







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



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



1899 1901 1935 1963 1980

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





Viega starts manufacturing plumbing fittings.



Viega starts producing copper solder fittings.

## 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.



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



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



1988 1989 1996 1999 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.

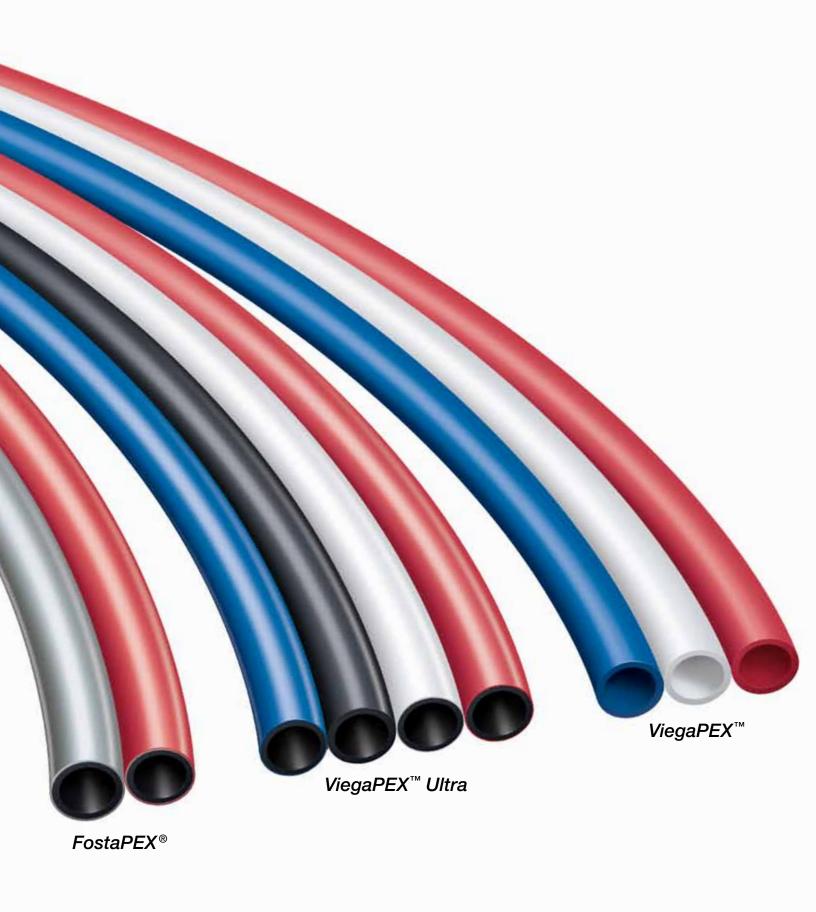
product line is manufactured in the most recent North American investment, our new 439,000 square foot

The PureFlow

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 Viegener'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.





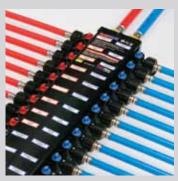
## ViegaPEX PureFlow systems

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.

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

<sup>\*</sup> Listing for 3/4" and smaller tubing.



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



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



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.

<sup>\*\*</sup> Rated for both traditional and continuous hot water recirculation applications.



## 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 Press 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.

We not only invent the most innovative products and systems, we also make sure the products out perform the industry's most stringent standards for potable water quality. All PureFlow PEX Press listings are based upon testing against the following standards:

ANSI/NSF 14

ANSI/NSF 61

ASTM F876

ASTM F877

**ASTM F1807** 

**ASTM F2159** 

Additional code information is available at the following websites:

www.astm.org

www.iapmo.org

www.icc-es.org

www.nsf.org







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)



## 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 extra-ordinary performance.

Molded from PLS (Polysulfone)
plastic and tested to the
requirements of ASTM F877 and
certified by NSF International, 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 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 10-year warranty covers replacement, property damage and reasonable repair costs.





## 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 for short). 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 resistance. ViegaPEX Ultra also 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 and protects system components.

