

Summary of Substantive Changes between the 2004 and 2016 editions of ASSE 1052, Hose Connection Backflow Preventers

Presented to the IAPMO Standards Review Committee on May 8, 2017

General: The changes to this standard might have an impact on currently listed products. The significant changes are:

- Revised the load application in the resistance to bending test procedure (see Section 3.5 and Figure 3).
- Changed the location of pressure gauge #1 in the test set-up for the water flow capacity and pressure loss test (see Figure 2).
- Changed the configuration of the test set-up to include a vacuum gauge and vacuum tank for the backsiphonage test (see Figure 8).

Section 3.5, Resistance to Bending: Revised the test procedure as follows:

3.5.1 Purpose

The purpose of this test is to determine if the device continues to function without leakage when subjected to a large pull force of 100.0 pound (45.4 kg) on a connected hose applied perpendicularly to the device. The proportional force applied at a distance creates a moment of 25 ft-lbf (34 N-m) per Figure 3.

3.5.2 Procedure

With the device installed as shown in Figure 3 apply a load equivalent to a pull of 100.0 pound (45.4 kg) in a direction at right angles to the axis through the hose connections at the outlet of the device and hold for not less than three (3) minutes. The load shall be applied at a distance to create a torque of 25 ft-lbf (Example: 25lbf (110 N) at 12in (31cm)). During the test, the device shall be pressurized to not less than 125.0 psi (861.9 kPa).

Footnote 1:

For reference, this moment is the same as a large pull of 100 lbf (440 N) on a connected hose perpendicular to the outlet of the device 3.0 in (76 mm) away.



Figure 2, Changed the location of the pressure gauge #1 in the test set-up for the water flow capacity and pressure loss test as follows:

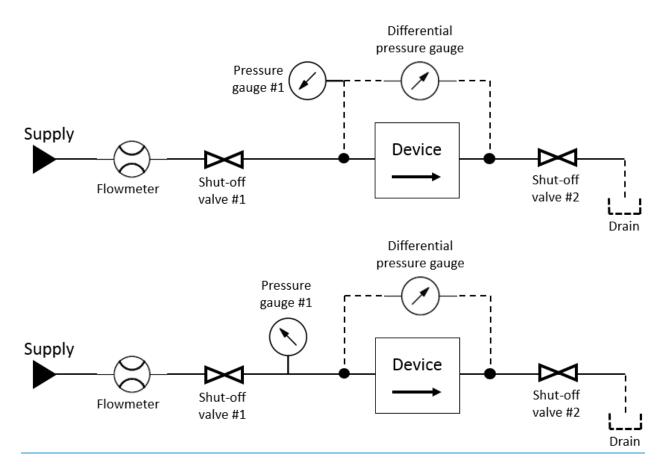




Figure 3, Revised the load application in the resistance to bending test procedure as follows:

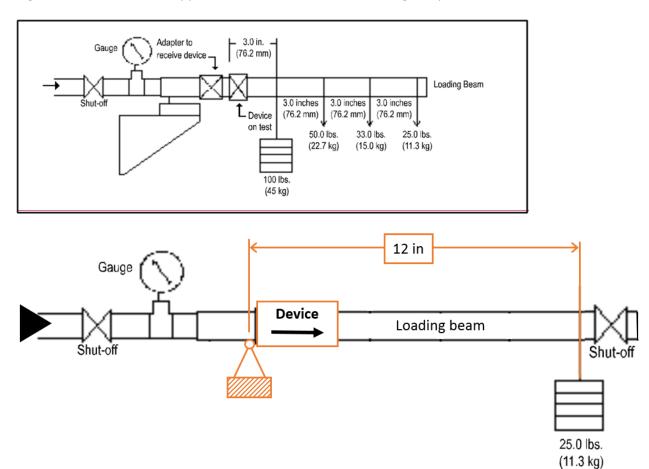




Figure 8: Changed the configuration of the test set-up to include a vacuum gauge and vacuum tank for the backsiphonage test as follows:

