

Viega Government & Military Solutions

Capabilities and Approvals



viega

Viega press fittings are in U.S. Government and military installations worldwide including The Pentagon

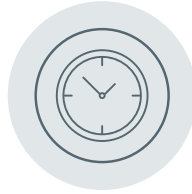


viega

> With multiple government approvals, Viega's high-quality, performance-tested products are the clear choice for new builds, MRO or retrofit projects. Our extensive engineered product line offers solutions in copper, stainless steel, copper nickel, carbon steel and PEX, providing a wide variety of pipe joining and system solutions.

Viega LLC's history of 120 years of innovation has made us the recognized leader in press technology. With Viega, installation is quick, easy and consistently secure. A fifth-generation German manufacturer, Viega employs more than 600 people in the U.S., has over 4,000 employees worldwide, and produces more than two million press fittings per day.

FEATURES + BENEFITS



Many Viega products can be pressed in seven seconds or less, a significant time savings over traditional joining methods. There's no wait time for curing or drying, so pressure tests can be performed immediately.



Viega press fittings are simpler and safer to install than traditional methods. Installations can be made anywhere, in any condition. Unlike grooved and threaded connections, you don't have to reduce the thickness of the pipe wall to get the dependable connection you need.



With Viega's patented Smart Connect® technology, you'll know every connection is made correctly. Smart Connect helps easily identify unpressed connections, so if one was missed it's easy to locate and press without having to drain the system.



Viega is a trusted leader in press technology, so build with confidence. With a heritage of engineering press fittings for a variety of materials and strict quality control, you'll know you're getting the very best when you choose Viega.



With no welding or soldering flames, fire watches are unnecessary. That means there's no need for additional manpower, plus you can skip the messy or labor-intensive tools.

Viega ProPress

THE RECOGNIZED LEADER IN COPPER PRESS TECHNOLOGY

Viega ProPress is the proven solution for nearly any industrial, commercial or residential project. With three choices in sealing elements, Viega ProPress systems can be customized to suit nearly any application, from potable water to solar systems.

ProPress applications:

- Argon
- Carbon dioxide
- Chilled water
- Compressed air
- Cooling water
- Ethanol
- Fire protection
- Fuel oil
- Gray water
- Hydronic heating
- Kerosene
- Low-pressure steam
- Lube oil
- Nitrogen
- Potable water
- Propane
- Vacuum (to 29.2 in. Hg)



Viega ProPress

For more specific information on applications for Viega ProPress, contact Viega Technical Services at 800-976-9819.



Viega ProPress Stainless

COMPLETE STAINLESS SOLUTIONS FOR NEARLY ANY APPLICATION

Viega ProPress Stainless is engineered for harsh industrial environments where the piping systems may come into contact with corrosive cleaning liquids. Available in two grades of stainless steel, 304 and 316, ProPress Stainless provides reliable performance whether you need 316 stainless for a potable water line or 304 stainless for a corrosive chemical line.

ProPress Stainless applications:

- Acetone
- Acetylene
- Acids
- Ammonia
- Argon
- Caustic solutions and vent piping
- Chemical process lines
- Chilled water
- Compressed air
- Condensate
- Deionized water
- Diesel fuel
- Ethanol
- Fuel oil
- Greywater
- Hydrogen
- Hydronic heating
- Isopropyl alcohol
- Kerosene
- Low-pressure steam
- Lube oils
- Methanol
- Nitrogen
- Oxygen (non-medical)
- Potable water
- Sludge
- Steam condensate
- Toluene
- Urea
- Vacuum (to 29.2 in. Hg)

For more specific information on applications for Viega ProPress Stainless, contact Viega Technical Services at 800-976-9819.



Viega ProPress in 304 Stainless



Viega ProPress in 316 Stainless

Viega MegaPress

SAVE TIME, LABOR AND CLEANUP

Ideal for industrial, commercial and residential applications, the Viega MegaPress system is easy to use, flameless and reliable. The system performs well in both new installations and retrofit projects. MegaPress leaves no joining material buildup, exposed threads or tarnish, creating a clean, professional appearance.

