ASSE International
Product (Seal) Listing Program

ASSE 1052-2016
Performance Requirements for Hose Connection Backflow Preventers

Manufacturer: _____

Contact Person: _____ **E-mail:** _____

Address: _____

Laboratory: _____ **Laboratory File Number:** _____

Model # Tested: _____

Model Size: _____

Additional models report applies to: _____

Additional Model Information (i.e. orientation, series, end connections, shut-off valves)

_____

Date models received by laboratory: _____ **Date testing began:** _____

Date testing was completed _____

If models were damaged during shipment, describe damages:

_____

Prototype or production sample? _____

Were all tests performed at the selected laboratory? ❍ **Yes** ❍ **No**

If offsite, identify location: _____

General information and instructions for the testing engineer:
The results within this report apply only to the models listed above.

There may be items for which the judgment of the test engineer will be involved. Should there be a question of compliance with that provision of the standard, a conference with the manufacturer should be arranged to enable a satisfactory solution of the question.

Should disagreement persist and compliance remain in question by the test agency, the agency shall, if the product is in compliance with all other requirements of the standard, file a complete report on the questionable items together with the test report, for evaluation by the ASSE Seal Control Board. The Seal Control Board will then review and rule on the question of compliance with the intent of the standard then involved.

Documentation of material compliance must be furnished by the manufacturer. The manufacturer shall furnish to the testing agency, a bill of material which clearly identifies the material of each part included in the product construction. This identification must include any standards which relate thereto.

Section I

1.0 General

1.1 Application

Is the purpose of the device, as described by the manufacturer, as stated in this section?

☐ Yes ☐ No ☐ Questionable

If no or questionable, explain _____

1.2 Scope

1.2.1 Description

Does the device conform to the product described in this standard?

☐ Yes ☐ No ☐ Questionable

If no or questionable, explain _____

1.2.2 Size Range

Inlet: _____ inches (_____ mm)
Outlet: _____ inches (_____ mm)

Does the device have a non-removable feature?

☐ Yes ☐ No ☐ Questionable

If no or questionable, explain _____

1.2.3 Pressure Range

What is the operating pressure range of the device as noted by the manufacturer?
_____ psi (_____ kPa) to _____ psi (_____ kPa)

Is the device in compliance with this section?

☐ Yes ☐ No ☐ Questionable

If no or questionable, explain _____

1.2.4 Temperature Range

What is temperature range of the device as noted by the manufacturer?
_____°F (_____°C) to _____°F (_____°C)

Is the device in compliance with this section?

☐ Yes ☐ No ☐ Questionable

If no or questionable, explain _____

Section II

2.0 Test Specimens

2.1 How many units were submitted by the manufacturer? _____

2.2 How many models were utilized during testing?_____

2.3 Drawings

Were assembly drawings, installation drawings and other technical data which are needed to enable a testing agency to determine compliance with this standard submitted with the devices?

☐ Yes ☐ No

Were the drawings reviewed by the laboratory?

☐ Yes ☐ No

Section III

Performance Requirements and Compliance Testing

3.1 Hydrostatic Test of Complete Device

What was the supply pressure used for this test? _____ psi (_____ kPa)

How long was the pressure held for? _____ minutes

Was there any indication of external leakage?

☐ Yes ☐ No ☐ Questionable

If yes or questionable, explain _____

Is the device in compliance with this section?

☐ Yes ☐ No ☐ Questionable

If no or questionable, explain _____

3.2 Water Flow Capacity and Pressure Loss

What was the supply pressure used for this test? _____ psi (_____ kPa)

At a 25 psi (172.4 kPa) pressure differential across the device, what was the flow rate? _____ GPM (_____ L/s)

Is the device in compliance with this section?

☐ Yes ☐ No ☐ Questionable

If no or questionable, explain _____

3.3 Deterioration at Maximum Rated Temperature and Pressure

What was the water temperature used for this test? _____°F (_____°C)

What was the supply pressure used for this test? _____ psi (_____ kPa)

What was the duration of the test? _____ hours/day for _____ days

Was there any indication of external leakage?

☐ Yes ☐ No ☐ Questionable

If yes or questionable, explain _____

Is the device in compliance with this section?

