

ASSE Standard #1030-2016

ASSE Board Approved: April 25, 2016

ANSI Approved: May 30, 2016

ASSE International

Performance Requirements for

Positive Pressure Reduction Devices for Sanitary Drainage Systems

An American National Standard

This is a preview of "ASSE Standard 1030-2...". [Click here to purchase the full version from the ANSI store.](#)

General Information

Neither this standard, nor any portion thereof, may be reproduced without the written consent of ASSE International.

No product may be said to be listed by ASSE unless the manufacturer has applied to ASSE International, has had its product tested according to the applicable 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 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
Copyright © 2016, 2013, 2009
All rights reserved.

Foreword

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

ASSE International considers product performance standards to be of great value in the development of improved plumbing systems. ASSE standards are developed in the interest of consumer safety.

A positive air pressure reduction device for sanitary drainage systems is a device specifically designed to protect water trap seals against unwanted positive pressure transients in sanitary drainage systems.

The ASSE 1030 working group, which developed this standard, was set up within the framework of the ASSE International Product Standards Committee.

Recognition is made of the time volunteered by members of the 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 procedures developed by the American National Standards Institute (ANSI).

2016 Product Standards Committee

Edward J. Lyczko, Chairperson

*Cleveland Clinic – Retiree
Cleveland, OH*

William Briggs, Jr.

*MGJ Associates
New York, NY*

Terry Burger

*NSF International
Ypsilanti, MI*

William Chapin

*Professional Code Consulting, LLC
Cullman, AL*

Mark Fish

*Zurn Industries, LLC
Cary, NC*

Ron George

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

Daniel Gleiberman

*Sloan
Los Angeles, CA*

John F. Higdon, PE

*Apollo Valves / Conbraco Industries, Inc.
Matthews, NC*

Gary Howard

*Illinois Plumbing Inspector – Retiree
LaGrange, IL*

Conrad L. Jahrling (non-voting)

*ASSE International
Chicago, IL*

Chuck Lott

*Precision Plumbing Products
Portland, OR*

Peter Marzec

*United Association of Plumbers
and Pipefitters
Pearl River, NY*

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*

Tsan-Liang Su, PhD

*Stevens Institute of Technology
Hoboken, NJ*

1030 Working Group

Steven Cole, Chairperson

*IPS Corporation
Collierville, TN*

Steven White

*Studor Incorporated
East Essex
United Kingdom*

Conrad L. Jahrling (non-voting)

*ASSE International
Chicago, IL*

Table of Contents

Section I	1
1.0 General	1
1.1 Application	1
1.2 Scope	1
Figure 1	1
1.3 Requirements	2
1.4 Reference Standards	2
Section II	4
2.0 Test Specimens	4
2.1 Samples Submitted for Test	4
2.2 Samples Tested	4
2.3 Drawings	4
2.4 Rejection	4
Section III	5
3.0 Performance Requirements and Compliance Testing	5
3.1 Air Tightness Test	5
3.2 Rating Test	5
3.3 Endurance Test	5
Figure 2	6
3.4 Test Fixture Description, Calculations and Setup	6
3.5 Device Characteristic Performance Test	8
3.6 Device Opening Time Test	9
3.7 Device Filling Time Test	9
Figure 3	10
Figure 4	10
Figure 5	11
Section IV	12
4.0 Detailed Requirements	12
4.1 Materials	12
4.2 Documentation	12
4.3 Markings	12
Section V	13
5.0 Definitions	13

Performance Requirements for Positive Pressure Reduction Devices for Sanitary Drainage Systems

Section I

1.0 General

1.1 Application

Positive pressure reduction devices (herein referred to as "device") are to be used in building drainage waste and vent (DWV) systems. They are intended to reduce the impact of short duration air pressure transients that arise in DWV networks through use. They are not intended to have any effect on long duration or steady-state offsets in air pressure.

1.2 Scope

1.2.1 Description

See Figure 1 for a simple arrangement of components. The device consists of a variable volume reservoir contained within a ventilated rigid outer casing with an inlet connection by which the reservoir inflates when subjected to positive pressure. In its inactive state, the flexible reservoir is deflated. Expansion only occurs in response to an increase in line pressure at the entrance to the device. This expansion provides a variable volume reservoir for air. The device connects to the drainage network via an airtight seal to prevent the diversion of airflow from entering the reservoir. As a result, the reservoir becomes an integral part of the drainage network.

Figure 1
Components

