**



Part no	Size	Length	Min. Order Qty
U860R10	1/2"	10'	10
U860R20	1/2"	20'	10



Size	Length	Min. Order Qty	Part no	Size	Length	Min. Ord Qty
3/4"	10'	10	U880R10	1"	10'	5
3/4"	20'	10	U880R20	1"	20'	5

1" Red Pipe Straight Lengths





Part no	Size	Length	Min. Orde Qty
U860B10	1/2"	10'	10
U860B20	1/2"	20'	10



Part no	Size	Length	Min. Order Qty
U870B10	3/4"	10'	10
U870B20	3/4"	20'	10







Part no	Size	Length	Min. Orde Qty
U860W10	1/2"	10'	10
U860W20	1/2"	20'	10

# 3/4" White Pipe Straight Lengths

U870R10 U870R20



r	Part no	Size	Length	Min. Orde Qty
	U870W10	3/4"	10'	10
	U870W20	3/4"	20'	10



Length	Min. Order Qty
10'	5
20'	5
20'	5
20'	5
20'	5
	10' 20' 20' 20'

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# Special Application PEX Pipe



Part no	Size	Length	Min. Order Qty
U8550100	3/8"	100'	1
U855O300	3/8"	300'	1
U8550500	3/8"	500'	1
U8600100	1/2"	100'	1
U860O300	1/2"	300'	1
U860O500	1/2"	500'	1
U86001000	1/2"	1000'	1
U865O300	5/8"	300'	1



Part no	Size	Length	Min. Order Qty
U8700100	3/4"	100'	1
U870O300	3/4"	300'	1
U870O500	3/4"	500'	1
U87001000	3/4"	1000'	1
U880O100	1"	100'	1
U880O300	1"	300'	1
U880O500	1"	500'	1



Part no	Size	Length	Min. Order Qty
U860010	1/2"	10'	10
U860O20	1/2"	20'	10
U870O20	3/4"	20'	10
U880O20	1"	20'	5

# **Support of SharkBite PEX Pipe**

SharkBite PEX Pipe must be properly supported as per local code. For both horizontal applications we recommend the pipe be supported every 32" between supports (sizes 1" and smaller), leaving a little slack in the pipe to allow for normal expansion and contraction. Always use approved PEX supports and never use a support that has sharp edges. It is recommended to support PEX tubing in vertical installations, refer to local codes for distances between supports.

# **Horizontal Support**

	IPC	UPC	NPCC
1/2" - 1"	32"	32"	32"
1-1/4" - 2"	48"	48"	32"

# **Vertical Support**

	IPC	UPC	NPCC
1/4" - 2"	Base and at base of alternate floors (< 7.5 m)		
Mid-story Guide	Х	Х	

# Installation of SharkBite PEX Pipe Embedded in Concrete

SharkBite PEX Pipe can be embedded in concrete but we recommend the following guidelines to ensure a long lasting installation.

Protect the SharkBite PEX Pipe with non-metallic sleeves when entering or exiting the concrete slab. A larger diameter piece of SharkBite PEX Pipe also works well in this application.

Avoid making connections in concrete. Use a continuous length of SharkBite PEX Pipe within the slab and be sure to check for leaks before pouring concrete.

# **Cross Linking Methods**

Cross linking is a process that changes the chemical structure of high density polyethylene used to make PEX Pipe, so that the polymer chains are connected with each other in a three-dimensional matrix by chemical bonds. PEX A, B and C are terms used to describe the different manufacturing methods used to produce PEX Pipe, not grades of PEX. Regardless of which manufacturing method is used, all PEX Pipe meets the same ASTM standards for commercial and residential plumbing applications.

# Technical Data for SharkBite PEX Pipe

#### **SharkBite PEX Pipe Marking:**

All SharkBite PEX Pipe is marked with:

#### **Tubing Length**



#### **Code Evaluation**

CSA B137.5 ANSI/AWWA C904 ASTM F876/877 (ASTM F1807, ASTM F2098, ASSE 1061)

# Technical Data For SharkBite PEX Pipe (Cont'd)

# Certifications

The SharkBite PEX Pipe is design certified to ASTM F-876, F-877, UL 1821, CSA B137.5 standards, and is listed to NSF/ANSI 61 and NSF/ANSI 372 standards and CSA B137.5 standards for use in potable water systems.

