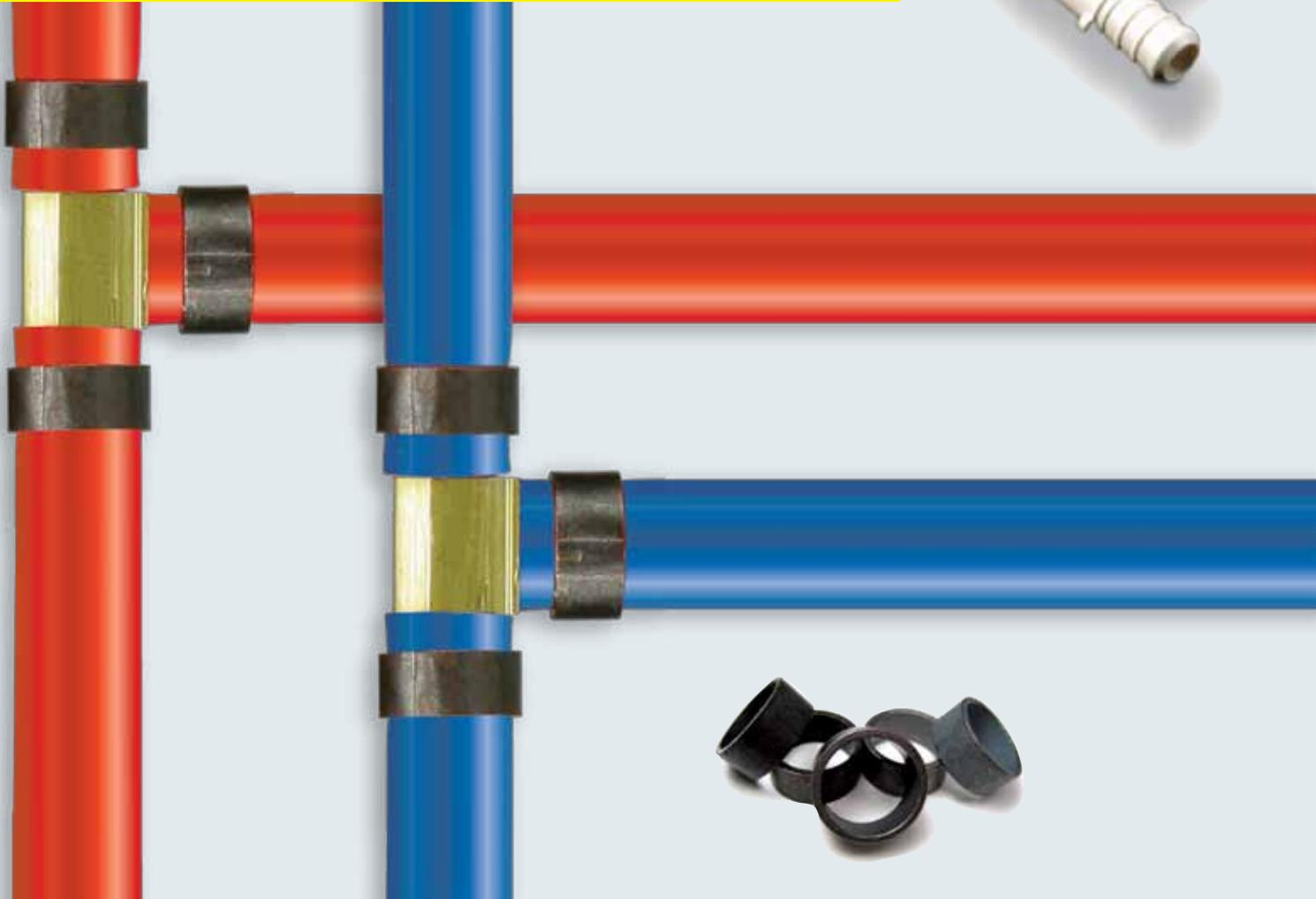




ViegaPEX™ PureFlow® Crimp



Viega...The global leader in plumbing and heating systems.





1899

Franz-Anselm Viegener starts Viega Co. with first brass beer tap.



1901



Viega starts manufacturing plumbing fittings.

1935

Viega adds traps and draining products for sinks and bathtubs to our lineup.



1963



Viega starts producing copper solder fittings.

1980

The first PEX radiant floor heating in the U.S., the ProRadiant® system, is introduced.



A heritage of better ideas since 1899

Our heritage of innovation and quality began in Attendorn, Germany, in 1899 when Franz-Anselm Viegener introduced a new design in brass beer taps. By 1901, the company evolved and began

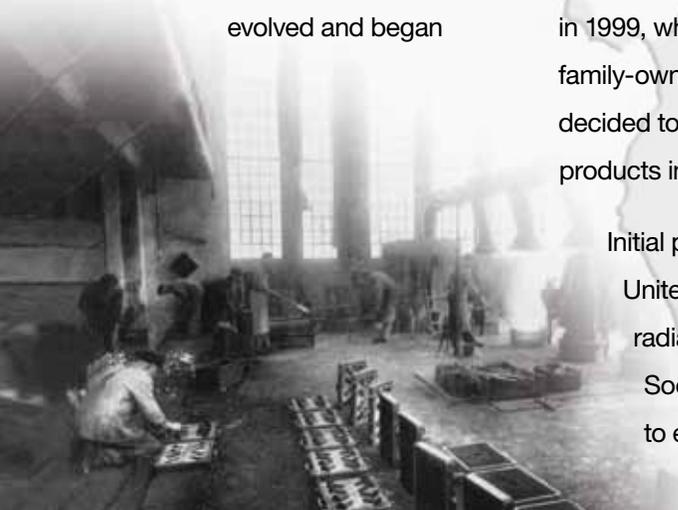
manufacturing home plumbing products. But our story, the North American story, really began in 1999, when the family-owned Viega decided to offer a selection of Viega products in the United States.

