ASSE Standard #1061 - 2006
ASSE Board Approved: APRIL, 2006

American Society of Sanitary Engineering

Performance Requirements for

Removable and Non-Removable Push-Fit Fittings

An American National Standard

General Information

No product may be said to be ASSE approved unless the manufacturer has applied to the ASSE, has had his product tested according to the applicable ASSE Standards, and when the product has passed the test, displays the ASSE Seal on the product.

Instructions for receiving the authorization to display the Seal are available from ASSE's International Office. Organizations wishing to adopt or list any ASSE Standard should print the ASSE Standard number on the cover page first and in equal or larger type to that of the adopting or listing organization.

American Society of Sanitary Engineering
Westlake, Ohio

Foreword

This foreword shall not be considered a part of the standard; however, it is offered to provide background information.

ASSE standards are developed in the interest of consumer safety.

This standard was developed to establish the minimum performance requirements for removable and non-removable push-fit fittings for an alternative method of connections fittings with valves and tubing on potable water distribution systems and hydronic heat systems.

There are other applications for push-fit fittings, including compressed air systems and gas piping systems; however the performance requirements and tests in ASSE Standard #1061 were developed for fittings installed in potable water distribution systems and hydronic heat systems only.

Piping materials shall be installed in accordance with local codes and regulations.

Pressurized (compressed) air used for laboratory testing contains large amounts of stored energy, which presents serious safety hazards should a system fail for any reason. It is the responsibility of the user of this standard to establish appropriate safety requirements prior to performing any of the tests contained in this standard.

Recognition is made of the time and support of those who participated in the development of this standard.

This standard does not imply ASSE’s endorsement of a product which conforms with these requirements.

Compliance with this standard does not imply acceptance by any code body.

It is recommended that these devices be installed consistent with local codes.

This standard was promulgated in accordance with procedures developed by the American Society of Sanitary Engineering and approved by the American National Standards Institute (ANSI).

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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 than 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 B88 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).