



**Summary of Substantive Changes between the 2015 edition of  
ASSE 1002/ASME A112.1002/CSA B125.12,  
“Anti-Siphon Fill Valves for Water Closet Tanks,”  
the 2008 edition of  
ASSE 1002, “Anti-Siphon Fill Valves for Water Closet Tanks,”  
and the 2012 edition of CSA B125.3, “Plumbing fittings”**

**Presented to the IAPMO Standards Review Committee on February 8, 2016**

**General:** This new harmonized ASSE 1002/ASME A112.1002/CSA B125.12 standard underwent a complete reformat of sections and contents from the previous ASSE 1002 and CSA B125.3 standards which will affect currently listed products. Although the majority of previous ASSE 1002 and CSA B125.3 tests and requirements have been reformatted (which does not allow correlation of sections), the current version now includes a different number of life cycles’ test, a new thread torque test, and a new hydrostatic pressure test as summarized below.

**ASSE 1002 and CSA B125.3**

Section 3.5.3, Acknowledged and added a requirement for proprietary shanks:

*[Proprietary shanks or inlets shall be designed to mate with common supply connections.](#)*

**ASSE 1002**

Section 3.6, Added requirement for seat discs (already in in section 4.3.2 of CSA B125.3):

*[Seat disc arrangements shall be replaceable.](#)*

**ASSE 1002**

Section 3.7, Added minimum requirement for copper, and stainless steel materials along with plastic (already in section 4.14 of CSA B125.3):

*[Coupling nuts and locknuts shall be made from materials that comply with Clause 4.14 of ASME A112.18.1/CSA B125.1.](#)*

**ASSE 1002**

Section 3.8, Added requirement for accessible valve servicing (already in in section 4.4 of CSA B125.3):

*[The device shall be designed so that replacement of wearing parts can be accomplished](#)*

*[\(a\) without removing the fitting from the supply system;](#)*

*[\(b\) without removing the piping from the body;](#)*

*[\(c\) without disturbing the finished wall; and](#)*

*[\(d\) using standard tools or manufacturer-provided tools.](#)*

**ASSE 1002 and CSA B125.3**

Section 3.9, Added pressure-relief pressure for pressure-relief devices:

*[For pressure-relieving devices, pressure relief shall occur at a pressure of at least 1030 kPa \(150 psi\), and the relief discharge shall be into the fixture.](#)*



### **ASSE 1002**

Section 4.2.1, Added requirement for ambient lab conditioning (already in in section 5.1.1 of CSA B125.3):

*Before testing, the device shall be conditioned at ambient laboratory conditions for not less than 12 h.*

### **ASSE 1002 and CSA B125.3**

Section 4.4.1.2(c), Widened the flush volume to 1.0 and 2.0 gallons during Pressure and Temperature tests:

*Using water at a temperature of  $49 \pm 3$  °C ( $120 \pm 5$ °F) and a static pressure of  $860 \pm 14$  kPa ( $125 \pm 2$  psi), flush the water closet tank every 5 min  $\pm$  15 s for a total of 50 cycles using a flush volume between 3.8 and 7.6 L (1.0 and 2.0 gal).*

~~*Section 3.1.2, ASSE 1002, Flush the water closet tank every five (5) minutes for a total of fifty (50) cycles using a flush volume tolerance of 1.4 to 2.0 gallons (5.3 to 7.6 liters).*~~

~~*Section 5.3.1.1, CSA B125.3, Seals of plumbing fittings, except those of trap primers, shall comply with Clause 5.3.1.1 of ASME A112.18.1/CSA B125.1 when tested in accordance with Clauses 5.3.1.2 to 5.3.1.4 of ASME A112.18.1/CSA B125.1.*~~

### **ASSE 1002 and CSA B125.3**

Section 4.5.3(c), Changed the number of life cycles in between those in ASSE 1002 and CSA B125.3:

*Operate the fill valve for 150,000 cycles by filling the tank for each cycle. Cycle duration shall not exceed 1 min.*

~~*Section 3.2.2, ASSE 1002, The device shall be operated a total of seventy-five thousand (75,000) cycles at a minimum of 90.0 psi (620.6 kPa) static pressure and 70.0 psig (482.7 kPa) minimum flowing pressure using ambient temperature [ $65.0$  °F –  $80.0$  °F ( $18.3$  °C to  $26.7$  °C)] water.*~~

~~*Section 5.8.4.1, CSA B125.3, After being tested in accordance with Clause 5.8.4.2 (250,000 cycles), anti-siphon fill valves shall continue to function as they did before the life cycle test and shall show no signs of leakage.*~~

### **ASSE 1002 and CSA B125.3**

Section 4.6.2.1.1(a), Allowed use of colored water optional:

*Manually fill the test tank to the level required with clear or coloured water at  $10 \pm 6$  °C ( $50 \pm 10$ °F).*

~~*Figure 1, ASSE 1002, use of colored water is shown.*~~

~~*Section 5.8.4.1(c), CSA B125.3, Manually fill the flush tank to the normal operating level with coloured water at  $10 \pm 6$  °C ( $50 \pm 10$ °F) prepared separately*~~

### **ASSE 1002 and CSA B125.3**

Section 4.9, Added thread torque test to end connections of fill valves:

*The purpose of this test is to verify that end connection thread meets a minimum torque resistance. Clause 4.9 shall not apply to factory-assembled connections.*

### **ASSE 1002**

Section 4.10, Added hydrostatic test requirement (already in in section 5.3.2 of CSA B125.3):

*The purpose of this test is to determine if any leakage occurs at a supply pressure of 3,448 kPa (500 psi).*