Initial product offerings in the United States consisted of PEX radiant floor heating systems. Soon after, we continued to expand our U.S. product



offerings by introducing a totally new system of ProPress fittings and valves to connect copper pipe. The new century saw rapid

growth in Viega innovations, including PureFlow — the first PEX press plumbing technology, ProPressG for solderless fuel gas applications, hybrid technology to connect copper to PEX and the Smart Connect feature to quickly identify unpressed fittings.



Viega's press technology begins in Germany.



1988

1989

1996

Viega's copper press technology launches in the U.S., the ProPress® System.



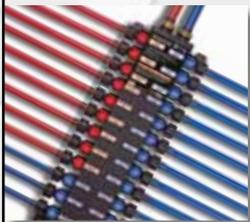
1999

Viega stainless press technology launches in the U.S., ProPress® Stainless

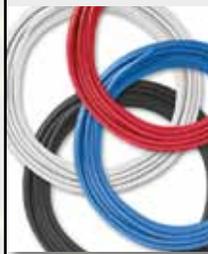


2005

2008



The MANABLOC® water distribution manifold is introduced.



Production of plastic tubing, PureFlow® PEX products begins.



Viega creates hybrid technology to connect copper to PEX.

In 2005, Viega acquired Vanguard Piping Systems and Midtec, Inc. This acquisition enabled us to combine European and American technologies to create a new standard of quality. Besides the expanded options in PEX tubing and fitting systems, the acquisition also added the number one selling PEX water distribution manifold in the U.S., the MANABLOC, to the Viega



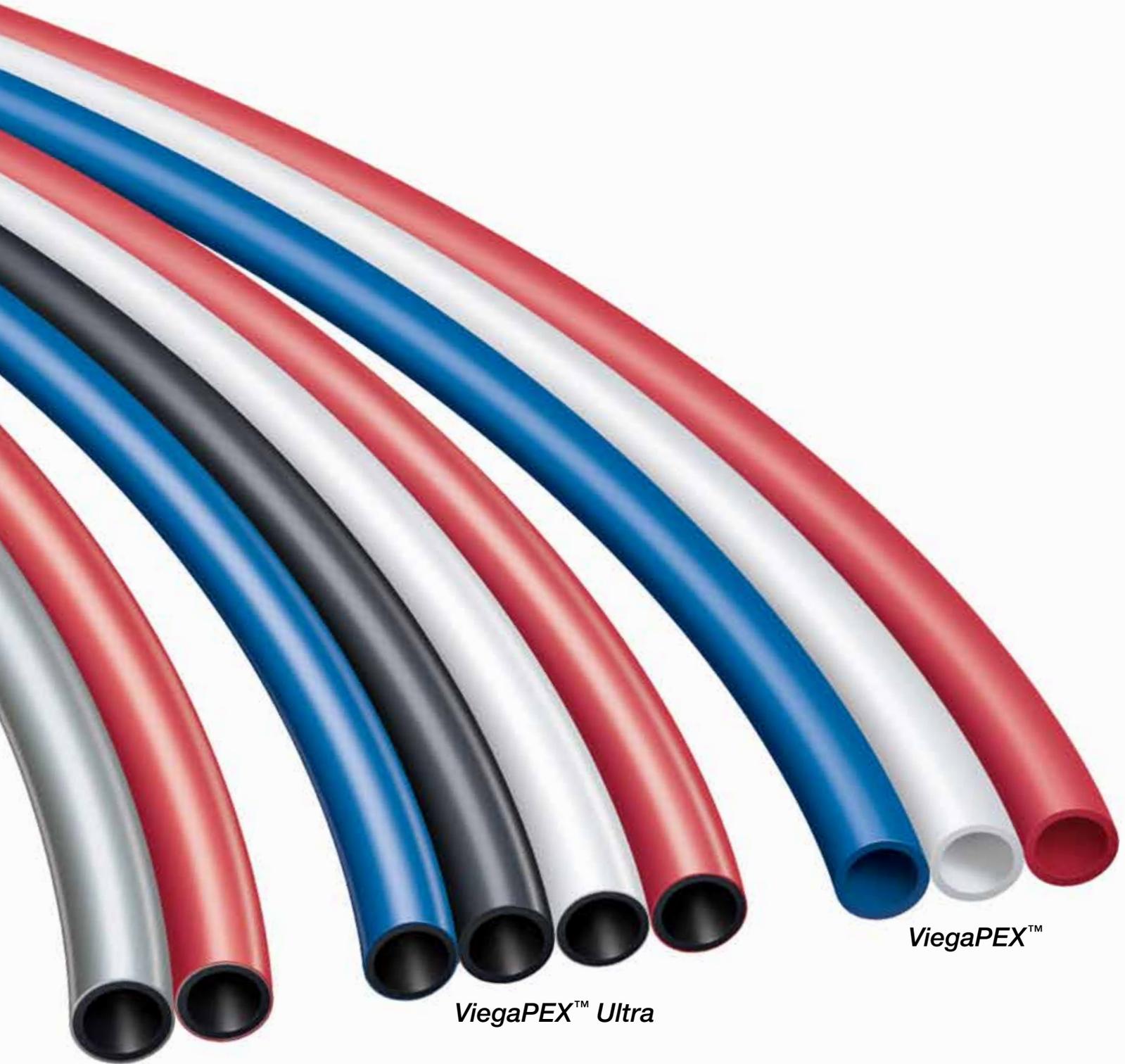
PureFlow line.

The PureFlow product line is manufactured in the most recent North American investment, our new 439,000-square-foot manufacturing and distribution center. This facility, which opened in 2009, is located in the heartland of the U.S. in McPherson, KS. The facility houses extrusion, injection molding, distribution and office space. It is the largest PEX manufacturing facility of its kind in the nation.



From Franz-Anselm Viegenger's first product introduction in 1899, Viega's family heritage of innovation, quality and service still flows through all of our products and the people who design, make, sell and support them. It is our heritage of better ideas that allows us to extend our reach to exceed customer expectations around the globe.





FostaPEX®

ViegaPEX™ Ultra

ViegaPEX™

ViegaPEX PureFlow systems

We have had 110 years of success in the plumbing industry, not because we tout the many features of our products but because we prove the value of our systems. Our innovative products are backed by extensive research, testing and the most comprehensive warranties in the business. That is why the Viega PureFlow product line is the preferred choice for PEX plumbing applications.

