

**American Society of Sanitary Engineering  
Seal (Certification) Program**

**Laboratory Evaluation Report Form for:  
Trap Seal Primer Valves – Drainage Types and Electronic Design Types**

**Tested for compliance to ASSE Standard #1044**

**Revised: February, 2001**

**Laboratory File Number \_\_\_\_\_**

**Manufacturer:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**City:** \_\_\_\_\_ **State:** \_\_\_\_\_ **Zip:** \_\_\_\_\_

**Model No:** \_\_\_\_\_ **Serial No:** \_\_\_\_\_

**Other Identification Markings:** \_\_\_\_\_

**Size** \_\_\_\_\_

General information and instructions for the testing engineer:

Within the text there may be items which are only advisory to conditions which experience indicates could be troublesome. It is not for evaluation related to acceptance of the product.

There may be other 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 item involved.

Documentation of material compliance must be furnished by the manufacturer. He 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.

Product Name: \_\_\_\_\_  
 Model Number: \_\_\_\_\_ Size(s): \_\_\_\_\_  
 Date Submitted for Review: \_\_\_\_\_ Date Review Complete: \_\_\_\_\_  
 Has this device been submitted for review prior to the above mentioned date?  
 Yes  No  
 If yes, please indicate date: \_\_\_\_\_  
 Were the test units production models?  Yes  No  
 or prototypes?  Yes  No

**Section I**

**1.0 General**

**1.1 Application**

Are the devices designed to supply potable water to drain traps?

- Yes
- No
- Questionable

If no or questionable, explain: \_\_\_\_\_

Is the rate of water flow to the trap fixed or adjustable?  Fixed  Adjustable

If adjustable, is the method of adjustment downstream of the backsiphonage backflow device?

- Yes
- No

Is the means of adjustment capable of completely shutting off the water flow?

- Yes
- No

If yes, the adjustment method is not in compliance with this section.

**1.2 Scope**

**1.2.1 Description**

Does the description furnished by the manufacturer meet that described in the standard?

- Yes
- No

Check any or all the types of the devices that apply to the product: (See List)

- a) Fixture connected devices.  Yes  No

- b) Ballcock connected devices.  Yes  
 No
- c) Flushometer connected devices.  Yes  
 No
- d) Electronic devices.  Yes  
 No

1.2.2 Fixture Connected Devices

What is the tailpipe tubing size? \_\_\_\_\_ DN ( \_\_\_\_\_ NPT)  
 What is the makeup water supply size? \_\_\_\_\_ DN ( \_\_\_\_\_ NPT)

1.2.3 Ballcock Connected Devices

What is the makeup water supply connection size to the refill tube?  
 \_\_\_\_\_ DN ( \_\_\_\_\_ NPT)

1.2.4 Flushometer Connected Devices

What is the makeup water supply connection size? \_\_\_\_\_ DN ( \_\_\_\_\_ NPT)

1.2.5 Electronic Devices

What is the inlet size connection? \_\_\_\_\_ DN ( \_\_\_\_\_ NPT)  
 What is the outlet size connection? \_\_\_\_\_ DN ( \_\_\_\_\_ NPT)

1.2.6 Working Pressure. State the manufacturer design working pressure for the following devices.

Fixture Tailpipe Connected Devices. \_\_\_\_\_ kPa ( \_\_\_\_\_ PSI)  
 Ballcock Connected Devices. \_\_\_\_\_ kPa ( \_\_\_\_\_ PSI)  
 Flushometer Connected Devices. \_\_\_\_\_ kPa ( \_\_\_\_\_ PSI)  
 Electronic Connected Unites. \_\_\_\_\_ kPa ( \_\_\_\_\_ PSI)

1.2.7 Connections. List the type of Connection. \_\_\_\_\_

Did this comply with the standard noted in this section?  Yes  
 No

If the connection is not listed in this section, state the appropriate standard.  
 \_\_\_\_\_

1.2.8 Fixture Tailpiece Trap Primer Device. Did the device comply with this section?  
 (See Section 1.2.1 also).  Yes  
 No

