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Removable and Non-Removable Push-Fit Fittings

Section I

1.0 General

1.1 Application

The purpose of this standard is to establish minimum performance requirements for removable and non-removable push-fit fittings that employ a quick assembly push-fit connector, as well as push-fit connectors integrated into plumbing devices (herein referred to as the “fitting”). The fittings described in this standard are intended for use in domestic and commercial applications, for both potable water distribution systems and hydronic heating systems.

1.2 Scope

1.2.1 Description

This standard applies to push-fit fittings that can be used with one or more of the following materials:

- 1) PEX tubing complying with ASTM F 876 or ASTM F 877;
- 2) Type K, L and M copper tubing complying with ASTM B 88; and
- 3) CPVC tubing complying with ASTM D 2846.

Push-fit fittings may be designed to be used with one or more types of tubing that conforms to the dimensions as specified in their respective standard. This standard serves to supplement ASTM F 877, ASTM D 2846 and ASTM B 88 in describing a test method for a specific type of push-fit fitting system to be used with PEX, Copper and/or CPVC tubing. This standard covers minimum requirements for materials of construction and prescribes minimum performance requirements for fitting joints, marking, and identification. When using fittings with PEX tubing, a tube liner must be inserted into the end of the tubing before assembly into the fitting.

1.2.2 Size Range

These fittings shall have a size range of ¼ NTS to 2 NTS (6 DN to 50 DN), and ¼ CTS to 2 CTS (6 DN to 50 DN).

1.2.3 Minimum Pressure

The fittings shall be designed for a minimum continuous working pressure of 125.0 psi (861.9 kPa).

1.2.4 Minimum Temperature Range

These fittings shall be designed to withstand flow temperatures from a minimum of 33.0 °F to at least 180.0 °F (0.6 °C to at least 82.2 °C).