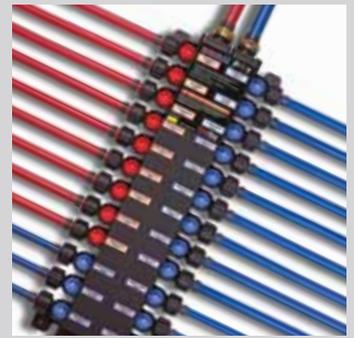
Comprised of ViegaPEX, ViegaPEX Ultra and FostaPEX, PolyAlloy, brass and bronze fittings, coupled with the MANABLOC manifold system, the PureFlow product line is the most complete potable water system you will find in the North American market.

For a quality PEX plumbing system with proven performance, choose a Viega PureFlow System.

Tubing	Available Sizes	Available Colors	UV Rating	Chlorine Rating	Plenum Rating	Approved Connections			Listings
						Press (Bronze)	Crimp (Brass)	Crimp (PolyAlloy)	
ViegaPEX	1/4" to 1"	Red, White, Blue	60 days	CL5**	Yes*	Yes	Yes	Yes	ASTM F876 / F877 / E84 ANSI / NSF 14 & 61
ViegaPEX ULTRA	3/8" to 1 1/2"	Red, White, Blue, Black	6 Months	CL5**	Yes*	Yes	Yes	Yes	ASTM F876 / F877 / E84 ANSI / NSF 14 & 61
FostaPEX	1/2" to 1"	Red, Silver	Extended	—	—	Yes	No	No	ASTM F876 / F877 / ANSI / NSF 14 & 61

* Listing for 3/4" and smaller tubing.

** Rated for both traditional and continuous hot water recirculation applications.



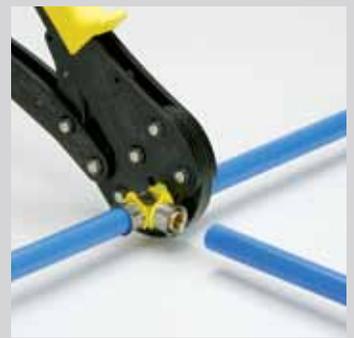
Viega MANABLOC manifold system is a unique water distribution system that provides extraordinary performance.



Viega PolyAlloy™ PEX Crimp fitting system is an economical and corrosion-resistant joining system that installs quickly and easily.



Viega Brass PEX Crimp fitting system is a high-quality, proven dependable connection system, perfect for residential applications.



Viega Bronze PEX Press fitting system is the ultimate PEX fitting system; fast, reliable and designed to connect with ViegaPEX and FostaPEX tubing.



A reliable partner

The Viega Quality Assurance and Research and Development Departments review and test each and every Viega product to ensure that all products meet and exceed the

industry standards and customer's expectations. Products in the PureFlow product line are no different. From fittings to tubing, the PureFlow PEX Crimp offering

has been tested rigorously for tens of thousands of hours at extreme pressures, temperatures and water conditions to ensure the quality and reliability customers expect from Viega.



ASTM International (formerly known as American Society for Testing and Materials), Uniform Plumbing Code (UPC), International Code Council (ICC), NSF International (formerly known as National Sanitation Foundation), International Association of Plumbing and Mechanical Officials (IAPMO), American National Standards Institute (ANSI)



We not only invent the most innovative products and systems, we make sure the products outperform the industry's most stringent standards for potable water quality. All PureFlow PEX Crimp

listings are based upon testing against the following standards:

ANSI/NSF 14	ASTM F877
ANSI/NSF 61	ASTM F1807
ASTM F876	ASTM F2159

Additional code information is available at the following websites:

www.astm.org	www.icc-es.org
www.iapmo.org	www.nsf.org



Viega MANABLOC

Like a breaker-box for plumbing, each fixture of the MANABLOC is fed by its own flexible water distribution line. It is a simple concept that provides extraordinary performance.

Molded from PLS (Polysulfone) plastic and tested to the requirements of ASTM F877 and certified by NSF International and IAPMO, the MANABLOC is a perfect solution for potable water applications.

Faster hot water delivery

Because MANABLOC distribution lines are dedicated to individual fixtures, less water is flushed out before hot water gets to the fixture.

This saves time, energy and water when compared to a traditional branch and main plumbing system. This is a great benefit to the homeowners.

Clean and efficient installation

There are no fumes from solvents to contend with and no torches required on site for installation.