☐ Yes ☐ No ☐ Questionable

If no or questionable, explain _____

3.4 Life Cycle Test

What was the water temperature used for this test? _____°F (_____°C)

What was the supply pressure used for this test? _____ psi (_____ kPa)

How many cycles was the device subjected to? _____ cycles.

What was the cycling speed? _____ cycles/minute

Is the device in compliance with this section?

☐ Yes ☐ No ☐ Questionable

If no or questionable, explain _____

3.5 Resistance to Bending
What torque was created for this test? _____ ft-lbf
How long was the load held for? _____ minutes
What was the device pressurized to for this test? _____ psi (_____ kPa)

Were there any visible external leaks during the test?
☐ Yes ☐ No ☐ Questionable
If yes or questionable, explain _____

Is the device in compliance with this section?
☐ Yes ☐ No ☐ Questionable
If no or questionable, explain _____

3.6 Tightness of Outlet Check Valve
What was the initial height of water in the sight glass?_____ inches (_____ mm)
What was the final height of water in the sight glass? _____ inches (_____ mm)
What was the duration of the test? _____ minutes

Is the device in compliance with this section?
☐ Yes ☐ No ☐ Questionable
If no or questionable, explain _____

3.7 Tightness of Inlet Check Valve
What was the initial height of water in the sight glass? _____ inches (_____ mm)
What was the final height of water in the sight glass? _____ inches (_____ mm)
What was the duration of the test? _____ minutes

Is the device in compliance with this section?
☐ Yes ☐ No ☐ Questionable
If no or questionable, explain _____

3.8 Leakage from Vent Ports
At what inlet pressure did the highest rate of discharge occur? _____ psi (_____ kPa)
What was the rate of leakage flow at the above inlet pressure?
_____ ounces/minute (_____ ml/minute)
Was there any leakage at or above a pressure of 3 psi (20.7 kPa)?
☐ Yes ☐ No ☐ Questionable
If yes or questionable, explain _____

Is the device in compliance with this section?
☐ Yes ☐ No ☐ Questionable
If no or questionable, explain _____

3.9 Backflow Through Inlet Check Valve
At 6 inches (152.4 mm) water column:
How long was the water level held for? _____ minutes
Was there any loss of water level in the sight glass or leakage through the inlet check valve?
☐ Yes ☐ No ☐ Questionable
If yes or questionable, explain _____

At 10 feet (3.0 meters) water column:
How long was the water level held for? _____ minutes
Was there any loss of water level in the sight glass or leakage through the inlet check valve?

☐ Yes ☐ No ☐ Questionable

If yes or questionable, explain _____

Is the device in compliance with this section?

☐ Yes ☐ No ☐ Questionable

If no or questionable, explain _____

3.10 Backflow Through Outlet Check Valve
At 6 inches (152.4 mm) water column:
How long was the water level held for? _____ minutes
Was there any loss of water level in the sight glass or leakage through the outlet check valve at the atmospheric vent?

☐ Yes ☐ No ☐ Questionable

If yes or questionable, explain _____

At 10 feet (3.0 meters) water column:
How long was the water level held for? _____ minutes
Was there any loss of water level in the sight glass or leakage through the outlet check valve at the atmospheric vent?

☐ Yes ☐ No ☐ Questionable

If yes or questionable, explain _____

At 125 psi (861.9 kPa) or the manufacturer's maximum rated working pressure, if greater:
How long was the pressure held for? _____ minutes
Was there any loss of water level in the sight glass or leakage through the outlet check valve at the atmospheric vent?

☐ Yes ☐ No ☐ Questionable

If yes or questionable, explain _____

Is the device in compliance with this section?

☐ Yes ☐ No ☐ Questionable

If no or questionable, explain _____

3.11 Backsiphonage
What vacuum was applied and held? _____ inches (_____ mm) of mercury
How long was this vacuum held for? _____ minutes

During the slowly applied vacuum, what was the vacuum raised to?
_____ inches (_____ mm) of mercury
During the slowly applied vacuum, what was the vacuum reduced to?
_____ inches (_____ mm) of mercury

During the surge effect, what was the applied vacuum?
_____ inches (_____ mm) of mercury

What was the maximum rise of the meniscus in the sight glass? _____ inches (_____ mm)

Is the device in compliance with this section?