## Exceeds the strictest plumbing standards

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

#### It's the professional's choice

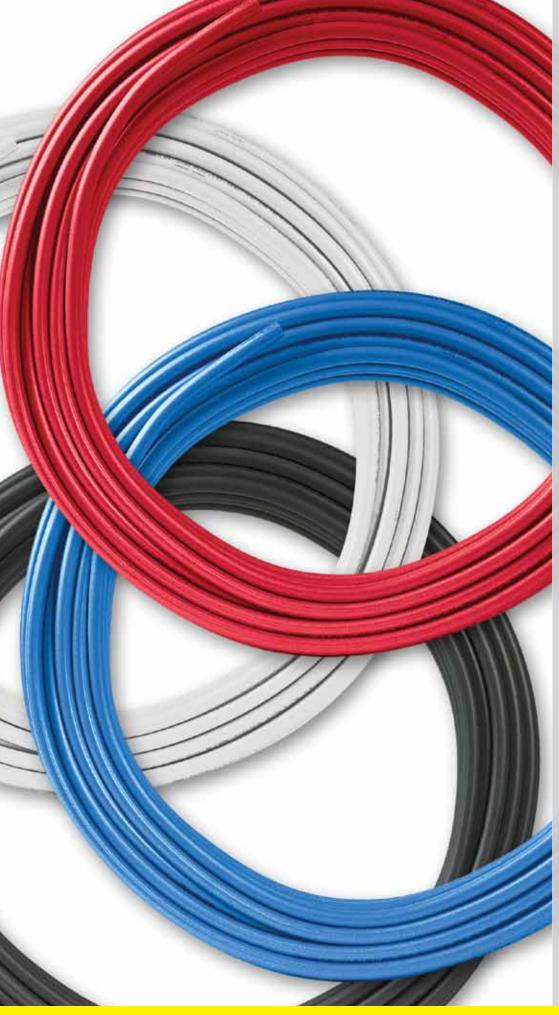
Cross-linked polyethylene produces a strong, durable tubing ideal for hot and cold potable water systems.

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 system covers product replacement, property damage and reasonable repair costs. The warranty can also be transferred to future homeowners during the 10-year period.





#### ViegaPEX and ViegaPEX Ultra

ViegaPEX and ViegaPEX Ultra 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. Both tubing types are rated at 100 psi at 180°F and 160 psi at 73°F. ViegaPEX Ultra tubing can handle up to 6 months UV exposure without losing any of its performance properties.