Fewer fittings

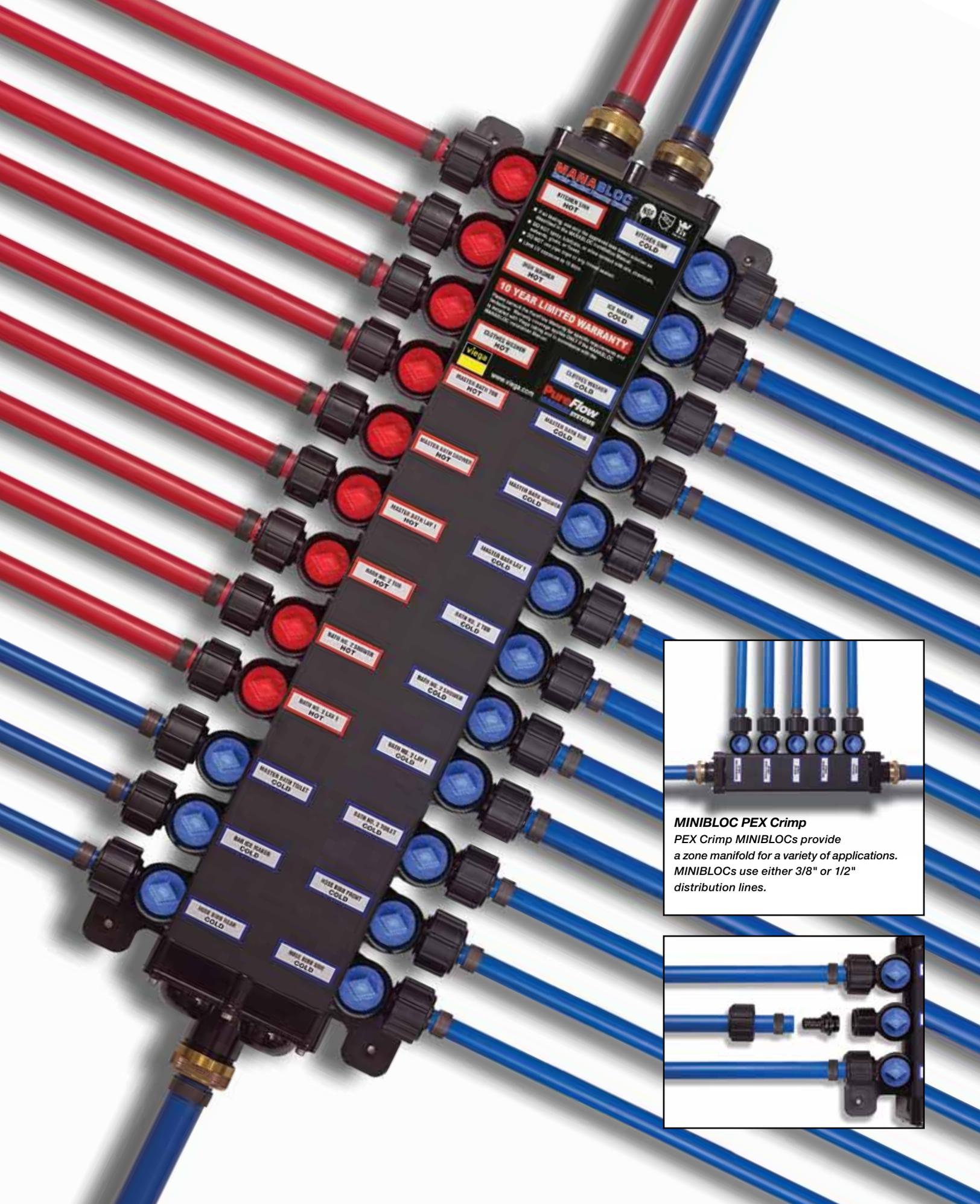
ViegaPEX tubing lines run directly from the MANABLOC, around obstacles, and to the fixture with minimal fittings, so the chance of leaks and call-backs are minimized.

Convenience

There's no need to shut off the main water supply to your home or struggle with hard-to-access fixture shut-off valves. Simply turn the individually labeled shut-off valve located directly on the MANABLOC.

Complete coverage

It is no wonder why the MANABLOC is the number one selling PEX manifold in the U.S. The MANABLOC's 10-year warranty covers replacement, property damage and reasonable repair costs.



MINIBLOC PEX Crimp
PEX Crimp MINIBLOCs provide a zone manifold for a variety of applications. MINIBLOCs use either 3/8" or 1/2" distribution lines.



ViegaPEX, the superior tubing choice

Don't let the competition fool you. We pioneered the use of professional-grade PEX tubing more than a generation ago. Our ViegaPEX tubing is high-density cross-linked polyethylene tubing (PEX). Although there are now many choices in PEX tubing, ViegaPEX offers advantages over other tubing types:

More resistance to chlorine and UV radiation

ViegaPEX offers superior chlorine resistance for continuously recirculating applications, plus excellent corrosion and freeze break resistance. ViegaPEX Ultra provides additional protection against UV rays.

Better protection against algae and minerals

The light-blocking properties of ViegaPEX tubing eliminate algae growth and the high-density tubing wall inhibits mineral buildup eliminating flow restriction.

Exceeds the strictest plumbing standards

The tubing exceeds strict ASTM International standards in addition to IAPMO (UPC) and International Code Council (ICC) standards for potable water systems.

