



Standard Specifications for Fittings

Fittings are categorized in accordance with ASTM or IAPMO specifications, as follows:

ASTM F 1807: Standard Specification for Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-Linked Polyethylene (PEX) Tubing

This specification covers metal insert fittings and copper crimp rings for use with PEX tubing that meet requirements in ASTM F 876 and F 877. These fittings are intended for use in 100 psi (690 kPa) cold- and hot-water distribution systems operating at temperatures up to and including 180°F (82°C). Requirements for materials, workmanship, dimensions, and markings to be used on fittings and rings are also included. Size range is 3/8 to 1 1/4 inches.

ASTM F 1960: Standard Specification for Cold Expansion Fittings with PEX Reinforcing Rings for Use with Cross-Linked Polyethylene (PEX) Tubing

This specification covers cold expansion fittings and PEX reinforcing rings for use with PEX plastic tubing that meet requirements of ASTM F 876 and F 877. These fittings are intended for use in 100 psi (690 kPa) cold- and hot-water distribution systems operating at temperatures up to and including 180°F (82°C). The system is comprised of a PEX reinforcing ring and a cold expansion fitting. Included are requirements for materials, workmanship, dimensions, and markings to be used on fitting components. Size range is 3/8 to 1 1/2 inches.

ASTM F 2080: Standard Specification for Cold Expansion Fittings with Metal Compression Sleeves for use with PEX Pipe

This specification covers cold-expansion fittings using metal compression sleeves for use with PEX plastic pipe that meet requirements of ASTM F 876 and F 877, whereby the PEX pipe is cold-expanded before fitting assembly. These cold expansion fittings and metal compression sleeves are intended for use in residential and commercial, hot and cold, potable water distribution systems, with continuous operation at pressures up to and including 100 psi (690 kPa), and at temperatures up to and including 180°F (82°C). Included in the specification are requirements for materials, workmanship, dimensions, and markings to be used on fittings and compression sleeves. Performance requirements are as referenced in ASTM F 877. Size range is 3/8 to 2 inches.

ASTM F 2098: Standard Specification for Stainless Steel Clamps for Securing SDR9 Cross-Linked Polyethylene (PEX) Tubing to Metal Insert Fittings

This specification covers stainless steel clamps for use with four sizes of insert fittings that comply with F 1807, and cross-linked polyethylene (PEX) plastic tubing that complies with F 876 or F 877. These clamps are intended as an alternative to the copper-alloy crimpings of Specifications F 1807 or F 2159 for use in 100 psi (689.5 kPa) cold- and hot-water distribution systems operating at temperatures up to and including 180°F (82°C). Included are requirements for materials, workmanship, dimensions, and marking of the stainless steel clamps; requirements for deforming the clamps, which apply to assemblies of PEX tubing and Specifications F 1807 and F 2159, insert fittings secured with deformed clamps per this specification.

ASTM F 2159: Standard Specification for Plastic Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-Linked Polyethylene (PEX) Tubing

This specification covers plastic insert fittings and copper crimp rings for use with PEX pipe that meets requirements in ASTM F 876 and F 877. It establishes requirements for sulfone plastic insert fittings and copper crimp rings for PEX plastic tubing. These fittings are intended for use in 100 psi (690 kPa) cold- and hot-water distribution systems operating at temperatures up to and including 180°F (82°C). Included are requirements for material, molded part properties, performance, workmanship, dimensions, and markings to be used on fittings and rings. Size range is 3/8 to 1 inch.

ASTM F 2434: Standard Specification for Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 PEX Tubing and SDR9 PEX-AL-PEX Tubing

This specification covers metal insert fittings with o-ring seals and copper crimp rings for use with cross-linked polyethylene (PEX) tubing in 1/2, 3/4, 1, and 1 1/4 inch nominal diameters that meet the requirements for Specifications F 876 and F 877. These fittings are intended for use in 100 psi (689.5 kPa) cold- and hot-water distribution systems operating at temperatures up to and including 180°F (82°C). Included are the requirements for materials, workmanship, dimensions, performance, and markings to be used on the fittings and rings. Size range is 1/2 to 1 1/2 inches.