With an EPDM sealing element for Viega MegaPress and MegaPress Stainless 316, an HNBR sealing element for MegaPressG and an FKM sealing element for MegaPress XL and MegaPress Stainless 304, the system provides maximum performance for both hydronic and gas applications.

MegaPress applications:

- Chilled water
- Compressed air
- Fire protection
- Fuel oil
- Hydronic heating
- Low-pressure steam
- Natural gas
- Vacuum (to 29.2 in. Hg)
- Acetone
- Diesel fuel
- Vegetable oils
- Engine oils
- Gear grease
- Hydraulic fluid
- Transmission fluid
- Nitrogen
- Argon
- Carbon dioxide

For more specific information on applications for Viega MegaPress, contact Viega Technical Services at 800-976-9819.



Viega MegaPress



Viega MegaPressG

Viega carbon steel

FIRE PROTECTION YOU CAN COUNT ON



Viega MegaPress XL Booster



Viega MegaPress is UL and FM certified for fire protection applications in sizes ½" to 2". As with other Viega press systems, Viega MegaPress fittings can be used in pre-fabricated assemblies, producing a straight, clean installation. And with patented Smart Connect technology, installers can verify that all fittings in pre-fabbed assemblies are secure.



Viega MegaPress Stainless



Viega

PUREFLOW SYSTEM

With fittings, manifolds and tubing, Viega PureFlow provides everything you need for a total plumbing system. Viega was the first to offer a true press system to the PEX market. Available in sizes 3/8" to 2", Viega PureFlow polymer fittings are made in the United States. Viega PEX has the highest ratings for chlorine and UV resistance, according to industry standards, and Viega PureFlow Press fittings are available in high-performance polymer and Zero Lead bronze.

PureFlow applications:

- Hot and cold potable water
- Rainwater/gray water
- Fire sprinkler
- Hydronic heating
- Cooling water

For more specific information on applications for Viega PureFlow, contact Viega Technical Services at 800-976-9819.



Viega PureFlow Press



Viega

HEATING AND COOLING SOLUTIONS

For radiant heating and cooling needs, Viega offers the Climate Mat, an innovative product that makes installation simple and speedy. Hydronic heating provides many benefits including clean and quiet operation, increased user comfort, and varied design options. Climate Mat is a tubing module which allows the installer to simply roll out as many as six equivalent lengths of radiant tubing simultaneously.

Advantages over typical installation include:

- Reduced installation time
- Tubing securement method guarantees desired tubing spacing
- Pre-pressured tubing eliminates downtime
- Pre-engineered design takes the guesswork out of installation
- No balancing needed due to the same circuit lengths



Viega Climate Mat

Climate Mat comes in modules that are 5 or 6 feet wide, with lengths customized to the specific job. Rectangular modules are best-suited to applications that have large, open spaces (greater than 10,000 square feet) and rectangular geometries, though more complicated spaces can be accommodated. Examples of typical applications include space heating and/or cooling of:

Heating and Cooling applications:

- | | | |
|--------------------------|-------------------------|---------------------|
| • Agricultural buildings | • Lobbies | • Turf conditioning |
| • Airports and hangars | • Museums | • Warehouses |
| • Convention centers | • Places of worship | • Corporate offices |
| • Maintenance Garages | • Snowmelt applications | • Barricks |

For more specific information on applications for Viega PureFlow, contact Viega Technical Services at 800-976-9819.

Viega is Buy American Act compliant

What is the Buy American Act

The Buy American Act (BAA) restricts the purchase of supplies that are not domestically manufactured for use in U.S. government projects. There are two general guidelines that define a domestic product: the item must be manufactured in the U.S. and/or the cost of the domestic components must exceed 50% of the cost of all other components in the item.

The BAA does have provisions which allow the approval of foreign-made products under Presidential Executive Order 12849 and IAW DFARS 225.872.1a. The project contracting officer has the final authority as to what product(s) will be approved for a specified project.



