American National Standard

ASSE 1014-2020

Performance Requirements for

Backflow Prevention Devices for Hand-held Showers

ASSE Board Approved: January 2020
ANSI Approved: February 2020
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Approved American National Standard ANSI

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General Information

No product may be said to be ASSE listed unless the manufacturer has applied to ASSE International, has had the product tested by an official ASSE recognized independent laboratory, according to the applicable standard, passed the test, and has been reviewed and approved by the consensus ASSE International Seal Control Board. Having completed the aforementioned, the manufacturer may then display the ASSE Seal on the product.

Instructions for receiving the authorization to display the Seal are available from the ASSE 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.

ASSE International
Mokena, Illinois

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.

Hand showers, sometimes identified as “telephone showers,” provide a desirable means for bathing as well as some therapeutic services. ASSE has recognized that these devices, due to their mobility in service, can create unsanitary conditions in the potable water lines unless preventative means are provided in the installation.

Loss of water supply pressure can create a condition in which contaminated water can be caused to backflow into the potable water lines. This could occur when a hand-held shower is submersed in non-potable water, therefore it is essential that adequate means to protect against backflow be provided.

Loss of water pressure is not a frequent occurrence, but it is a possibility. Many plumbing codes mandate that all hand-held shower installations be provided with means of protecting against backsiphonage and backpressure conditions.

This performance standard has been developed around well established and extensively field-tested principles for backflow prevention devices of this class. ASSE 1014 is intended for backflow prevention devices that are separately attached or integral to hand-held showers, while relying on ASME A112.18.1 Plumbing Fixture Fittings for the remaining performance requirements. Other devices such as those complying with ASSE Standard #1001 and ASSE Standard #1011, when installed in a properly designed system, can provide equivalent protection from backsiphonage and/or backpressure.

Recognition is made of the time volunteered by members of this working group and of the support of manufacturers, who also participated in meetings for this standard.

This standard does not imply ASSE International’s endorsement of a product that conforms to 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 by qualified and trained professionals.

This standard was promulgated in accordance with the ASSE Procedures for Standards Development as approved by the American National Standards Institute (ANSI).

2019 Product Standards Committee

Tsan-Liang Su, PhD, Chairperson
Stevens Institute of Technology
Hoboken, NJ

William Briggs, Jr.
JB&B
New York, NY

Terry Burger
NSF International
Cleveland, OH

William Chapin
Professional Code Consulting, LLC
Cullman, AL

Mark E. Fish
Zurn Industries, LLC
Cary, NC

Ron George
Plumb-Tech Design & Consulting Services, LLC
Newport, MI

Daniel Gleiberman
Sloan
Los Angeles, CA

Brandon Gunnell
Precision Plumbing Products
Portland, OR

Chris Haldiman
Watts Water Technologies
Springfield, MO

John F. Higdon, P.E.
Supply Source Products
Matthews, NC

Conrad L. Jahrling (non-voting)
ASSE International
Chicago, IL

Jim Kendzel
American Supply Association
Minneapolis, MN

Ramiro Mata
American Society of Plumbing Engineers (ASPE)
Cleveland, OH

Thomas Pitcherello
State of New Jersey
Bordentown, NJ

Daniel Rademacher
Plumbing Code and Design Consulting
Butte, MT

Shabbir Rawalpindiwala
Kohler Company
Kohler, WI

Billy Smith
American Society of Plumbing Engineers (ASPE)
Montgomery, AL

1014 Working Group

John E. Bertrand
Moen, Inc.
North Olmsted, OH

Mark E. Fish
Zurn Industries, LLC
Cary, NC

Mark R. Gibeault
Kohler Co.
Kohler, WI

Conrad L. Jahrling (non-voting)
ASSE International
Chicago, IL

Mark Malatesta
American Standard / Lixil
Piscataway, NJ

David Orton
NSF International
Ann Arbor, MI

Shabbir Rawalpindiwala
Kohler, Co.
Kohler, WI

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Section I

1.0 General

1.1 Application

This standard provides performance requirements for backflow prevention device(s) for handheld showers (herein referred to as the “device”) in the interest of health and safety.

1.2 Scope and Purpose

1.2.1 Description

These devices provide backflow protection against backsiphonage and backpressure in handheld showers. These are separate devices or are integral with handheld showers, tub fillers, flexible hoses, or components that are attached to a shower system. The device shall include two independently acting check valves in series or a check valve in series with a vacuum breaker feature.

1.2.2 General Requirements

The device(s) and associated components shall comply with the requirements of this standard and the applicable requirements of ASME A112.18.1 / CSA B125.1, unless stated otherwise herein.

1.2.3 Minimum Working Pressure

The device shall be designed to withstand an inlet working pressure of a minimum of 125.0 psi (861.9 kPa).

1.2.4 Temperature

1.2.4.a. Temperature Range

The device shall be designed to function at temperatures from 40.0 °F to 120.0 °F (4.4 °C to 48.9 °C).

1.2.4.b. Maximum Temperature Spike

The device shall withstand temperature spikes up to 150 °F (65.6 °C).

1.2.5 Connections

Connections for non-integral devices shall conform to ASME A112.18.1 / CSA B125.1.

1.2.6 Two Check Valves

Devices with two check valves in series shall comply with ASME A112.18.3 as a fitting with internal backflow prevention device.