# **Maximum Working Pressure**

160psi @ 73.4°F (23°C) 100psi @ 180°F (80°C) 80psi @ 200°F (93°C)

# Thermal Expansion

Since SharkBite PEX Pipe will expand and contract during temperature changes, please allow slack when running the pipe through the building. SharkBite PEX Pipe will expand and contract at a rate of approximately 1.1" per 100 feet of Pipe for each 10°F change in temperature (see equation below). We recommend that offsets and expansion loops be used as ways to compensate for expansion and contraction.

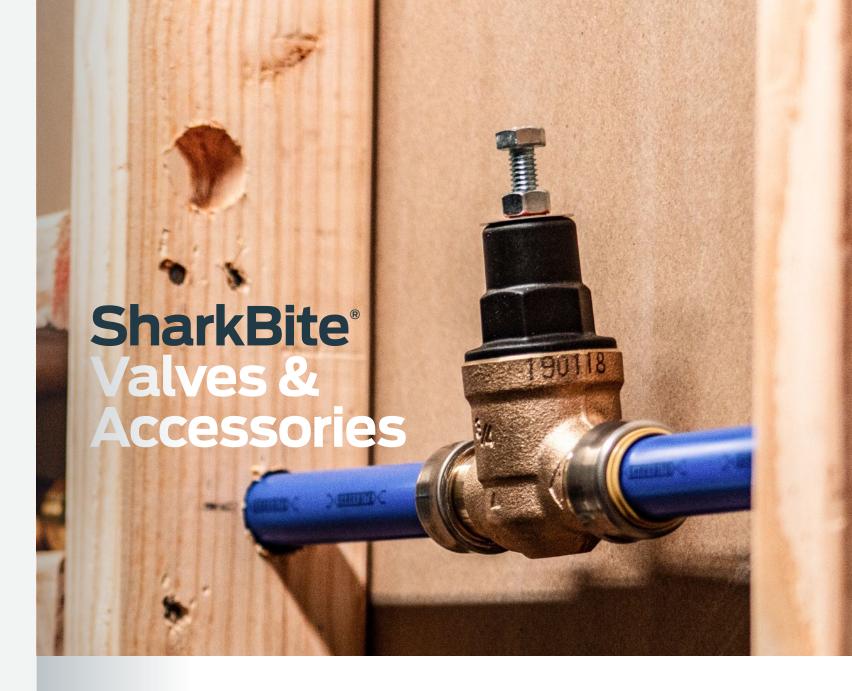
PEX tubing will expand/contract at a rate of 1.1" / 10°F∆T / 100'

# Expansion/Contraction Loop Methods



# SharkBite PEX Pipe Dimensions, Bend Radius and Fluid Capacity

Nominal Diameter	OD Inches	ID Inches	Bend Radius	Fluid Cap 100'/Gals
3/8"	0.5	0.35	4"	0.53
1/2"	0.625	0.475	5"	0.96
3/4"	0.875	0.671	7"	1.9
1"	1.125	0.885	10"	3.1



# Superior quality valves that establish trust.

A total system from meter to fixture, the SharkBite product offering goes beyond the traditional pipe-and-fitting solutions to include valves, outlet boxes, water heater connectors, supply stops and other accessories needed to install a complete potable water plumbing system.



EvoPEX® Push-to-Connect System

# Pressure Regulating Valves

# EB45 Direct SharkBite

Part no	Size	Min. Order Qty
23807-0045	1/2"	1
24383-0045	1/2" Slip Feature	1
23808-0045	3/4"	1
24384-0045	3/4" Slip Feature	1
22675-0045	1"	1

# EB45 Double Union SharkBite

Part no	Size	Min. Order Qty
23893-0045	1/2"	1
23894-0045	3/4"	1
23896-0060	3/4" (60 psi setting)	1
24449-0045	3/4" w/ Gauge Port	1
23358-0045	1"	1
23945-0060	1" (60psi setting)	1