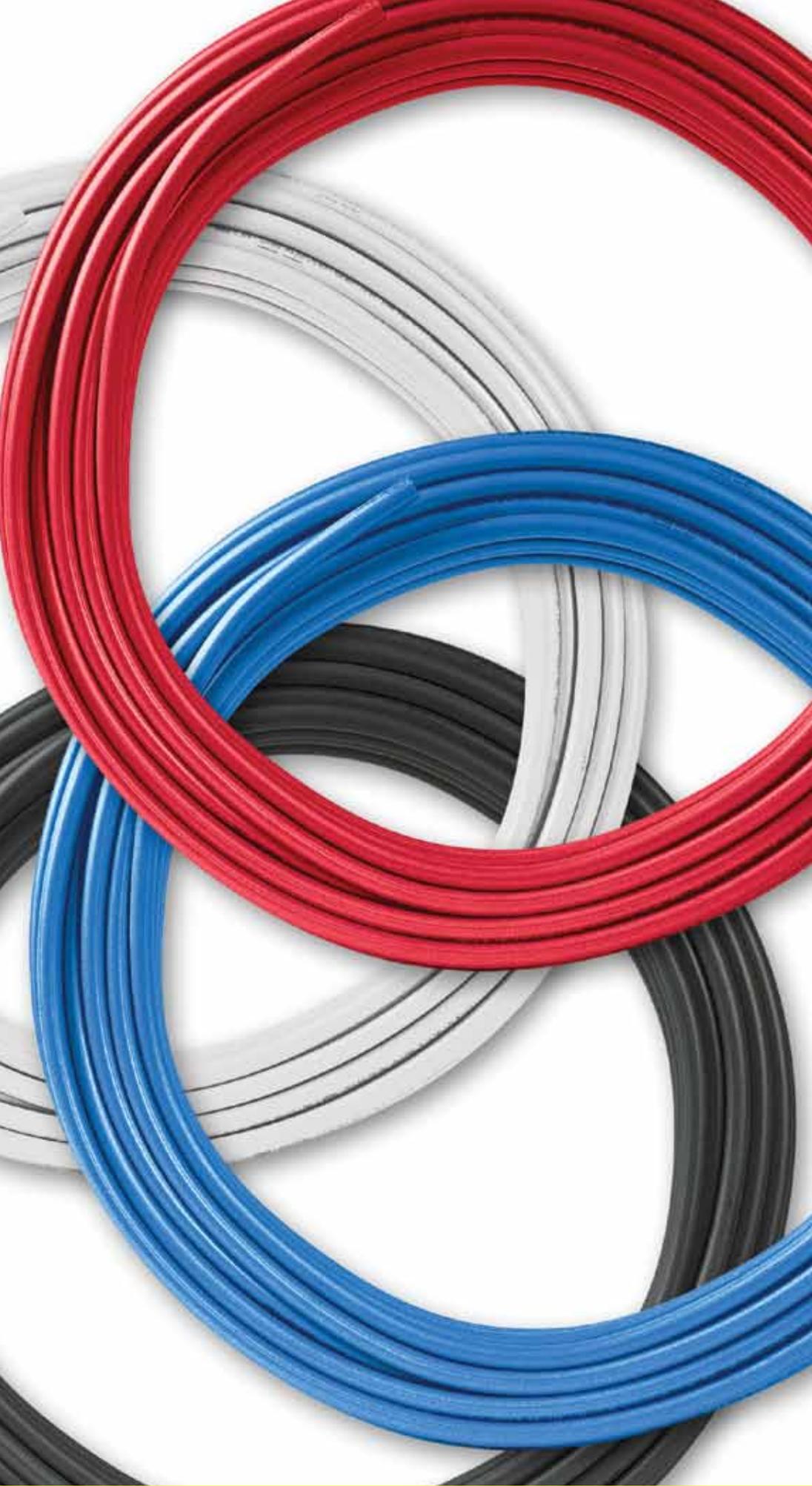
It's the professional's choice

Cross-linked polyethylene produces a strong, durable tubing ideal for hot and cold potable water systems. Compared to ordinary polyethylene tubing (PE), cross-linked tubing has a higher temperature resistance and higher burst pressure.

Most comprehensive warranty in the business

The 10-year warranty on ViegaPEX tubing and PureFlow fitting systems cover product replacement, property damage and reasonable repair costs. The warranty can be transferred to future homeowners during the 10-year period.





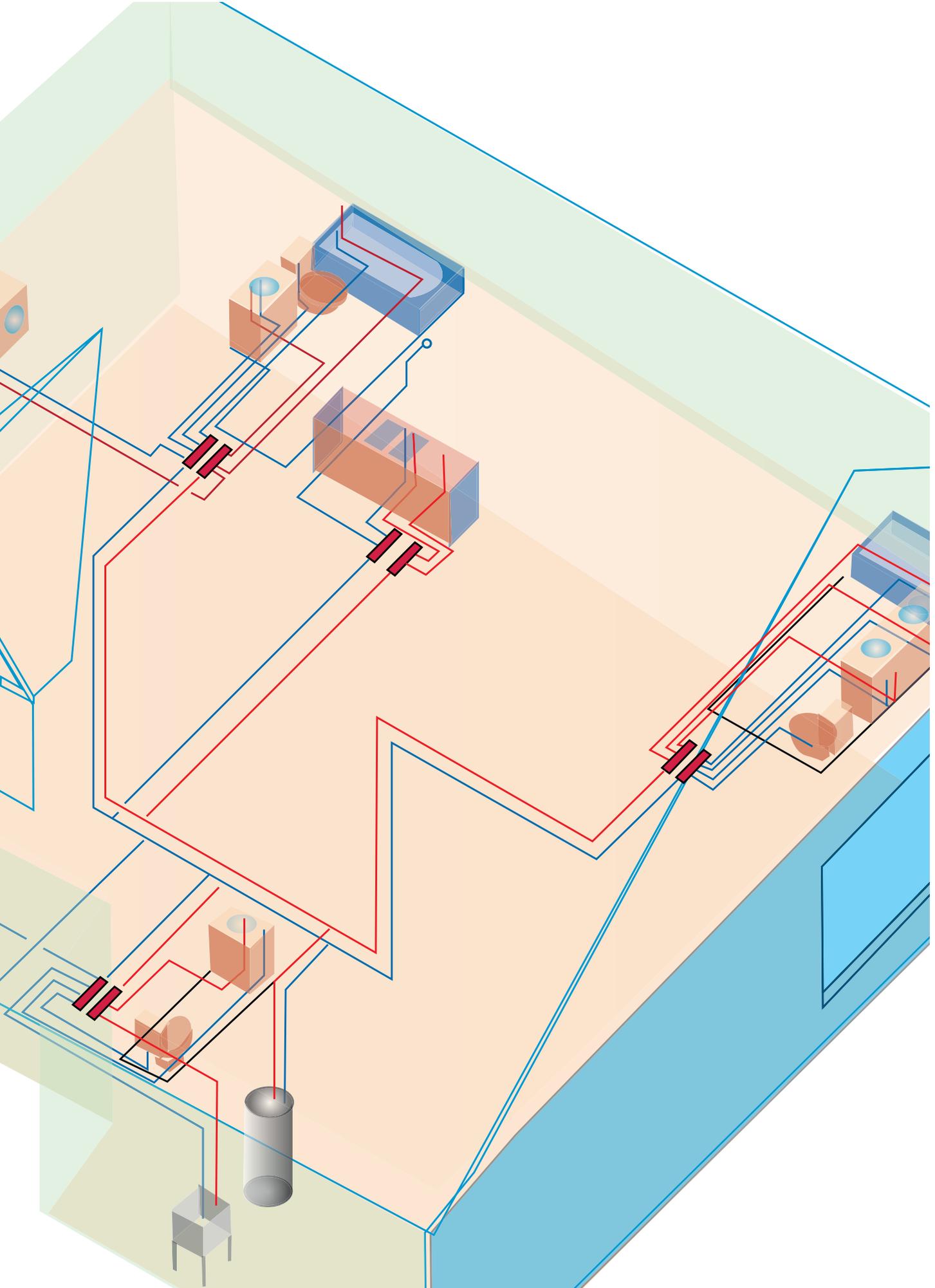
ViegaPEX

ViegaPEX tubing is manufactured to ASTM F876/F877 standards and listed to ANSI/NSF Standards 14 and 61. It is chlorine-resistance rated for both traditional and continuous recirculation PEX 5006 (CL5) applications. ViegaPEX tubing is rated at 100 psi at 180°F and 160 psi at 73°F and is available in three colors (red, white and blue). ViegaPEX is available in sizes from 1/4" to 1".

