ASSE International
Product (Seal) Listing Program

ASSE 1014-2020
Performance Requirements for Backflow Prevention Devices for Hand-held Showers

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

Does the device meet the application?

❍ Yes ❍ No ❍ Questionable

If no or questionable, explain _____

1.2 Scope and Purpose

1.2.1 Description

Does this device conform to this section?

❍ Yes ❍ No ❍ Questionable

If no or questionable, explain _____

1.2.3 Minimum Working Pressure

What inlet working pressure is the device designed to withstand? _____ psi (_____ kPa)

1.2.4 Temperature

What temperatures are the device designed to function at? _____°F to _____°F (_____°C to _____°C)

What temperature spikes is the device designed to withstand? _____°F (_____°C)

1.2.5 Connections

Do connections for non-integral devices conform to ASME A112.18.1 / CSA B125.1?

❍ Yes ❍ No ❍ Questionable

If no or questionable, explain _____

1.2.6 Two Check Valves

Do devices with two check valves in series comply with ASME A112.18.3 as a fitting with internal backflow prevention devices?

❍ Yes ❍ No ❍ Questionable

If no or questionable, explain _____

Section III

3.0 Performance Requirements and Compliance Testing

3.1 Deterioration at Extremes of Temperature and Pressure Test

3.1.2 Procedure

b. What pressure was water through the device flowed at? _____ psi (_____ kPa)

c. What was the inlet water temperature adjusted to? _____°F (_____°C)
How long was water flowed for? _____ minutes

d. What was the water temperature increased to? _____°F (_____°C)
How long was water flowed for? _____ minutes

e. Perform the Pressure and Temperature Test for Static and Dynamic Seals in ASME A112.18.1 / CSA B125.1:

Procedure with the valve closed

Was the test conducted in an ambient environment of 20 ± 5°C (68 ± 9°F)?

❍ Yes ❍ No ❍ Questionable

If no or questionable, explain _____

a) What was the test temperature? _____°F (_____°C)
What was the test pressure? _____ psi (_____ kPa)
How long was the device tested for? _____ minutes

b) What was the test temperature? _____°F (_____°C)
What was the test pressure? _____ psi (_____ kPa)
How long was the device tested for? _____ minutes

c) What was the test temperature? _____°F (_____°C)
What was the test pressure? _____ psi (_____ kPa)
How long was the device tested for? _____ minutes

d) What was the test temperature? _____°F (_____°C)
What was the test pressure? _____ psi (_____ kPa)
How long was the device tested for? _____ minutes

Procedure with the outlet(s) blocked

Was the test conducted in an ambient environment of 20 ± 5°C (68 ± 9°F)?

❍ Yes ❍ No ❍ Questionable

If no or questionable, explain _____

a) What was the test temperature? _____°F (_____°C)
What was the test pressure? _____ psi (_____ kPa)
How long was the device tested for? _____ minutes

b) What was the test temperature? _____°F (_____°C)
What was the test pressure? _____ psi (_____ kPa)
How long was the device tested for? _____ minutes

c) What was the test temperature? _____°F (_____°C)
What was the test pressure? _____ psi (_____ kPa)
How long was the device tested for? _____ minutes

d) What was the test temperature? _____°F (_____°C)
What was the test pressure? _____ psi (_____ kPa)
How long was the device tested for? _____ minutes

3.1.3 Criteria

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 Life Cycle Test

3.2.1 Procedure

a. For devices integral to a handheld shower assembly:
What was the flowing pressure? _____ psi (_____ kPa)
For non-integral devices:
What flow rate was established? _____ GPM (_____ L/min)
What was the flowing pressure? _____ psi (_____ kPa)

b. What was the cycling rate? _____ cycles/hour
What was the pressure range of the cycles? _____ psi to _____ psi (_____ kPa to _____ kPa)
The incoming water temperature was alternated between _____°F (_____°C) and _____°F (_____°C) every _____ cycles.

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

d. For devices integral to a handheld shower assembly:
What was the flowing pressure? _____ psi (_____ kPa)
How long was water flowed for? _____ minutes
For non-integral devices:
What flow rate was established? _____ GPM (_____ L/min)
What was the flowing pressure? _____ psi (_____ kPa)
How long was water flowed for? _____ minutes

e. What static pressure was maintained on the inlet of the device? _____ psi (_____ kPa)

f. How long was the static pressure maintained? _____ minutes

3.2.2 Criteria

Was there any indication of external leakage after the test when the gauge pressure of 125.0 psi (861.9 kPa) is applied with the shut-off valve in a closed position?

❍ Yes ❍ No ❍ Questionable

If yes or questionable, explain _____

Is the device in compliance with this section?

❍ Yes ❍ No ❍ Questionable

If no or questionable, explain _____

3.3 Continuous Capacity

3.3.2 Procedure

a. What was the length of the handheld shower hose? _____ inches (_____ mm)

d. How far above the centerline of the device was the discharge end of the shower hose raised to? _____ inches (_____ mm)

e. How long was water in the shower hose held for? _____ minutes

f. How far above the centerline of the device was the discharge end of the shower hose raised to? _____ inches (_____ mm)
How long was water in the shower hose held for? _____ minutes

3.3.3 Criteria

Was there any indication of 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 Backsiphonage Test

3.4.2 Procedure

a. What was the diameter of the wire used to foul the inlet check valve? _____ inches (_____ mm)
b. What was the inside diameter of the sight glass connected to the discharge end of the shower hose? _____ inches (_____ mm)
c. For Steps c and d, fill out the table below with the vacuum applied, and how long the vacuum was held for.

Vacuum Applied	Time Vacuum was Held For
_____ in-Hg (_____ kPa)	_____ seconds
_____ in-Hg (_____ kPa)	_____ seconds
_____ in-Hg (_____ kPa)	_____ seconds
_____ in-Hg (_____ kPa)	_____ seconds
_____ in-Hg (_____ kPa)	_____ seconds

e. A vacuum was alternated between _____ in-HG and _____ in-HG (_____ kPa and _____ kPa) for _____ cycles.

3.4.3 Criteria

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

Is the device in compliance with this section?

❍ Yes ❍ No ❍ Questionable

If no or questionable, explain _____

Section IV

4.0 Detailed Requirements

4.1 Materials

What is the lead content of the solder and fluxes in contact with potable water? _____%

Are there any metal alloys in contact with potable water?

❍ Yes ❍ No ❍ Questionable

If questionable, explain _____

If yes, what is the lead content of the metal alloys in contact with potable water? _____%

4.2 Installation Instructions

Were instructions for installation packaged with the device?

❍ Yes ❍ No ❍ Questionable

If questionable, explain _____

Were instructions for maintenance of field repairable devices and testing for field testable devices packaged with the device?

❍ Yes ❍ No ❍ Questionable

If questionable, explain _____

Check all those that were found on the installation instructions:

☐ Inlet and outlet connection sizes.
☐ Maximum working pressure.
☐ Minimum and maximum flow rate.
☐ Minimum stated flow.

4.3 Markings

4.3.1

Does the device have the following marked?

☐ The name of manufacturer or trademark on the device.
☐ The type or model number on the device or in the installation instructions.

4.3.2

Are markings cast, etched, stamped, or engraved on the body of the device?

❍ Yes ❍ No ❍ Questionable ❍ N/A

If questionable, explain: _____

Do labels comply with UL 969 for permanence?

❍ Yes ❍ No ❍ Questionable ❍ N/A

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: _____