- 1.2.9 Ballcock Trap Primer Device. Did this device comply with this section?  
(See Section 1.2.1 also).  Yes  
 No
  
- 1.2.10 Flushometer Tailpiece/ Trap Primer Device. Did this device comply with this section?  
(See Section 1.2.1 also).  Yes  
 No
  
- 1.2.11 Electronic Devices
  - 1.2.11.1 Did the tubing comply with this section?  
See Section 1.2.1 also).  Yes  
 No
  
  - 1.2.11.2 Electric Trap Priming Assembly.  
Did this electric assembly comply with one of the standards in this section?  
 Yes  
 No

If no state the appropriate applicable industry standard: \_\_\_\_\_

- 1.2.11.3 Backflow Protection. What backflow protection was utilized with this section?

- ASSE/ANSI Standard 1001
- ASME/ANSI A112.1.2 (Air Gap)

If other backflow protection used, list it: \_\_\_\_\_

**Section II**

**2.0 Test Specimens**

- 2.1 Samples Submitted. How many devices of each size and model were submitted by the manufacturer? \_\_\_\_\_
  
- 2.2 How many devices were utilized during the laboratory evaluation? \_\_\_\_\_  
If more than one (1) device was used during the evaluation, state why additional devices were necessary. \_\_\_\_\_
  
- 2.3 Were assembly drawings, installation instructions and all other data submitted by the manufacturer to enable you to determine compliance with the standard?  
 Yes  
 No  
  
Were these items reviewed by the lab personnel performing and supervising the test?  
 Yes  
 No
  
- 2.4 Rejection. Failure of one (1) device shall be cause for rejection of that size and model.

**Section III**

**3.0 Performance Requirements and Compliance Testing**

**3.1 Hydrostatic Test for Ballcock, Flushometer and Fixture Tailpiece Devices**

What was the maximum pressure applied? \_\_\_\_\_ kPa ( \_\_\_\_\_ psi)

How long was the pressure sustained? \_\_\_\_\_ minutes

Were there any indications of damage or leakage?  Yes  
 No

**3.2 Electronic Devices**

What was the maximum pressure? \_\_\_\_\_ kPa ( \_\_\_\_\_ psi)

How long was the pressure applied? \_\_\_\_\_ minutes

Were there indications of damage or leakage?  Yes  
 No

**3.3 Verification of Manufacturer's Performance Rating**

Did the manufacturer furnish ratings for the four types of devices?  Yes  
 No

List the quantities below:

Minimum flow rates through the supply line \_\_\_\_\_ L/m ( \_\_\_\_\_ GPM)

Minimum flow rates to the trap seal. \_\_\_\_\_ L/m ( \_\_\_\_\_ GPM)

**3.3.2.1 Fixture Drain Devices**

Run tests using faucets having flow rates of 1.9 L/m (0.5 GPM) to 9.5 L/m (2.5 GPM) at pressures of 137.9 kPa (20 PSI).

Record the ratings obtained on the test data sheet.

Faucet flow at 1.9 L/m (0.5 GPM) = \_\_\_\_\_ L/m ( \_\_\_\_\_ GPM)

Faucet Flow at 9.5 L/m (2.5 GPM) = \_\_\_\_\_ L/m ( \_\_\_\_\_ GPM)

In compliance?  Yes  
 No

**3.3.2.3 Procedure for Ballcock Primer Valve**

Operate the ballcock at a static pressure of 276 kPa (40 psi) twenty times. Was there any leakage from the tank bolt connection?  Yes  
 No

Did the water closet reseal to the full trap seal?  Yes  
 No

3.3.2.4 Operate the ballcock at a static pressure of 55.8 kPa (8 psi) twenty times. Was there any leakage from the tank bolt connection?  Yes

Did the water closet reseal to the full trap seal?  No

Was the device in compliance with this section?  Yes

No

3.3.2.5 Procedure for Flushometer Valve Tailpiece Devices

Operate the flushometer valve at a static pressure of 345 kPa (50 psi) twenty times.

