

Installation Instructions for PEX-c Tubing

Versatility, Reliability and Flexibility, no sweat it's VesiPEX

PEX-c tubing is made of high-density polyethylene, cross-linked by the irradiation method (commonly referred to the "electron beam" method). This method of cross-linking provides excellent long-term properties at elevated water temperatures and internal pressures. A continuous operational pressure of 100 PSI (6.9 Bar) is allowed, with a continuous operating temperature of 180° F (82° C); short fluctuations in temperature up to 230° F (110° C) are possible and can be tolerated. For heating tubing only, as required in DIN 4726/29, the tubing is coated with a layer of barrier material which prevents the diffusion and absorption of oxygen through the pipe wall (this barrier is not supplied with potable water tubing). The oxygen barrier product is suitable for use with potable water. Long-term testing has been performed on PEX-c since the early 1960's.

North American approvals and standards have been completed for VesiPEX tubing including CSA B137.5, NSF 61, NSF 14, NSF CI-TD, ASTM 876/877, ASTM F1960, F2080, F1807, F2098 and F2159.

Complete installation and start-up instructions are available; please contact VesiPEX for the full installation manuals. **Please take a special note of the following instructions:**

- All tubing should be kept in their original packaging until installation and must not be exposed to direct sunlight.
- Pipe bending is possible without using any special tools; the pipe bending radius should not exceed 6 times the outer diameter of the tubing. It is recommended that whenever possible the pipe should be installed at temperatures above 5° C (41° F)
- To repair a kinked section of tubing it can be warmed using hot air; during the cooling process the thermal memory of the PEX tubing will return the pipe to its original shape and diameter. **An open flame should never be used.** In the area being heated the barrier coating may separate from the tubing, the quality and integrity of the overall barrier properties will not be affected.
- Care should be taken not to damage the tubing during installation by sharp objects such as nails or wires. The use of binding wire when being tied to wire mesh or re-bar is not approved. Only plastic tie straps should be used.
- The tubing is easily cut with a simple plastic pipe cutter. The cut should always be perpendicular to the pipe axis.
- Tubing must not be directly connected to a boiler or hot water tank heat source; allow for a minimum of 18" (50 cm) of solid piping before converting to PEX tubing.

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- After installation and before enclosure or covering of tubing, the system must be pressure tested with either air pressure or a hydrostatic test. (Note: for hydrostatic tests in cold climates ensure the pipe is protected from potential freezing) A test pressure of 80 PSI for a minimum of 24 hours before, during and after the enclosure is required.

Please don't hesitate to contact VesiPEX for any further information that might be needed.

Tubing Dimensions and Tolerances

Nominal Tube Size	Outer Diameter	Tolerance	Wall Thickness	Tolerance
3/8"	0.500"	+/- 0.003"	0.070"	+/- 0.010"
1/2"	0.625"	+/- 0.004"	0.070"	+/- 0.010"
5/8"	0.750"	+/- 0.004"	0.083"	+/- 0.010"
3/4"	0.875"	+/- 0.004"	0.097"	+/- 0.010"
1"	1.125"	+/- 0.005"	0.125"	+/- 0.013"

Listings and Approvals

- NSF Standard 61: Drinking Water System Components - Health Effects
- NSF Standard 14: Drinking Water System Components - Performance
- Plastic Pipe Institute (PPI) Hydrostatic Stress Board, TR-4/2000 Listing, Standard Grade @ 73° F. (23° C.) HDB 1250 psi, 180° F. (83° C.) HDB 800 psi and 200° F. (93° C.) HDB 630 psi.
- CSA Standard B137.5 - Cross-linked polyethylene (PEX) tubing for pressure applications
- U.P. Code
- NSF CI-TD Chlorine Resistance Performance for Potable Water Applications
- ASTM F876-04: Standard Specification for Crosslinked Polyethylene (PEX) Tubing
- ASTM F877-05: Standard Specification for Crosslinked Polyethylene (PEX) Tubing - hot and cold water Distribution Systems
- ASTM F1960, F2080, F1807, F2098 & F2159