



**Summary of Substantive Changes
between the
2015 edition and the 2020 edition including
Update No.1 dated September 2017 of
ASSE 1037/ASME A112.1037/CSA B125.37
“Performance Requirements for
Pressurized Flushing Devices for Plumbing Fixtures”**

Presented to the IAPMO Standards Review Committee on January 11, 2021

General: The changes to this standard should not have an impact on currently listed products. The significant change is:

- Added an exception for the back siphonage test to be tested with a second specimen only if access to the checking members will affect the other test procedures (see Sections 4.1.4, and 4.4)

Section 2, Referenced publications and definitions: The referenced standards were updated as follows:

ASME (The American Society of Mechanical Engineers)/CSA Group

ASME A112.18.1-~~2012~~[2018](#)/CSA B125.1-~~12~~[18](#)

Plumbing supply fittings

ASME A112.19.2-~~2013~~[2018](#)/CSA B45.1-~~13~~[18](#)

Ceramic plumbing fixtures

ASME (The American Society of Mechanical Engineers)

A112.18.3-~~2002 (R2012)~~[2008 \(R2017\)](#)

Performance requirements for backflow protection devices and systems in plumbing fixture fittings

A112.19.14-~~2006 (R2011)~~[2013 \(R2018\)](#)

Six-liter water closets equipped with a dual flushing device

B1.1-~~2008~~[2003 \(R2018\)](#)

Unified Inch Screw Threads (UN & UNR Thread Form)

B1.20.1-2013 [\(R2018\)](#)

Pipe Threads, General Purpose (Inch)

B16.18-~~2012~~[2018](#)

Cast Copper Alloy Solder Joint Pressure Fittings

B16.22-~~2013~~[2018](#)

Wrought Copper and Copper Alloy Solder Joint Pressure Fittings

ASSE (ASSE International Chapter of IAPMO, LLC.)

1001-~~2008~~[2017](#)

Performance Requirements for Atmospheric Type Vacuum Breakers

CSA Group

B64 Series-11 [\(R2016\)](#)

Backflow preventers and vacuum breakers

B64.1.1-11 [\(R2016\)](#)



Atmospheric vacuum breakers (AVB)

Section 4, Performance requirements and test methods: Added an exception for the back siphonage test to be tested with a second specimen only if access to the checking members will affect the other test procedures as follows:

4.1.4 Order of tests

Tests shall be conducted on the same specimen, in the order listed in this Standard. Where access to checking members to perform the test in Clause 4.4 would compromise the integrity of the specimen to complete the remainder of the tests, a second sample may be used solely to test per Clause 4.4.

4.4 Backflow Back siphonage test — Tank type PFDs

4.4.1 Purpose

The purpose of this test is to ensure that the PFD incorporates a means to protect against back Siphonage ~~and backpressure~~ from the discharge side.

4.4.2 Procedure

The back siphonage test for tank type PFDs shall be conducted as follows:

- a) Install the test specimen in accordance with Figure 1.
- b) Foul all checking members with a 0.8 mm (0.032 in) diameter 100% copper wire formed to the sealing surface of the check being tested and in the proper location for the type of valve construction, as illustrated in Figure 2, 3, or 4.
- c) Add a dye solution to the tank.
- d) Pressurize the tank to the manufacturer's recommended working pressure to establish the normal water level in the PFD tank.
- e) The pressure of the tank shall be set at (0) gauge or atmospheric for the remainder of this test.
- ef) Apply a vacuum of 85 kPa (12 psi) and maintained for at least 1 min.
- fg) Slowly apply a vacuum (not less than 5 s) from 0 kPa to 85 kPa (0 psi to 12 psi)
- gh) Slowly reduce the vacuum from 85 kPa to 0 kPa (12 psi to 0 psi).
- hi) Create a surge effect by quickly (less than 1 s) opening and closing a quick-acting valve. During this step, the vacuum shall range between 85 kPa and 0 kPa (12 psi and 0 psi).

Note: 85 kPa (12 psi) is equivalent to 638 mm (25 in) of mercury.

Table 1, Sequence for hydraulic performance tests: The table was revised to replace mixed media with Waste extraction.