ViegaPEX Ultra

ViegaPEX Ultra is manufactured to ASTM F876/F877 standards and listed to ANSI/NSF Standards 14 and 61. It is chlorine-resistance rated for both traditional and continuous recirculation PEX 5006 (CL5) applications. ViegaPEX Ultra tubing is rated for up to six months UV exposure without losing any of its performance properties. ViegaPEX Ultra is rated at 100 psi at 180°F and 160 psi at 73°F and is available in four colors (red, white, blue and black). ViegaPEX Ultra is available in sizes from 3/8" to 1 1/2".





A different approach

Parallel systems

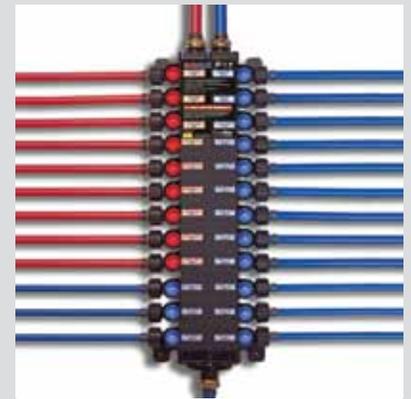
A parallel system uses a home-run manifold, like the Viega MANABLOC. With this type of installation, the installer can plumb a house without fittings hidden inside walls. By installing the MANABLOC system near the hot water source, tubing can be run directly to each fixture without using additional fittings. A parallel system provides the lowest pressure loss, as well as eliminates interference between fixtures. Often each fixture can be fed with smaller-diameter tubing, which is easier, faster and more economical to install.

Branch and main systems

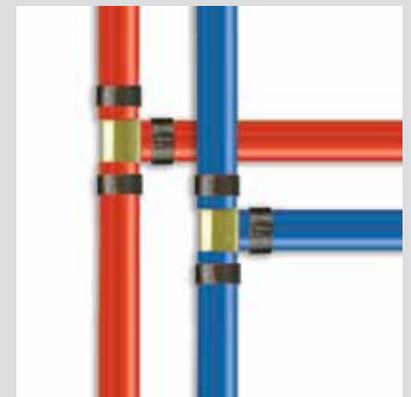
Branch and main plumbing systems are more commonly known as conventional plumbing systems, or branch and tee systems. This type of system does not use the MANABLOC. Instead, this system uses a large-diameter “main” supply line for the hot and cold water supplies within the structure, with smaller “branch” lines teeing off the main lines to supply each fixture. ViegaPEX or ViegaPEX Ultra tubing can be used for this type of installation.

Combination systems

A combination system uses multiple manifolds combined with a branch and main type of supply system. Combination systems use small manifolds located throughout a structure placed near each main fixture group and are supplied by the main hot and cold water supply lines. For this installation, Viega offers the MINIBLOC. The MINIBLOC branches multiple ViegaPEX or ViegaPEX Ultra tubing lines from a common location instead of using multiple tee fittings spread throughout the structure. This helps keep hidden fittings to a minimum.



Parallel installation



Branch installation



Combination installation



Zero Lead™... Zero Problem



Don't let new lead-free legislation* in California or Vermont set you back. A large majority of our potable water products already meet the upcoming 2010 lead requirements. All of our PEX tubing, PolyAlloy insert fittings, MANABLOC and MINIBLOC meet the approaching lead requirements.

Thanks to Viega, plumbers across the country have already been installing 100% lead-free water delivery systems for more than 30 years. When installing a Viega MANABLOC parallel water

distribution manifold with PolyAlloy fittings and ViegaPEX tubing, the system is completely lead-free.

Now, with our Eco Brass crimp offering, the lead-free installations can continue.

New Zero Lead** fittings will be offered to replace the Viega products that do not comply with new lead-free requirements. The Zero Lead fittings are a lead-free, environmentally friendly fitting alternative to our current brass crimp fitting offerings.

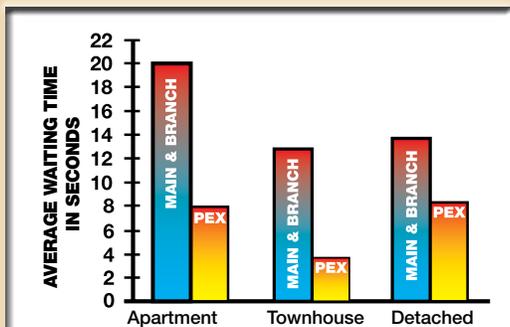
With excellent dezincification and corrosion resistance, our Zero Lead fittings and valves will contain stamped markings to clearly indicate the fittings are Zero Lead. The new fittings will be certified to ANSI/NSF Standard 61 Annex G and will be fully compliant with new lead legislation. Once again, we are outperforming our competition by exceeding standard requirements. We will continue to add Zero Lead products to the PureFlow product line to meet the market's need and to comply with upcoming legislation changes.

* Beginning January 1, 2010, California and Vermont will limit the lead content of plumbing fixtures and fitting products to a maximum weighted average of 0.25%. For additional information visit these sites: <http://healthvermont.gov/enviro/lead/lead.aspx>, <http://law.justia.com/california/codes/hsc/116875-116880.html> and zeroleadfacts.com.

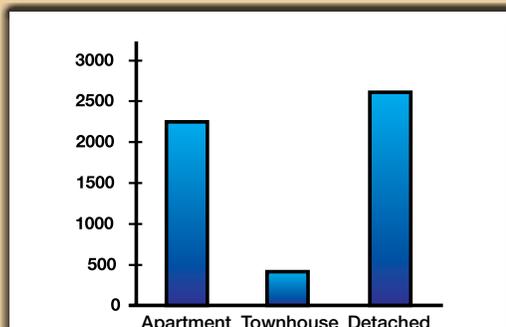
** Zero Lead identifies Viega products meeting the lead-free requirements of California and Vermont law, effective January 1, 2010, as tested and listed against NSF-61, Annex G.



