Abridged Version of the NEWWA Backflow Prevention Device Assembly Test Procedures for a PVB Utilizing a 3 Valve Test Kit

(PVB) Pressure Vacuum Breaker (1 T 1)

Test Check Valve for Differential Pressure. (Minimum 1 PSID)

1. Close downstream shut-off valve. Verify upstream shut-off valve is open.
2. Orientate Test Kit. Close high and low control valve. Open vent control valve.
3. Connect high pressure hose to test cock #l and low pressure hose to test cock #2.
4. Open test cocks #1, and #2, - bleed air from the test kit high and low control valves.
5. Record the differential pressure gauge reading. It should be a minimum of 1 PSID.
6. Close test cocks #1 and #2. Disconnect the hoses.

No-Flow Tightness Validation Test (T)

7. Connect high pressure hose to test cock #2.
8. Orientation Test Kit. Close high and low control valves. Open vent control valve.
9. Open test cock #2. The test kit needle should 'peg' to the extreme right of the gauge.
10. Open high control valve to bleed air. Close the high control valve.
11. Close the upstream shut off valve. Observe test kit needle. If needle remains steady, the device is in a no-flow condition, proceed to step 12. If needle starts to descend, the device is in a flow condition and downstream shut-off valve is considered leaking. The test in invalid. No further testing of the device can be completed until the downstream shut-off valve is repaired or no flow can be determined.

Test the Air Inlet Valve for Differential Pressure (Minimum I PSDI)

12. Elevate the test kit and the end of low pressure hose to the same level as the device.
13. Slowly open the test kit high control valve ¼ turn while simultaneously observing the air inlet valve.
14. Observe the test kit needle at the point where the air inlet valve opens (pops). It should be equal to or greater than 1 PSID.

New England Water Works Association
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