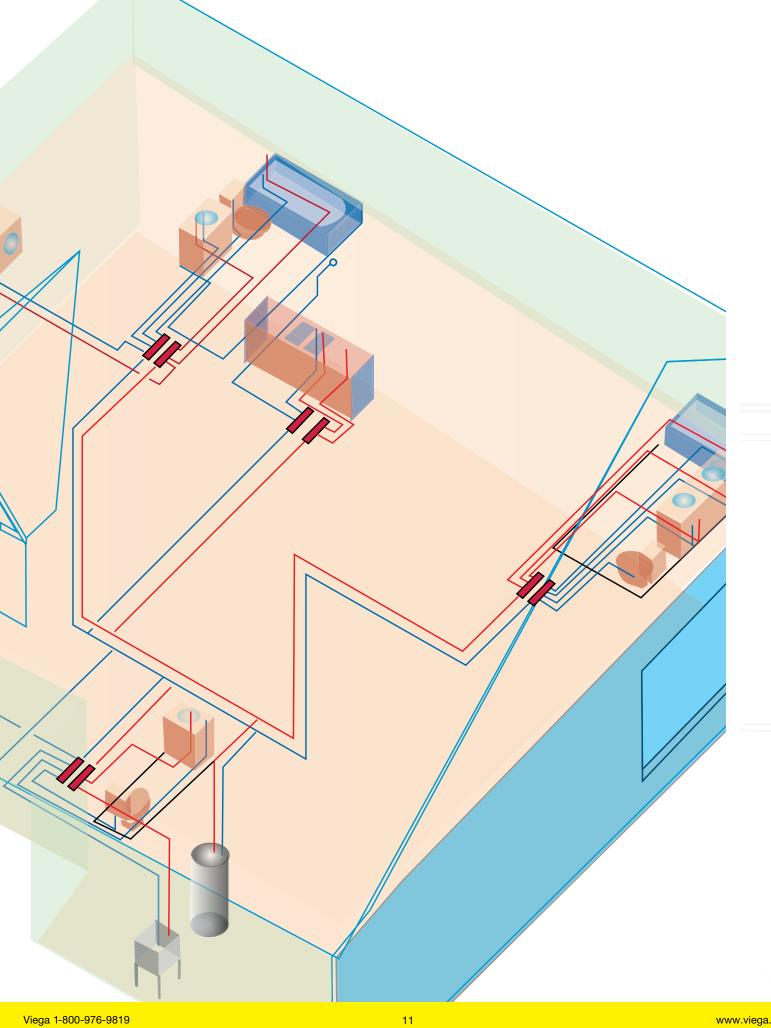


#### Viega FostaPEX

Fosta stands for Form-Stable PEX, so the piping will keep its shape after it is bent. The flexibility of the PEX and the form stability of the rigid aluminum outer coating are combined to make FostaPEX ideal for plumbers and homeowners wanting a professional looking installation. This makes FostaPEX ideal for potable water systems and radiant heating systems.

FostaPEX tubing has extended UV resistance due to its fully dimensional PEX core being protected by the outer aluminum and PE layers.





## 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 potentially 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 losses, as well as eliminates interference between fixtures. Often each fixture can be fed with smaller diameter tubing, which is easier and faster to install.

#### **Branch and main systems**

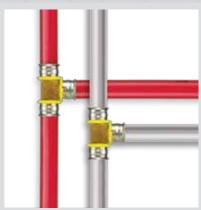
Branch and main plumbing systems are more commonly known as conventional plumbing systems, or branch and tee systems. This type of system does not use the MANABLOC. Instead, this system uses a large diameter "main" supply line for the hot and cold water supplies within the structure, with smaller "branch" lines teeing off the main lines to supply each fixture. While this system can reduce the amount of tubing used, it requires more fittings, which can increase installation time and cost. 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 in lieu 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 over 30 years. When installing a Viega MANABLOC parallel water distribution manifold with PolyAlloy fittings and ViegaPEX tubing, the system is completely lead-free.

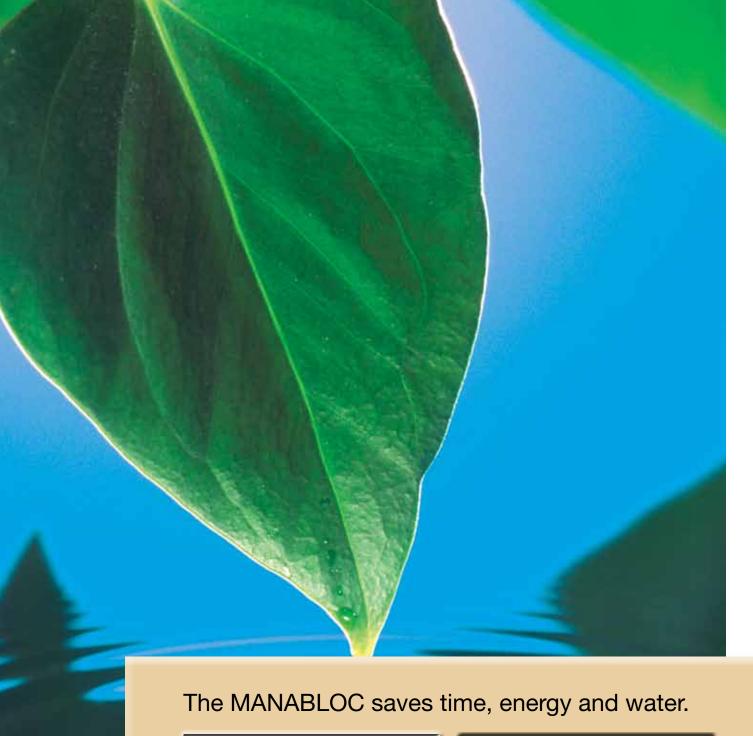
Bronze PEX Press fittings and MANABLOC Press connections will now be produced from a lead-free bronze. Zero Lead PEX Press fittings have also been introduced with attached stainless steel sleeves and color-coded tool locator rings. These fittings are Zero Lead, tested and listed for use in potable water applications, radiant systems and residential fire sprinkler installations.\*\*