The MANABLOC saves time, energy and water.



With PEX parallel piping MANABLOC systems, waiting times for hot water are projected to be reduced by 60% for an apartment, 70% for a townhouse and 39% for a single-family dwelling.



Annual gallons of water saved when using PEX parallel piping MANABLOC systems compared to standard main and branch plumbing configuration based on reduced water waste associated with hot water use.

*Source: Davis Energy Group report filed March 2006

Make your Green project a reality; gain LEED* certification

It is one thing for a company to say it supports Green Building initiatives; it is another to provide the products needed to support those initiatives. At Viega, actions speak volumes. Viega's PureFlow plumbing systems can be incorporated to improve both water and energy efficiency, helping installers and homeowners gain credits toward a LEED certification level (when following LEED installation criteria).

When the Viega MANABLOC is placed in close proximity to a water heater, and the distribution lines to

the fixtures are kept within 20 – 30 feet, hot water demand is drastically reduced, thus reducing overall energy use. Since less water is required to purge the line, water waste can be reduced up to 40%. Proper installation of the Viega MANABLOC can qualify you for credits toward LEED certification as outlined in LEED for Homes.

Did you know?

The Davis Energy Group conducted an independent study using a Viega MANABLOC in place of a

conventional plumbing system and proved a family of four can save 2,600 gallons of hot water a year with a MANABLOC system.

Our PureFlow Crimp Systems also reduce the need for flames, solder or flux. There are no fumes from solvents and no torches required on site for installation. This creates a safer work environment and improves the quality of our environment.

**LEED (Leadership in Energy and Environmental Design) is an ecology-oriented building certification program created under the U.S. Green Building Council (USGBC).*

Green Projects in Action

In 2007 the U.S. Department of Housing and Urban Development built a PATH Concept Home in Omaha, Neb. The PATH Concept Home combines the latest in Green Building products and meets the criteria for LEED for Home, Environments for Living®, Energy Star and NAHB's Green Building guidelines. Inside the PATH Concept Home is our MANABLOC system complete with ViegaPEX tubing. Viega continues to support and participate in PATH Concept Homes being constructed in other urban areas across the U.S.



PureFlow PEX Crimp fittings

The PureFlow PEX Crimp Fitting System continues to be an economical and reliable method for making PEX connections. Expand your options. Pick from a choice of metallic or plastic crimp fittings.

Like PEX Press, the PEX Crimp System requires no glue, no solder, no torches and no lubricants. PureFlow PEX Crimp fittings range in size from 3/8" to 1" and hand tools are available in these sizes as well.

Brass PEX Crimp

PureFlow Brass PEX Crimp fittings are machined from a brass alloy and produced for all connections necessary in a potable water system. PureFlow Brass PEX Crimp fittings are perfect for use in potable water applications because they are:

- Cost-effective
- Designed with excellent strength properties
- Fast to install

Brass PEX Crimp Facts

- PEX to PEX fittings are available as straight couplings, elbows and tees (both single size and reducing). Adapters mate PureFlow tubing to NPT threads, copper tubing and copper fittings.
- PEX Crimp copper manifolds are available from 4 to 10 outlets and may be installed in concealed locations. The MANABLOC homerun manifold system is also available with brass PEX Crimp connections.
- PEX Crimp fittings are widely accepted with more than 50% of the industry offering this system.





PolyAlloy PEX Crimp

PureFlow PolyAlloy PEX Crimp fittings are molded from Acudel® and produced in many fitting configurations. PureFlow PolyAlloy PEX Crimp fittings are perfect for use in potable water applications because they are:

- Cost-effective and fast to install
- Equipped with superior wear properties
- Designed with high corrosion resistance

PolyAlloy PEX Crimp Facts

- Viega PolyAlloy Crimp fittings are corrosion-resistant, and ideal for aggressive water conditions. These are available in tees, elbows, couplings and adapters from 3/8" to 1".

- PEX to PEX fittings are available as straight couplings, elbows and tees (both single size and reducing). Adapters connect PureFlow tubing to fixture connections. The MANABLOC homerun manifold system is available with PolyAlloy PEX Crimp connections.
- The material choice and fitting design used in the PureFlow PolyAlloy PEX Crimp system ensures the integrity of each connection.



NOTICE: All PureFlow tubing, fittings and manifolds are NSF-certified for use in potable water systems.

A complete system solutions provider

Tools and accessories

Viega offers a variety of PEX Crimp hand tools, from full-size to compact, for 3/8" to 1" PEX Crimp connections.

We also offer a variety of compression couplings, adapters and elbows, as well as LAV risers, bend supports, PEX tubing clamps, tubing cutters and much more to completely plumb your next job.

Why you can depend on Viega

With so many fitting configurations and sizes, it is no wonder why the PEX Crimp fitting system is the most widely recognized PEX fitting system in North America.

The fitting system is:

- Safe
- Competitively priced
- Leak resistant
- Fast and solder-free
- Without an open flame during installation
- Comprehensive warranty

Viega's PureFlow PEX Crimp system not only has a long life expectancy but carries the most comprehensive warranty in the business. To top it off, we offer the support you need from purchase to installation to help guarantee every job is installed quickly and correctly.





PureFlow systems, an unbeatable choice

Whether the construction project is large or small, we want your business to succeed. That is why we commit ourselves to offering you best-in-class products, sophisticated systems, top-level service and a promise of satisfaction.

We invite you to learn more about the Viega PureFlow product line. PureFlow PEX Crimp fittings are just

one segment of our potable water offering. We also offer PureFlow PEX Press fittings and tubing options as a variation to our PEX Crimp line. With Viega PureFlow Press and Crimp fittings, joining sections of tubing takes a matter of seconds instead of minutes. This is because our systems require no glue, no solder, no torches and no lubricants.

