

American National Standard

# ASSE 1018-2001(R2021)



*Performance Requirements for*  
**Trap Seal Primer Valves –  
Potable Water Supplied**

**ASSE Board Approved:** January 2021

**ANSI Approved:** January 2021

**ICS Code:** 23 060 99 | 91 140 70





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# Foreword

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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.

For many years, the method of priming traps has been with the use of a water supply trap primer device, which is activated with pressure fluctuations or flow in the water supply piping. This method of priming continues to be the method of choice by some members in the plumbing community, although priming devices, which are addressed by ASSE 1044, provide trap seal protection by utilizing electronic design or drainage-type trap priming devices.

The critical feature in these devices is the backflow preventer. This standard addresses criteria for the evaluation of the backflow prevention features.

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

This standard does not imply ASSE's endorsement of a product which 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. It is recommended that these devices be installed and maintained per the manufacturer's instructions.

This standard was promulgated in accordance with procedures developed by the American National Standards Institute (ANSI).

# 2021 Product Standards Committee

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**Tsan-Liang Su, PhD**, Chairperson

*Stevens Institute of Technology  
Hoboken, NJ*

**Chris Haldiman**

*Watts Water Technologies  
Springfield, MO*

**Karl Abrahamson**

*Saint Paul Department of Safety  
and Inspections  
Cottage Grove, MN*

**John F. Higdon, P.E.**

*Supply Source Solutions  
Matthews, NC*

**Brian Andersen**

*C.J. Erickson Plumbing Co.  
Manhattan, IL*

**Jim Kendzel**

*American Supply Association  
Minneapolis, MN*

**William Briggs Jr.**

*JB&B  
New York, NY*

**Ramiro Mata**

*American Society of Plumbing  
Engineers (ASPE)  
Mentor, OH*

**Terry Burger (non-voting)**

*ASSE International  
Cleveland, OH*

**Robert Neff**

*Delta Faucet  
Pendleton, IN*

**William Chapin**

*Professional Code Consulting, LLC  
Cullman, AL*

**Thomas Pitcherello**

*State of New Jersey  
Bordentown, NJ*

**Mark E. Fish**

*Zurn Industries, LLC  
Cary, NC*

**Daniel Rademacher**

*Plumbing Code and Design Consulting  
Butte, MT*

**Ron George**

*Plumb-Tech Design & Consulting Services LLC  
Newport, MI*

**Shabbir Rawalpindiwala**

*Kohler Company  
Kohler, WI*

**Mark Gibeault**

*Kohler Company  
Kohler, WI*

**Billy Smith**

*American Society of Plumbing  
Engineers (ASPE)  
Montgomery, AL*

**Daniel Gleiberman**

*Sloan  
Los Angeles, CA*

**Chris White (non-voting)**

*ASSE International  
Mokena, IL*

**Brandon Gunnell**

*Precision Plumbing Products  
Portland, OR*

# ASSE 1018 Working Group (2001)

---

**Patrick J. Higgins**

*P.J. Higgins & Associates  
Frederick, MD*

**John Lauer**

*Sloan Valve Company  
Franklin Park, IL*

**Rand Ackroyd**

*Rand Engineering  
Newburyport, MA*

**Jerry McDanal**

*Jay R. Smith Manufacturing Co.  
Montgomery, AL*

**Al Becker**

*Zurn Industries, Inc.  
Erie, PA*

**Mike Meagher**

*Sioux Chief Manufacturing Co.  
Peculiar, MO*

**John Clough**

*Josam  
Michigan City, IN*

**Jack Vilendre**

*Precision Plumbing Products, Inc.  
Portland, OR*

**George Flegel**

*Consultant  
Michigan City, IN*

**William Whitehead**

*Plumbing Drainage Institute (PDI)  
South Easton, MA*

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# Performance Requirements for Trap Seal Primer Valves – Potable Water Supplied

## Section I

### 1.0 General

#### 1.1 Application

Devices covered by this standard are designed primarily to supply water to drain traps which have infrequent use and in which water evaporation would allow sewer gas to enter the premises.

#### 1.2 Scope

##### 1.2.1 Description

This type of device is located in the domestic water distribution system and is designed to supply potable water to a drain trap to maintain the water seal. A means for the prevention of back-siphonage shall be incorporated as part of the device and shall comply with backflow siphonage testing in Section 3.4.

##### 1.2.2 Size

Water distribution line connections shall be not less than 1/2 NPT pipe size. Trap seal makeup (discharge branch) connections shall be minimum 1/2 NPT pipe size.

##### 1.2.3 Flow

The rate of water flow to the trap shall be fixed or adjustable. If the water flow to the trap is adjustable and the means of adjustment is located downstream of the back-siphonage backflow device, the means of adjustment shall not be capable of shutting off the flow of water. The device shall provide intermittent discharge to the trap in response to the flow or pressure changes in the supply line.

##### 1.2.4 Pressure Requirements

Device shall be designed to withstand a minimum hydrostatic working pressure of 862.5 kPa (125 psi).

##### 1.2.5 Operating Range

Devices shall be designed for minimum operating range of 138-552 kPa (20-80 psi).

##### 1.2.6 Sliding Parts

Parts shall prevent galling and sticking when tested to Section 3.2, Cycle Test.

#### 1.3 Reference Documents

Reference to industry standards shall mean to the latest edition of these standards.