Part no	Size	Min. Ord Qty
25847-0045	1-1/4"	1
25848-0045	1-1/2"	1
25849-0045	2"	1



Part no	Size	Min. Order Qty
23955-0045	3/4"	1
23956-0045	1"	1

# **Ball Valves**



Part no	Size	Min. Order Qty
22222-0000LF	1/2" x 1/2"	12
22185-0000LF	3/4" x 3/4"	12
22223-0000LF	1" x 1"	6



Part no	Size	Min. Order Qty
24615-0000LF	1/2" x 1/2"	12
24616-0000LF	3/4" x 3/4"	12
24617-0000LF	1" × 1"	6



1-1/2" 1-1/2"

UXLBV41

UXLBV54 2" x 2"

# Check Valves & General Service Valves



Size	Min. Order Qty
1/2" x 1/2"	6
3/4" x 3/4"	6
1" x 1"	3
	1/2" x 1/2" 3/4" x 3/4"

Anti-Siphon Frost Free Sillcocks		

Part no	Size	Min. Order Qty
24628LF	1/2" x 3/4" MHT 8"	4
24629LF	1/2" x 3/4" MHT 10"	4
24636LF	1/2" x 3/4" MHT 12"	4
24637LF	1/2" x 3/4" MHT 15"	4
24638LF	1/2" x 3/4" MHT 18"	4

# Thermostatic Mixing Valves



Part no	Size	Min. Ord Qty
24639	3/4" Corrugated	1
24832	3/4" Braided	1
24643	3/4" Corrugated, with temperature gauge	1
24644	3/4" Braided, with temperature gauge	1



Part no	Description	Min. Order Qty
24548	1/2" with Integrated SharkBite Conn.	1
24549	3/4" with Integrated SharkBite Conn.	1
24504	1/2" with SharkBite Conn.	1
24505	3/4" with SharkBite Conn.	1



#### HG135 with Compression Connections ASSE 1017, 1070 & CSA B 125.3



Part no	Size	Min. Order Qty
25686	3/8"	1
25687	3/8" Tee	1

Chrome finish. Mounting bracket & hardware, and inlet strainer included.

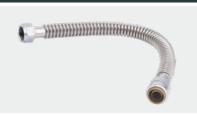
# **Water Heater** Connectors

# Braided Water Heater Connectors Stainless Steel



Part no	Size	Length	Qty
U3068FLEX12LF	1/2" x 3/4" FIP	12"	12
U3068FLEX15LF	1/2" x 3/4" FIP	15"	12
U3068FLEX18LF	1/2" x 3/4" FIP	18"	12
U3068FLEX24LF	1/2" x 3/4" FIP	24"	12
U3088FLEX12LF	3/4" x 3/4" FIP	12"	12
U3088FLEX15LF	3/4" x 3/4" FIP	15"	12
U3088FLEX18LF	3/4" x 3/4" FIP	18"	12
U3088FLEX24LF	3/4" x 3/4" FIP	24"	12

# Corrugated Water Heater Connectors Stainless Steel



Part no	Size	Length	Qty
SS3088FLEX18LF	3/4" x 3/4" FIP	18"	12
SS3088FLEX24LF	3/4" x 3/4" FIP	24"	12
SS3086FLEX24LF	3/4" x 1" FIP	24"	6

# Braided Water Heater Connectors Stainless Steel with Ball Valve



Part no	Size	Length	Qty
U3068FLEX18BVLF	1/2" x 3/4" FIP	18"	12
U3088FLEX18BVLF	3/4" x 3/4" FIP	18"	12

# Corrugated Water Heater Connectors Stainless Steel with Ball Valve



Part no	Size	Length	Qty
SS3068FLEXBVLF	1/2" x 3/4" FIP	18"	12
SS3088FLEXBVLF	3/4" x 3/4" FIP	18"	12

# Accessories

# Water Hammer Arrestors



Part no	Size	Min Order Qty
22630LF	1/2" Residential	1
22631LF	1/2" Commercial	1
22632LF	3/4" Residential	1
22633LF	1" Commercial	1

Provides maintenance-free, continuous protection against water hammer. Can be positioned vertically or horizontally.