Viega Systems

GOVERNMENT APPROVALS*

*For additional government/military codes, standards and approvals, go to: www.viega.us/gov

- Buy American Act (FTA) (FAR 52.225 9 -12)
- CDC
- Dept of Justice BOP
- Dept of State OBO
- DOD
- GSA
- GPO
- HUD
- NASA
- National Park Service
- Pentagon
- TVA
- USACE
- U.S. Air Force
- U.S. Army
- U.S. Coast Guard
- U.S. Marine Corps
- U.S. Navy
- VA



Viega System

INDUSTRY CODES/ STANDARDS/LISTINGS

*For additional government/military codes, standards and approvals, go to: www.viega.us/gov

- ABS
- ANSI/LC4
- ASTM B16.51
- FM Class 1920
- HUD
- IAPMO PS117
- IPC/IMC/IFGC
- NFPA 54
- NFPA 58
- NSF 61G
- PHCC NFPC
- UL 213
- UPC/UMC

Viega

INSTALLATION CREDENTIAL TRAINING CLASSES

Viega Federal Government / Military Technical Managers provide on-site installation credential training classes and engineer lunch and learns. For more information, please contact your local Government Technical Manager.

Choose from three versatile sealing options

With a variety of sealing elements, Viega ProPress systems are approved for more applications than any other press system, ranging from potable water to corrosive chemicals. A proven pipe joining method used around the world, Viega ProPress technology increases the benefits to installers and specifying engineers.

Viega ProPress fittings are available with EPDM, HNBR and FKM sealing elements. Viega MegaPress fittings are available with EPDM and HNBR sealing elements.* see chart on viega.us for specific applications.

*HNBR sealing elements may NOT be installed in ProPress systems that require ANSI/CSA LC-4 approval for natural gas or propane gas applications.



EPDM Sealing Element



HNBR Sealing Element



FKM Sealing Element

Metals Systems

Media¹	System Operating Conditions			Product Line, Material, and Sealing Element²									
				ProPress			ProPress and MegaPress Stainless			MegaPress	MegaPressG		
				Copper			304	316		Carbon Steel			
	Comments	Max Pressure (psig)	Temperature Range (°F)	EPDM	FKM	HNBR	FKM	EPDM	FKM	EPDM	FKM	HNBR	
Water/Liquids													
Hot and cold potable water	Test pressure 600 psi	200	Note 3	✓				✓					
Rainwater / Graywater				✓	✓		✓	✓	✓				
Chilled Water	≤50% Ethylene / Propylene glycol			✓	✓		✓	✓	✓	✓	✓		
Hydronic Heating Water	≤50% Ethylene / Propylene glycol			✓	✓		✓	✓	✓	✓	✓		
Treated Water	Fully desalinated, deionized, demineralized, distilled (open system)		32° to 250°				✓	✓	✓				
Reverse Osmosis Water	<1 MΩ						✓	✓	✓				
Paraffin Wax			Max 100°				✓		✓				
Methyl Ethyl Ketone								✓					
Isopropyl alcohol			Ambient⁶				✓	✓	✓	✓	✓		
Nitric Acid	Concentration ≤10%						✓	✓	✓				
Phosphoric Acid	Concentration ≤25%							✓	✓				
Fire Sprinkler	NFPA 13, 13D, 13R	175		✓			✓	✓	✓	✓	✓		
Low-pressure steam		15	Max 250°		✓⁴		✓		✓		✓⁴		
Fuels/Oils/Lubricants													
Ethanol	Pure grain alcohol	200	Ambient⁶	✓				✓					
Mineral Oil								✓		✓		✓	✓
Lube Oil	Petroleum based	140	Max 150°			✓	✓		✓		✓	✓	
Biodiesel	ASTM D6751								✓		✓		
Propane		125	-40° to 180°									✓⁵	
Butane													✓⁵
Natural Gas	Primarily methane												✓⁵
Heating Fuel Oil			Max 100°			✓	✓		✓		✓	✓	
Diesel Fuel						✓	✓		✓		✓	✓	
Kerosene			Max 68°				✓		✓		✓		
Gases													
Compressed Air	Oil Concentration ≤25 mg/m³	200	Max 140°	✓	✓	✓	✓	✓	✓	✓⁴	✓⁴	✓⁴	
	Oil Concentration >25 mg/m³				✓	✓	✓		✓		✓⁴	✓⁴	
Nitrogen - N₂				✓	✓	✓	✓	✓	✓	✓	✓	✓	
Carbon Dioxide - CO₂	Dry			✓	✓	✓	✓	✓	✓	✓	✓	✓	
Carbon Monoxide - CO				✓	✓	✓							
Argon - Ar				✓	✓	✓	✓	✓	✓	✓	✓	✓	
Ammonia	Anhydrous		Max 120°					✓					
Oxygen - O₂	Non-medical	140	Max 140°	✓				✓		✓			
	Keep free of oil and grease												
Hydrogen - H₂		125		✓	✓	✓	✓	✓	✓	✓	✓	✓	
Acetylene	Test pressure 350 psi	20	Ambient⁶				✓	✓	✓	✓	✓	✓	
Vacuum	Minimum absolute pressure Maximum differential pressure	750µm Hg 29.2" Hg	Max 160°	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Special Media													
Methanol		200	75°					✓					
Latex Paint			32° to 250°					✓	✓				
Urea Solution	Concentration ≤40%	140	100°					✓					
Caustic Soda	Concentration ≤50%		140°					✓					
Acetone	Liquid	70	-14° to 104°	✓				✓					