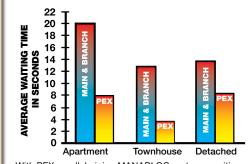
New Zero Lead fittings, will be offered to replace the Viega products that do not comply with new lead-free requirements. The Zero Lead fittings are a lead-free, environmentally friendly fitting alternative to our current bronze press fitting offerings.

With excellent dezincification and corrosion resistance, our Zero Lead fittings and accessories will contain appropriate markings to clearly indicate the fittings are Zero Lead. These new fittings will be certified to ANSI/NSF Standard 61 Annex G and will be fully compliant with new lead-free legislation. Once again, we are outperforming our competition by offering a full line of zero lead metal press fittings. 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.

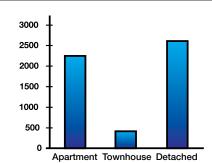
<sup>\*</sup> Beginning January 1, 2010, California and Vermont will limit the lead content of plumbing fixtures and fitting products to a maximum weighted average of 0.25%. For additional information visit these sites: http://healthvermont.gov/enviro/lead/lead.aspx and http://law.justia.com/california/codes/hsc/116875-116880.html.

<sup>\*\*3/4&</sup>quot; - 1 1/2" sizes only.





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

#### **Green Projects in Action**

On May 4, 2007, a devastating EF-5 tornado destroyed 95 percent of the buildings in Greensburg, KS. On Aug. 7, 2008, Viega announced it would help with rebuilding efforts by donating a MANABLOC homerun water distribution system, complete with ViegaPEX tubing and ViegaPEX Press fittings, for every home being rebuilt in Greensburg and the surrounding area. The Viega donation of \$300,000 worth of plumbing products to tornado-ravaged Greensburg residents will supply hot and cold water for a typical 1,200 square-foot home.



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

## PureFlow PEX Press fittings

Viega was the first to introduce press technology to PEX plumbing and today our pioneering spirit continues as we introduce the next generation of PureFlow PEX Press fittings. Our PureFlow PEX Press fittings come with a factory attached stainless steel PEX Press sleeve and color coded tool locator

ring for quick and easy installation on the job site.

The attached sleeves, with tool locator ring, provide a secure consistent press fit for the PureFlow PEX Press system. The view holes are used to verify full tubing insertion which also ensures the integrity of each connection.

The entire PureFlow PEX Press fitting system requires no O-rings, glue, solder, torches and no lubricants. The next generation of PureFlow PEX Press fittings are compatible with ViegaPEX, ViegaPEX Ultra, FostaPEX and ViegaPEX Barrier tubing.



Viega PureFlow PEX Press fittings are perfect for your next installation because they are:

- Available in Viega's Zero Lead bronze
- Resistant to corrosion and dezincification
- Attached sleeve for quick installation
- Professional appearance
- Available in more size ranges:
  5/16", 3/8", 1/2", 5/8", 3/4", 1",
  1 1/4" and 1 1/2"
- UL listed for use in NFPA 13D residential fire sprinkler applications

Included in the next
generation of PureFlow
PEX Press fittings we
introduce a cost-effective
fire sprinkler solution. Our
PureFlow PEX Press fittings
are UL listed for use in NFPA 13D
residential fire sprinkler systems.
These fittings, when paired with
ViegaPEX Ultra tubing,\* can protect

homes from the threat of fires.



\*3/4" - 1 1/2" black only



the two systems improve efficiency and capitalize on the unique properties of each material.

Forward-thinking plumbing and mechanical contractors are increasingly installing combined copper and PEX systems, like Viega hybrid technology. John W. Danforth

Company is the perfect example of such forward-thinking behavior.