### Pressure Gauges



Part no	Size	Туре	Min Order Qty
24436	1/2"	Tee	1
24438	3/4"	Tee	1
24440	1"	Tee	1
24442	1/2"	CTS	1
24444	3/4"	CTS	1

# Temperature Gauges



Part no	Size	Type	Min Order Qty
24437	1/2"	Tee	1
24439	3/4"	Tee	1
24441	1"	Tee	1
24443	1/2"	CTS	1
24445	3/4"	CTS	1

#### Stub-Out Elbows



Part no	Size	Length	Min Order Qty
U351LFA	1/2" x 1/2"	8"	6

#### Home Run Manifolds



Part no	Size	Min Order Qty
PM012SB	12 Port with Brass Valves	1
PM024SB	24 Port with Brass Valves	1

# Supply Stop Valves

# Angle Stops



Part no	Size	Min Order Qty
23036-0000LF	1/2" x 3/8" Comp	12
23336-0000LF	1/2" x 1/4" Comp	6
23489	1/2" x 1/2" Comp	6
24946	1/2" x 1/2" MIP	6

### Straight Stops



no Part	Size	Min Order Qty
23037-0000LF	1/2" x 3/8" Comp	12
23337-0000LF	1/2" x 1/4" Comp	6
23490	1/2" x 1/2" Comp	6
24947	1/2" x 1/2" MIP	6

# Tee Stops



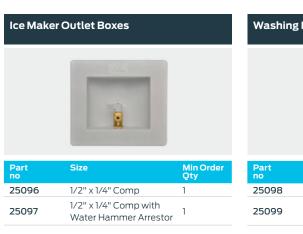
Part 10	Size	Min Order Qty
24983	1/2" x 1/2" x 1/4" Comp	6
24984	1/2" x 1/2" x 3/8" Comp	6
24985	3/4" x 3/4" x 1/4" Comp	6
24986	3/4" x 3/4" x 3/8" Comp	6

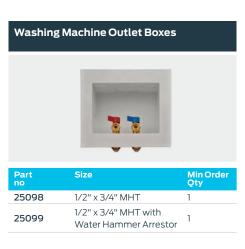
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# Supply Stop Valves Cont'd



# **Outlet Boxes**







Streamline the job with tools and accessories.



# **Installation Tools**

# Deburr & Depth Gauge Tool

1/4", 3/8", 1/2", 5/8", 3/4", 1" 1 U702

Use for copper and CPVC pipe.

# Disconnect Clips



Part no	Size	Min Order Qty
U706	1/4"	12
U708	3/8"	24
U710	1/2"	24
U3712	5/8"	24
U712	3/4"	24
U714	1"	12

#### **Disconnect Tongs**



Part no	Size	Min Order Qty
U711	1/2"	1
U713	3/4"	1
U715	1"	1

#### **PEX Cutters**



Part no	Description	Min Orde Qty
U701	PEX Pipe Scissor Cutter 1/4"-1"	1
233697	PEX Pine Radial Cutter	1

# Large Diameter Deburr & Depth Gauge Tool



Part no	Size	Min Orde Qty
UXLG03	1-1/4", 1-1/2", 2"	1

Use for copper and CPVC pipe.

### Large Diameter Disconnect Tools



Part no	Size	Min Order Qty
UXLDC35	1-1/4"	1
UXLDC41	1-1/2"	1
UXLDC54	2"	1
Use with UXL parts.		

# Wrap for Fitting Burial



Part no	Size	Min Order Qty
25406	10' x 2" x 0.02"	1

# Making a SharkBite Universal Connection



Step 1 Cut the desired length of pipe.

• Square cut, perpendicular to length of tubing



Step 3 Mark the pipe using the depth gauge tool

• Use the depth gauge opening that corresponds to the tubing outside diameter



Step 2 Deburr the end of the pipe to remove any sharp edges.

- Inspect tubing for damageExamine fitting to assure that it's free of debris



Step 4 Push the tubing into the fitting.

Mark from the depth gauge should rest against edge of release collar



# **Disconnecting a Fitting**

Remove fitting with disconnect clips.