Plastics Systems

Media ¹	System Operating Conditions		Product Line	
	Comments	Temperature / Pressure Ratings	PureFlow PEX, FostaPEX, Barrier PEX ⁷	
Potable Water / Rainwater / Greywater		160 psi @ 73°F	✓	
		100 psi @ 180°F		
		160 psi @ 73°F		
Chilled Water / Hydronic Heating Water ⁷	≤50% Ethylene / Propylene glycol	100 psi @ 180°F	✓	
		80 psi @ 200°F ⁷		
Fire Sprinkler	NFPA 13D (Only PureFlow PEX - Black)	130 psi @ 120°F	✓	

The term Viega, as used in this publication, does not apply to a specific company within the various separate and distinct companies comprising the Viega group of companies. The term Viega, as used in this publication, refers to the Viega brand itself or generally to the Viega group of companies. References to activities in North America specifically refer to activities of Viega LLC.

A green dot on a Viega ProPress, MegaPress and PureFlow Press fitting indicates the Smart Connect technology with an EPDM sealing element. A yellow dot on a Viega MegaPressG fitting indicates the Smart Connect technology with an HNBR sealing element. A white dot on a Viega ProPress (304 FKM) fitting indicates the Smart Connect technology with an FKM sealing element. For a current list of applications, please visit www.viega.us/applications.

Zero Lead identifies Viega products meeting the lead-free requirements of NSF 61-G through testing under NSF/ANSI 372 (0.25% or less maximum weighted average lead content).

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¹ It is recommended that all systems be clearly labeled with the media being conveyed.

For further information please consult Viega Technical Services.

² All Viega systems must be used with the manufacturer's recommended sealing element.

Contact your local Viega representative or Viega Technical Services for specific application temperature, pressure, and concentration limits.

³ System pressure and temperature ranges depend on sealing element. Any ranges listed above will be overruled by the sealing element limits here:

^{3a} EPDM temperature ranges are typically 0°F to 250°F.

^{3b} FKM temperature ranges are typically 14°F to 284°F with temperature spikes (24hr) up to 356°F.

^{3c} HNBR temperature ranges are typically -40°F to 180°F.

⁴ System contains adequate condensate drainage.

⁵ Compliant with CSA 6.32 / ANSI LO-4.

⁶ Ambient temperatures should be taken as normal operating conditions for the applications not to exceed sealing element limitations.

⁷ Tubing with oxygen barrier should be used for systems with ferrous components.