☐ Yes ☐ No ☐ Questionable

If no or questionable, explain _____

3.12 Backsiphonage and Back Pressure

With the inlet check valve fouled:

What was the supply pressure during the test? _____ psi (_____ kPa)
What vacuum was applied and held? _____ inches (_____ mm) of mercury
How long was this vacuum held for? _____ minutes

During the slowly applied vacuum, what was the vacuum raised to?
_____ inches (_____ mm) of mercury
During the slowly applied vacuum, what was the vacuum reduced to?
_____ inches (_____ mm) of mercury

During the surge effect, what was the applied vacuum?
_____ inches (_____ mm) of mercury

Was there any indication of flow of water from the outlet of the device into the inlet piping?

☐ Yes ☐ No ☐ Questionable

If yes or questionable, explain _____

With the outlet check valve fouled:

What was the supply pressure during the test? _____ psi (_____ kPa)
What vacuum was applied and held? _____ inches (_____ mm) of mercury
How long was this vacuum held for? _____ minutes

During the slowly applied vacuum, what was the vacuum raised to?
_____ inches (_____ mm) of mercury
During the slowly applied vacuum, what was the vacuum reduced to?
_____ inches (_____ mm) of mercury

During the surge effect, what was the applied vacuum?
_____ inches (_____ mm) of mercury

Was there any indication of flow of water from the outlet of the device into the inlet piping?

☐ Yes ☐ No ☐ Questionable

If yes or questionable, explain _____

Did the device comply with this section?

☐ Yes ☐ No ☐ Questionable

If no or questionable, explain _____

3.13 Relief of Intermediate Chamber Pressure

Did the atmospheric vents open?

☐ Yes ☐ No ☐ Questionable

If no or questionable, explain _____

Did the device comply with this section?

☐ Yes ☐ No ☐ Questionable

If no or questionable, explain _____

3.14 Non-Removable Feature

Was the device removed without damage to the hose threaded connection?

☐ Yes ☐ No ☐ Questionable

If yes or questionable, explain _____

Did the device comply with this section?

☐ Yes ☐ No ☐ Questionable

If no or questionable, explain _____

Section IV

4.0 Detailed Requirements

4.1 Materials

4.1.1 Metallic Parts

Do metal parts, except springs, in contact with water flowing through the device have a corrosion resistance at least equal to a copper allow of not less than 58%?

☐ Yes ☐ No ☐ Questionable

If no or questionable, explain _____

4.1.2 Springs

Do springs have a corrosion resistance at least equal to chrome nickel 300-series stainless steel?

☐ Yes ☐ No ☐ Questionable

If no or questionable, explain _____

4.1.3 Atmospheric Vent Ports

Are the atmospheric vent ports a non-standard plumbing size?

☐ Yes ☐ No ☐ Questionable

If no or questionable, explain _____

4.1.4 Metal to Metal Seating

Is there metal to metal seating of check valves and atmospheric vents?

☐ Yes ☐ No ☐ Questionable

If yes or questionable, explain _____

Are the seat and/or valve disc made of non-metallic materials that provide pressure tight seating and reseating?

☐ Yes ☐ No ☐ Questionable

If no or questionable, explain _____

4.2 Instructions for Marking

State the information marked on the device:

(a) Name or trademark of manufacturer: _____

(b) Model number: _____

How were the markings applied? _____

4.3 Installation Instructions

Were instructions for installing, field testing and field repairing submitted with the device?

☐ Yes ☐ No ☐ Questionable

If no or questionable, explain _____

LISTED LABORATORY: _____

ADDRESS: _____

PHONE: _____ FAX: _____

TEST ENGINEER(S): _____

If applicable:

OUTSOURCED LABORATORY: _____

ADDRESS: _____

PHONE: _____ FAX: _____

TEST ENGINEER(S): _____

Scope of outsourced testing: _____

We certify that the evaluations are based on our best judgments and that the test data recorded is an accurate record of the performance of the device on test.

Signature of the official of the listed laboratory: _____
Signature

Title of the official: _____ Date: _____