- Place the disconnect clip against the end of the fitting.
- Push the disconnect clip, compressing the release collar.
- Pull tubing away from fitting (slight twist).

# Disconnect tongs can also be used.

These are generally used in areas where there is no room for the disconnect clip

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# **Limited Warranty**

# SharkBite®, Cash Acme®, HoldRite®, John Guest® Products

#### What does this warranty cover?

Subject to conditions outlined in this statement, RWC (in the USA, Reliance Worldwide Corporation and in Canada, Reliance Worldwide Corporation (Canada) Inc.) warrants to owners of real property in the United States and Canada that SharkBite and Cash Acme products, when used and installed in accordance with the requirements set forth, shall be from defects in material and workmanship for the applicable Warranty Period. This Limited Warranty is in effect for installations made after January 1, 2018 and is applicable to products installed in the country in which they were purchased.

Proof of purchase is required to validate the Warranty Period. If proof of purchase is not available, the Warranty Period commencement shall default to the date of manufacture for each product. If the product suspected of a defect does not have a clear date of manufacture on it, a proof of purchase will be required.

#### What are the conditions of this warranty?

- All products must be installed in accordance with all then applicable codes, good plumbing practice, in accordance with any local, state, provincial or federal requirements, and installed in a potable water or radiant heating application unless a non-potable water service is specifically allowed for in the pertinent product literature
- 2. The installer must use construction techniques compliant with then applicable codes to install the product and use the product within the design parameters specified in any installation guidelines and technical notes for the applicable system. This shall include field pressure testing prior to concealing with concrete or by other means and wrapping any brass fitting when buried. Failure to install RWC products according to manufacturer's installation instruction will void all applicable warranties and may result in severe water damage.
- 3. Products must at all times be used in a manner consistent with their intended use and be used in installations and environments acceptable to their material and design specifications, including not being installed in a system that may operate at temperatures or at pressures that exceed the approved ratings which can be found on the product, packaging or installation instructions.
- 4. Additional product specific conditions of this Limited Warranty and the Warranty Period are documented in the section entitled "HOW LONG DOES THE LIMITED WARRANTY COVERAGE LAST AND WHAT OTHER SPECIFIC CONDITIONS EXIST FOR EACH PRODUCT?"
- 5. Without limiting the foregoing, this Limited Warranty does not apply and you do not have a right of reimbursement if the product failure or resulting damage is caused by: (a) evidence of tampering, mishandling, neglect, abuse, accidental damage, freeze damage (it is expressly understood that failure as a result of any freezing fluids within the pipes does not constitute a defect in material or workmanship and shall not be covered by this warranty) or unauthorized modifications or repairs that cause damage to warranted products; (b) exposure to harmful, unauthorized, or unanticipated chemicals or substances or corrosive water conditions; (c) exposure to ultraviolet light; (d) faulty installation including failure to follow proper burial instructions; (e) damage from abnormal operating conditions including exposure pressures and temperatures beyond the specified operating range; (f) failure to properly test and pass common testing methods (including pressure testing) after the installation and before the product or system is put in service; (g) components not manufactured or sold by RWC; or (h) acts of nature such as earthquakes, fire, flood or lightning.
- 6. Although RWC provides a plumbing system to facilitate a complete installation, other manufacturers pipe and/or fittings may be installed in any given installation provided manufacturing of the pipe and/or fittings demonstrates compliance with the applicable ASTM/CSA standards, and the product has been certified by a recognized third-party testing agency. The RWC product in the given installation will continue to be covered under this Limited Warranty although limits on Warranty Period may apply. RWC will be responsible only for proven defects in material or workmanship in RWC products. Problems in products manufactured by another company should be reported to that manufacturer.

#### How do you get service?

In order to be eligible for service under this Limited Warranty you must return the defective product to RWC for inspection and testing within thirty (30) days after detection of alleged failure or defect occurring within applicable Warranty Period (with shipping charges prepaid) to the original place of purchase. If the alleged defect involves a connection or joint with a RWC product, the fitting must be returned with a section

of the pipe still inserted. You must include the model number of the product (if available), the original date of purchase, proof of purchase and the nature of the alleged product failure or defect. Products returned without shipping charges prepaid will be refused. For questions or inquiries, in the U.S. call 1(877)700-4242 and in Canada 1(888)820-0120.

