



Effective Date: December 2024

This listing is subject to re-examination in one year.

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A Subsidiary of the International Code Council®

CSI: DIVISION: 22 00 00—PLUMBING
Section: 22 11 16—Domestic Water Piping

DIVISION: 23 00 00—HEATING, VENTILATION AND AIR CONDITIONING (HVAC)
Section: 23 21 13—Hydronic Piping

Product certification system:

The ICC-ES product certification system includes testing samples taken from the market or supplier's stock, or a combination of both, to verify compliance with applicable codes and standards. The system also involves factory inspections, and assessment and surveillance of the supplier's quality system.

Product: Oil Creek Plastics AQUA and HEATFLEX PE-RT Tubing

Listee: Oil Creek Plastics
45916 State Highway 27
P.O. Box 385
Titusville, Pennsylvania 16354
www.oilcreek.com

Compliance with the following codes:

2024, 2021, 2018, 2015, 2012 and 2009 *International Plumbing Code*® (IPC)
2024, 2021, 2018, 2015, 2012 and 2009 *International Residential Code*® (IRC)
2024, 2021, 2018, 2015, 2012 and 2009 *International Mechanical Code*® (IMC)
2024, 2021, 2018, 2015, 2012 and 2009 *Uniform Plumbing Code*® (UPC)*
2024, 2021, 2018, 2015, 2012 and 2009 *Uniform Mechanical Code*® (UMC)*
2022, 2019, 2016, 2013 and 2010 *California Plumbing Code* (CPC)
2022, 2019, 2016, 2013 and 2010 *California Mechanical Code* (CMC)
2023, 2020 and 2017 *City of Los Angeles Plumbing Code*
2023, 2020 and 2017 *City of Los Angeles Mechanical Code*
2023, 2021, 2017 and 2007 *Code of Massachusetts Regulation 248 CMR 10.00: Uniform State Plumbing Code*
2023, 2021, 2017 *Massachusetts State Building Code 780 CMR Ninth Edition: Chapter 28*
2020, 2015, 2010 and 2005 *National Plumbing Code of Canada (NPC)***
2021, 2017 *Uniform Illustrated Plumbing Code-India (UIPC-India) **
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Compliance with the following standards:

ASTM F2623-2024e1, Polyethylene of Raised Temperature (PE-RT) SDR9 Tubing
ASTM F2769-2024, Polyethylene of Raised Temperature (PE-RT) Plastic Hot- and Cold-Water Tubing and Distribution System

CSA B137.18-2020, Polyethylene of Raised Temperature Resistance (PE-RT) Tubing Systems for Pressure Applications

NSF/ANSI 14-2023, Plastic Piping System Components and Related Materials

NSF/ANSI/CAN 61-2023, Drinking Water System Components – Health Effects

Identification:

Oil Creek Plastics AQUA-Pert shall be marked every 5 feet (1524 mm) with the company name, the nominal tube size, the material designation, the temperature and pressure ratings, the standard designation, the production code, and the ICC-ES PMG listing mark. The ICC-ES PMG listing number is optional.

Oil Creek Plastics HEATFLEX PE-RT tubing is marked every 5 feet (1524 mm) with the company name, the nominal tube size, the material designation, the temperature and pressure ratings, the standard designation, the production code, and the ICC-ES PMG listing mark. The ICC-ES PMG listing number is optional.

Installation:

Oil Creek Plastics AQUA and HEATFLEX tubing must be installed in accordance with the manufacturer's published installation instructions and the applicable code. Installation is subject to approval by the code official having jurisdiction.

Fittings for the Oil Creek Plastics AQUA and HEATFLEX tubing are to consist of compression fittings or insert fittings that comply with ASTM F1807 or F2159 or stainless-steel clamps that comply with ASTM F2098. Fittings are to comply with the applicable code and be recognized in a current ICC-ES evaluation report or listing.

Water Distribution: Horizontally laid pipe must be secured in such a manner that temperature-induced expansion and contraction are accommodated. In jurisdictions enforcing the UPC, PE-RT tubing must not be installed within the first 18 inches (457 mm) of piping connected to a water heater.

Inspection of Water Distribution Piping: Installed tubing must be pressure-tested and inspected as required by Chapter 3 of the IPC, Chapter 25 of the IRC or Chapter 1 of the UPC.

Radiant heat piping: The tubing must be pressure-tested for leaks before installation of the cover, as noted in IRC Section M2103.4, IMC Section 1209.2, or UMC Section 1207.0, as applicable. The leak test must be witnessed by the code official. Embedded piping must be provided with a thermal barrier in accordance with IMC Section 1209.5 or IRC Section M2103.2 as applicable.

Clearances from heat-producing equipment must be in accordance with Section 503.7.8 of the 2012 *International Fuel Gas Code*[®], Section M1306 of the IRC or Section 802.10.5 of the UMC, as applicable.

Models:

Oil Creek Plastics AQUA-PERT is single layer tubing, complies with ASTM F 2769, CSA B137.18. AQUA-PERT tubing is available in nominal diameters of $\frac{1}{8}$, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, 1, 1- $\frac{1}{4}$, 1- $\frac{1}{2}$, 2, 2- $\frac{1}{2}$, 3, 3- $\frac{1}{2}$, 4, 4- $\frac{1}{2}$, 5, 6 in. (3, 7, 8, 10, 13, 16, 19, 25, 32, 38, 51, 64, 76, 89, 102, 114, 127, 152 mm) and in coils of various lengths. The AQUA-PERT tubing is available in white, red and blue.

Oil Creek Plastics HEATFLEX tubing consists of a layer of ethylene vinyl alcohol polymer (EVOH) sandwiched between two layers of Polyethylene Copolymer Resin and two layers of adhesive, complying with ASTM F2623 and CSA B137.18. The outer layer provides a protective shield for the oxygen barrier. HEATFLEX tubing is available in nominal diameters of $\frac{5}{16}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, and 1 inch (8, 10, 13, 16, 19, and 25 mm) and in coils of various lengths. The tubing is available in orange.

Conditions of listing:

1. When code approval is required, details on the design and installation of the heating system must be submitted to the code official for approval.
2. During placement of the cover over the tubing, the tube must be maintained at the greater of 1-1/2 times the working pressure or 100 psi (689.4 kPa), whichever is greater.

3. When code approval is required, the tubing installation must be pressure-tested for leaks in the presence of the code official or the official's designated representative prior to covering.
4. When installation is in fire-resistive-rated assemblies, evidence of compliance with the 2012 *International Building Code*[®] (IBC) Section 713 (penetrations) must be provided to the code official.
5. The potable water connections must be protected against backflow from the hydronic heating system.
6. The tubing must not be used as a source of electrical ground.
7. Minimum bending radius is six times the outside tube diameter of the PE-RT tube. The outside diameter is the nominal diameter plus $\frac{1}{8}$ inch (3.2 mm).
8. The tubing serving as a component of radiant systems is limited to applications using potable water or potable water/anti-freeze solution based on anti-freeze products approved for hydronic heating system use as the transfer fluid.
9. When the system is embedded in concrete, tubing must be covered a minimum of $\frac{3}{4}$ inch (19.1 mm) and installation must comply with IBC Section 1906.3.
10. All systems must be installed in accordance with the manufacturer's installation instructions, which are provided with the product. Installation must conform to relevant requirements of the referenced codes and is subject to approval by the code official. Manufacturer's instructions must be furnished to the code official upon request.
11. The tubing is under a quality control program with bi-annual inspections by ICC-ES.