In 2007, John W. Danforth
Company took on
the enormous task of

constructing the 139-room Stowe
Mountain Lodge in Stowe, Vermont.
With an assortment of architectural
layouts, Danforth elected to utilize
Viega hybrid technology to speed
construction progress. Kevin
Schedlbauer, Project Engineer,

attested to the speed of the Viega hybrid system by saying, "Viega technology is progressive... the hybrid system saved us more than half our time."

Whether it is a luxury hotel, apartment complex or multi-family home, Viega hybrid technology

> allows contractors to reduce installation time and improve reliability all while installing the highest quality plumbing products.

The Viega hybrid system, just as all of our systems, was developed in-house and tested under stringent quality control conditions. This is another reason why working with Viega is the perfect solution.









# Expanded product offering ensures you have the right tools on the jobsite

ViegaPEX Ultra tubing\* is now a reliable, inexpensive, lightweight and corrosion resistant option for residential fire sprinkler systems.

Why install a rigid CPVC system when ViegaPEX Ultra tubing can easily be routed around obstacles?

Combine the ViegaPEX Ultra tubing with our PureFlow PEX Press fire sprinkler fittings, and you have a fire sprinkler system that is not only easy to install but reliable. Since the

system incorporates Viega's press technology you don't have to worry about faulty connections from glues or solvent cements.

The PureFlow fire sprinkler system is a clean, leak-free reliable fire sprinkler system.

Both ViegaPEX Ultra tubing and our new PureFlow PEX Press fire sprinkler fittings meet the

requirements of UL 1821 for use in residential fire sprinkler systems per NFPA 13D.

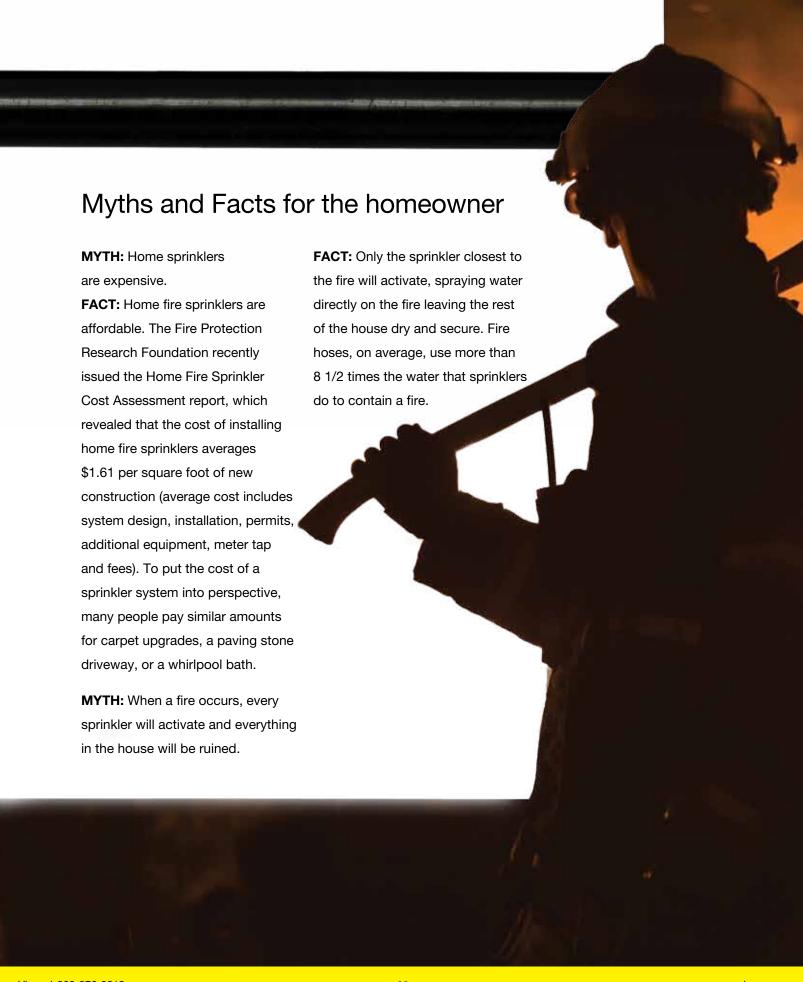
Our technical services department can provide training, design services and other support functions for your next fire sprinkler project. For any of the services mentioned above call Viega Technical Services at 1-877-843-4262.