#### What will RWC do?

If, after inspection, we find that a product covered by this Limited Warranty has failed due to a defect in material or workmanship during the specified Warranty Period, we will repair or replace, at our sole option, free of charge, the defective product during normal working hours and through a place of business as determined by RWC.

Notwithstanding anything to the contrary in this Limited Warranty, if RWC determines that any damages to the real property in which a defective product was installed were the direct result of a leak or failure caused by a defect in material or workmanship in any RWC product covered by this Limited Warranty and occurring within the first ten years after date of purchase or during the applicable Warranty Period, whichever is shorter, and if reasonable steps were taken to promptly limit or stop the effects of such leak or failure as soon as it was discovered, then RWC will reimburse the property owner for the reasonable costs of repairing or replacing such damaged real property to include flooring, drywall and painting and other real property damaged by the leak directly caused by the allegedly defective RWC product when the RWC SharkBite Connection System product was installed by a licensed professional plumbing contractor. Except as specified above or otherwise specifically authorized in writing by RWC. RWC shall not pay for any costs or expenses for transportation. relocation, labor, repairs or any other work associated with removing and/or returning failed or defective products or installing replacement products.

This shall constitute the sole and exclusive remedy for any defective product.

#### What does this limited warranty not cover?

RWC shall not be responsible for any other incidental, indirect, contingent, special or consequential damages, including without limitation, economic loss, lost profits or the cost of repairing or replacing other property which is damaged if these warranted products do not work properly, other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, adverse chemical environments, or

any other circumstances over which RWC has no control. This limitation applies even if RWC could have foreseen or has been advised of the possibility of these damages. This Limited Warranty shall be invalidated by any abuse, misuse, misapplication or improper installation of the product. Any remaining warranty coverage may not be assigned or transferred after the period ending ten years following the installation. RWC does not guarantee or in any way warrant the integrity or workmanship of the contractor/installer.

#### Miscellaneous

Some States/Provinces do not allow limitations on how long an implied warranty lasts, and some States/Provinces do not allow the exclusion or limitation of incidental or consequential damages. Therefore, the above limitations may not apply to you. This Limited Warranty gives you specific legal rights, and you may have other rights that vary from State/Province to State/Province. You should consult applicable State/Provincial laws to determine your rights.

SO FAR AS IS CONSISTENT WITH APPLICABLE STATE/ PROVINCIAL/FEDERAL LAW, THE EXPRESS WARRANTY SET FORTH HEREIN IS THE ONLY WARRANTY GIVEN BY RWC WITH RESPECT TO THE SHARKBITE® AND CASH ACME® PRODUCTS AND RWC MAKES NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND HEREBY SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

This Limited Warranty and any claims arising from breach of contract, breach of warranty, tort, or any other claim arising from sale or use of RWC's products shall be governed and construed under the laws of the State of Georgia. No action on the part of RWC under this Limited Warranty shall be construed as an admission of liability of that the product is not fit for its intended use.