Record the flow rate: \_\_\_\_\_ L/m ( \_\_\_\_\_ GPM)

Record the amount of leakage, if any, for each flush:

1) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)                      11) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)

2) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)                      12) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)

3) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)                      13) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)

4) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)                      14) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)

5) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)                      15) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)

6) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)                      16) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)

7) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)                      17) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)

8) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)                      18) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)

9) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)                      19) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)

10) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)                      20) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)

Was the device in compliance with this section?  Yes

No

3.3.2.7 Procedure for Electronic Devices

Pressurize the system to the manufacturer's rated working pressure; and active the device for five (5) cycles. Measure and record the discharge from any single outlet:

1) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)

2) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)

3) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)

4) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)

5) \_\_\_\_\_ ml ( \_\_\_\_\_ ounces)

Was there a minimum discharge of 60 ml (2 ounces) from the outlet?

Yes

No

Was the device in compliance with this section?  Yes  
 No

**3.4 Cycle Test for Electronic Devices**

Pressurize the device to 345 kPa (50 psi), and active the device for a 5,000 cycles.

Were there any indications of damage or leakage?  Yes  
 No

Was the device in compliance with this section?  Yes  
 No

**Section IV**

**4.0 Detailed Requirements**

**4.1 Materials**

4.1.2 General Requirement

Are the materials used in these device durable and capable of withstanding the stresses and wear during installation and operation?

Yes  
 No

4.1.2.1 Compliance and Certification

Do all elastomers and polymers in contact with the water comply with the U.S. Code of Federal Regulations Title 21, Section 177.2600?

Yes  
 No

If no, have they been certified as non-toxic by an independent, approved laboratory?

Yes  
 No

4.1.3 Corrosion of Interior Parts

Do all of the metal parts in contact with the water have a corrosion resistance at least equal to a copper alloy of not less than 58% copper?

Yes  
 No

4.1.4 Springs

Are there any springs in these devices?

Yes  
 No

If yes, do they have a corrosion resistance at least equal to stainless steel 300 series?

Yes  
 No

4.1.5 Elastomeric Parts

Are all flexible non-metallic parts, diaphragms, valve discs or seating facings designed for continuous exposure to water at the maximum rated operating temperature?

Yes  
 No

**4.2 Documentation**

**4.2.1 Installation and Maintenance**

Were full instructions packaged for the installation and maintenance of the device?

- Yes
- No

Did the instructions include data to guide the installer in selection of the fixture and drain line to locate the primer device which will satisfy the water needs of the trap it serves?

- Yes
- No

Did the instructions include language to inform the installer of electronic devices that conform to this standard shall be installed with backflow protection that meets all local and state codes?

- Yes
- No

**4.3 Markings**

List the markings shown on the device.

- (a) Manufacturer's name or trademark: \_\_\_\_\_
- (b) Model number or other identification: \_\_\_\_\_

How were the markings made?

- Stamped
- Cast
- Permanently affixed label
- Other: \_\_\_\_\_

Were the markings visible in the installed orientation?

- Yes
- No

TESTING AGENCY \_\_\_\_\_

ADDRESS \_\_\_\_\_

PHONE: \_\_\_\_\_ FAX: \_\_\_\_\_

TEST ENGINEER(S) \_\_\_\_\_

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 agency:

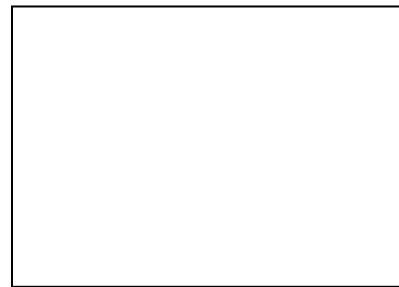
\_\_\_\_\_

Title of the official: \_\_\_\_\_ Date: \_\_\_\_\_

Signature and seal of the Registered Professional Engineer  
supervising the laboratory evaluation:

\_\_\_\_\_

Signature



Seal