\*3/4" - 1 1/2" black only











## **PlumbingCAD**

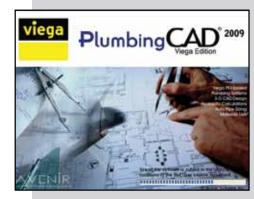
We are committed to making your job easier and more profitable. That is why we are introducing a new plumbing software program called PlumbingCAD to help you estimate your next Viega PureFlow project. Similar to how Viega's existing Radiant Wizard software designs complete radiant layouts, the intended use of PlumbingCAD is for designing plumbing systems.

PlumbingCAD allows you to draw your own floor plan (or import an AutoCAD drawing), and then place your required plumbing fixtures where they are needed. The software takes it from there and automatically connects and sizes the supply lines, which can be displayed in 2D and/ or 3D and have multiple floor levels. Upon completing the design of the project, the software will itemize and quote a comprehensive list of parts required to finish the installation.

It's all about making your job easier.

No other plumbing software program can offer the various reporting options and ease of estimating that our PlumbingCAD software delivers.

Try it today!



PlumbingCAD software will enable customers to better estimate their projects.



3D view while drawing floor plan.

With our applications training, technical support and design services offering, Viega is committed to supporting the customer. Viega offers design and customized drawing services as well as a 2-day residential fire sprinkler design course. For more information call Viega Technical Services at 1-877-843-4262.



## A complete system solutions provider

#### **Tools and Accessories**

Viega offers a variety of PEX Press hand tools, for 5/16" to 1" PEX Press connections.

We also offer a variety of 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

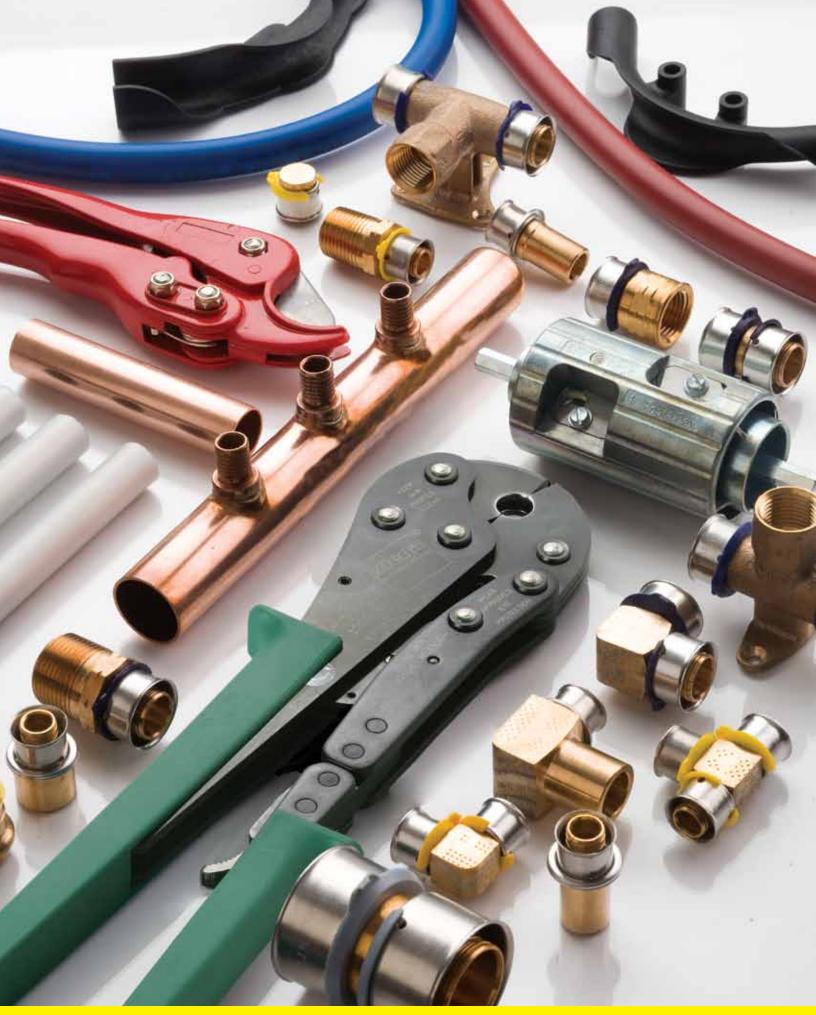
PEX Press fitting system has been so well received in North America.