# How long does the limited warranty coverage last and what other specific conditions exist for each product?

Classification	Product Category	Limited Warranty Period	Conditions
SharkBite Connection Systems	SharkBite Brass and Poly PEX Barb Fittings in conjunction with SharkBite PEX Pipe and SharkBite Rings/Clamps	Twenty-Five (25) Years	Must be used with  SharkBite PEX Pipe - ASTM F876/CSA B137.5  SharkBite Copper Crimp Rings – ASTM F1807 or F2159  SharkBite Stainless Steel Clamp Rings – ASTM
	SharkBite EvoPEX Fittings in conjunction with Shark- Bite PEX Pipe	Twenty-Five (25) Years	Must be used with SharkBite PEX Pipe - ASTM F876/CSA B137.5
	SharkBite Universal Push-To-Connect Fittings in conjunction with SharkBite PEX Pipe	Twenty-Five (25) Years	Must be used with SharkBite PEX Pipe - ASTM F876/CSA B137.5
SharkBite, Cash Acme, HoldRite, and John Guest Products	SharkBite Universal Push-To-Connect Fittings in Application with Copper, PEX, CPVC and/or PE-RT	Twenty-Five (25) Years	Must be used with: Copper-ASTM B 88 hard drawn copper tube K, L, and M PEX-ASTM F876/CSA B137.5 CPVC-ASTM D2846 or CSA B137.6
	SharkBite Universal Push-To-Connect Fittings in Application with HDPE	Five (5) Years	Must be used with HDPE SDR-9 ASTM D2737
	SharkBite Accessories (Ball Valves, Supply Hoses, Supply Stops, Supply Valve Box Systems, Kits, Cop- per Manifolds, etc.)	Two (2) Years	Must be installed per installation instructions with the pipes below:  Copper—ASTM B 88 hard drawn copper tube K, L, and M  PEX—ASTM F876/CSA B137.5  CPVC—ASTM D2846 or CSA B137.6  PE-RT—ASTM F2769
	SharkBite ProLock	Twenty-Five (25) Years	Must be used with:  · SharkBite PEX – ASTM F876/CSA B137.5  · SharkBite PE-RT – ASTM F2769
	SharkBite Poly PEX Barb Fittings	Five (5) Years	When used with Non-SharkBite PEX Pipe that conform to ASTM F876 CSA B137.5, PE-RT that conform ASTM F2769, and Clamp/Rings ASTM F2159
	SharkBite Brass PEX Barb Fittings/ Copper Manifold	Five (5) Years	When used with Non-SharkBite PEX Pipe that conform to ASTM F876/CSA B137.5, that conform ASTM F2769 and Clamp/Rings – ASTM F1807
	SharkBite EvoPEX Fittings	Five (5) Years	When used on Non-SharkBite PEX Pipe that conform to ASTM F876/CSA B137.5
	SharkBite PEX Pipe	Twenty-Five (25) Years	When used with Fitting and Clamps/Rings that conform to ASSE 1061, ASTM F1807, ASTM F2098, and/or ASTM F2159 Fittings
	SharkBite PE-RT Pipe	Twenty-Five (25) Years	When used with Fitting and Clamps/Rings that conform to ASSE 1061, ASTM F1807, ASTM F2098, and/or ASTM F2159 Fittings
	SharkBite Home Run Manifolds	Ten (10) Years	Must be installed per installation instructions
	SharkBite Tools	One (1) Year	From date of purchase
	SharkBite and Cash Acme Thermostatic Mixing Valves	Five (5) Years	Must be installed per installation instructions
	Other SharkBite and Cash Acme Valves	Two (2) Years	Must be installed per installation instructions
	John Guest Black Click-to-Lock CTS Fittings	Twenty-Five (25) Years	Must be used with:  Copper–ASTM B 88 hard drawn copper tube K, L, and M  PEX–ASTM F876/CSA B137.5  CPVC–ASTM D2846 or CSA B137.6
	John Guest Speedfit Twist & Lock CTS Fittings	Twenty-Five (25) Years	Must be used with:  Copper–ASTM B 88 hard drawn copper tube K, L, and M  PEX–ASTM F876/CSA B137.5
	John Guest Fluid System OD Fittings	One (1) Years	Must be used with Polyethylene, Nylon, PEX, or Soft Copper (must be round and in good condition)
	SharkBite Quick-Connect POM Plastic Fittings	One (1) Years	Must be used with Polyethylene, Nylon, PEX, or Soft Copper (must be round and in good condition)
	HoldRite Products	One (1) Years	Must be installed per installation instructions
	HoldRite QuickBrand Products	One (1) Years	Must be installed per installation instructions
	HoldRite Testrite	One (1) Years	Must be installed per installation instructions
	HoldRite HydroFlame Pro	Two (2) Years	Must be installed per installation instructions

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# **Training**

RWC Product Trainers are committed to creating a blended learning environment that features interactive online, classroom and field instructions for the plumbing and water management industry. Our curriculum offers courses and higher education learning opportunities for plumbing industry professionals.

Online Training - Learn as you go with accessible education that's virtual and self-paced.

On-site Training - Customizable on-site training that covers general plumbing theory and hands-on instruction.





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