To learn more about America's most trusted plumbing resource, contact us or a Viega wholesaler.

'Extreme Makeover: Home Edition' features Viega PureFlow products

ABC's hit television series, "Extreme Makeover: Home Edition," has frequently featured products manufactured and donated by Viega. One of our most recent "Extreme Makeover: Home Edition" partnerships took place in Toledo, Ohio. A 26-port and 30-port Viega MANABLOC water distribution system, and more than 4,000 feet of red, white and blue ViegaPEX tubing, was installed

from manifold to fixtures throughout the 5,000-square-foot home. Each episode of "Extreme Makeover: Home Edition" features a race against the clock. Due to the flexible nature of ViegaPEX tubing and the ease of installation, our PureFlow plumbing system enabled the show's design team, contractors and workers the ability to



install the complete PureFlow plumbing system in just 16 hours.





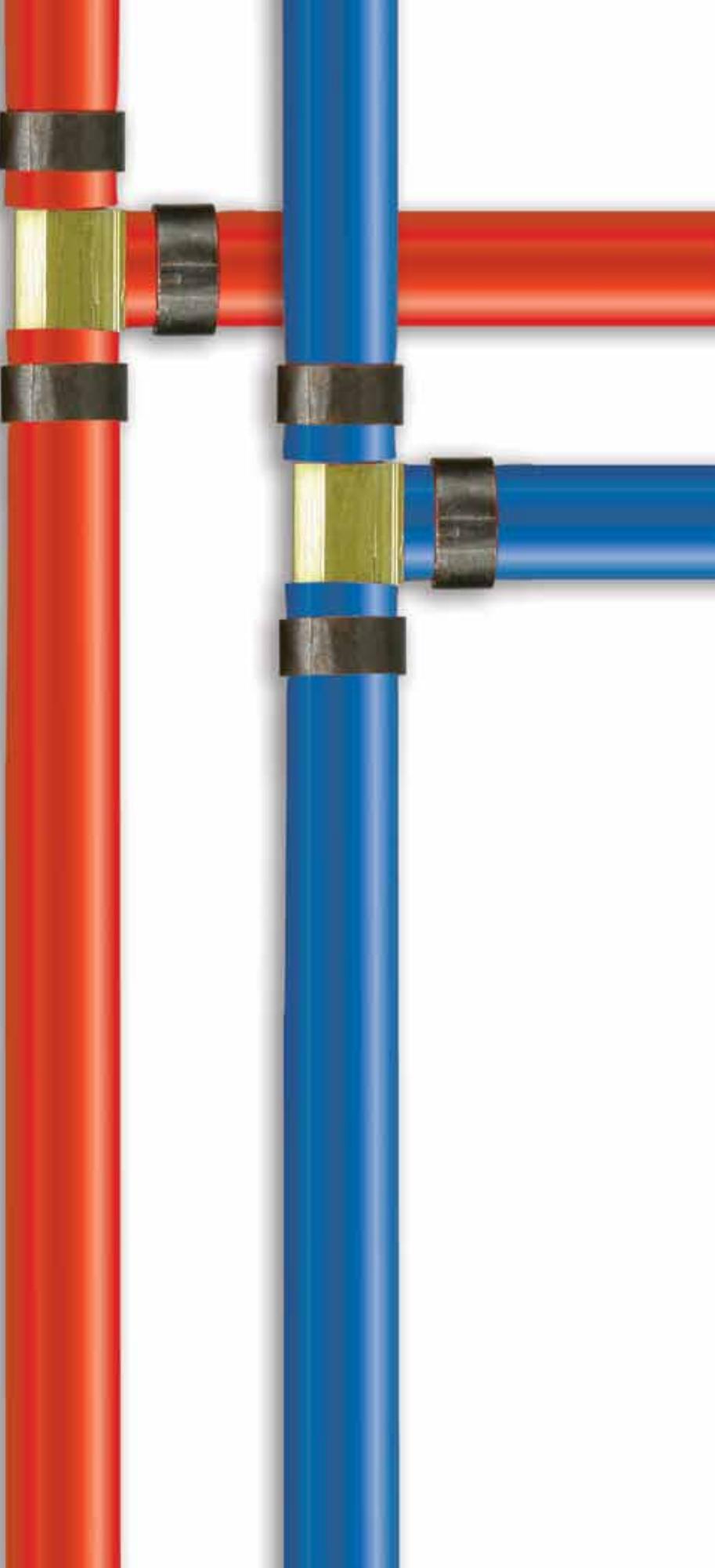
Tensile strength pull test

Rigorous testing shows the integrity of the crimp connection. The most widely used PEX connection system has an excellent track record with the industry, for leak-free connections.



Crimp cutaway

Full circle crimp rings ensure a leak-free connection.



Frequently asked questions about Viega PureFlow PEX Crimp fittings

What material types are available?

Viega offers two PureFlow PEX Crimp materials – PolyAlloy and Brass. Both material types are dependable and have been field-tested more than a million times.

Do I use a sleeve or a ring to complete the connection?

Viega PureFlow PEX Crimp fittings are compatible with the industry-standard black copper crimp ring. No O-rings are required. First position the crimp ring 1/8" to 1/4" from the end of the tubing.

Then insert the fitting into the tubing, center the crimping tool over the crimp ring, and crimp the ring full circle. This makes a reliable connection that has become so widely accepted that more than 50% of the industry is using it.

How do I know the crimp connection is reliable?

When a PureFlow PEX Crimp connection is carried out with the aid of a PureFlow PEX Crimp hand tool, the full circle crimp connection ensures a consistent, worry-free connection every time. A GO/NO

GO Gauge is provided with every PureFlow PEX Crimp hand tool so that installers can ensure the calibration of the crimp tools and the integrity of the connection.

What kind of warranty is offered?

Viega offers a 10-year warranty on our entire line of PureFlow tubing and fitting options. This warranty covers product replacement, property damage and reasonable repair costs. The warranty can be transferred to future owners of the residence during the 10-year warranty period.

Viega

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