The fitting system is:

- Safe
- Efficient to install
- Leak proof
- Fast and solder-free
- No open flame during installation
- Long life expectancy
- Versatile with certifications to capture changes in the market

Viega's PureFlow PEX Press system not only has a long life expectancy but also 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 Press fittings are just one segment of our potable water offering. We also offer PureFlow PEX Crimp fittings and tubing options, as a variation to our PEX Press 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 information 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 over 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.



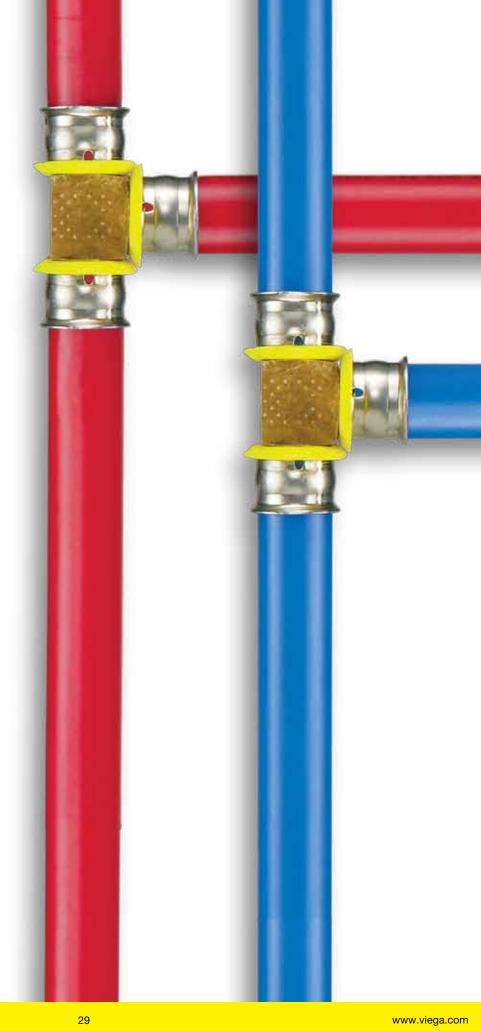
#### Tensile strength pull test

This test shows the integrity of the press joint. Not only is the PEX Press system quick to install, it also offers a more professional look with many installations options.



#### **Press cutaway**

Stainless steel press sleeves ensure a leak-free connection.



# Frequently asked questions about Viega PureFlow PEX Press fittings

## Will the stainless steel press sleeve corrode over time?

The stainless steel will not corrode so it will maintain a clean appearance for the lifetime of the system.

#### Can I use a PureFlow PEX Crimp Tool to make a PureFlow PEX Press connection?

No. Only a Viega Press tool can securely press a PureFlow PEX Press fitting connection.

## How do I know the press connection is reliable?

Viega has chosen superior materials like stainless steel and

bronze to withstand today's harsh water conditions. Design features include 3 view holes to ensure full tubing insertion and a tool locator ring for consistent presses each and every time.

# Can PureFlow PEX Press fittings with attached sleeves be used in fire sprinkler systems?

Yes, our PureFlow PEX Press fittings used with ViegaPEX Ultra Black tubing (3/4" – 1 1/2") are UL listed for use in NFPA 13D residential fire sprinkler applications.

## 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.



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