American Society of Sanitary Engineering

PRODUCT (SEAL) LISTING PROGRAM

Factory Audit Inspection Test Report

ASSE STANDARD #1016 - REVISED: 2017

Automatic Compensating Valves for Individual Showers and Tub / Shower Combinations

MANUFACTURER: _____

CONTACT PERSON: _____ **E-MAIL:** _____

ADDRESS: _____

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: _____

WERE ALL TESTS PERFORMED AT THE SELECTED LABORATORY? ○ Yes ○ No

If offsite, identify location and tests involved: _____

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 Board. The Seal 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 III

3.3 **Minimum Rated Flow**

What is the minimum flow rate as stated by the manufacturer?

_____ GPM (_____ L/min)

SECTION IV

4.7 **Water Supply Failure Test – All Types**

Was the device set up as shown in Figure 1 and in accordance with item (a) to (f) of Section 4.6.3? ○ Yes ○ No

The cold water supply valve was closed within _____ sec

Was the outlet temperature at T3 and the flow rate recorded for 5 seconds after the cold water supply valve had been fully closed? ○ Yes ○ No

The flow rate was reduced to _____ GPM (_____ L/min) within 5 seconds

The hot water supply valve was closed within _____ sec

Was the outlet temperature at T3 and the flow rate recorded for 5 seconds after the hot water supply valve had been fully closed? ○ Yes ○ No

The flow rate was reduced to _____ GPM (_____ L/min) within 5 seconds

30% of the manufacturer's minimum rate flow is _____ GPM (_____ L/min)

Did the device reduce the flow to 0.5 GPM (1.9 L/min) or 30% of the manufacturer's minimum rated flow, whichever is less, within 5 seconds? ○ Yes ○ No

Upon cold water failure, did the device reduce the flow to 0.5 GPM (1.9 L/min) or 30% of the manufacturer's minimum rated flow, whichever is less, prior to the water temperature at T3 exceeding 120.0 °F (48.9 °C)? ○ Yes ○ No

4.8 Mechanical Temperature Limit Stop Test

Hot water inlet pressure _____ psi (_____ kPa)
Cold water inlet pressure _____ psi (_____ kPa)
Flow rate through the device _____ GPM (_____ L/min)
Hot water inlet temperature _____ °F (_____ °C)
Cold water inlet temperature _____ °F (_____ °C)
Limit stop was set to an outlet temperature of _____ °F (_____ °C)

With the device set at the full hot position and flowing for 1 minute, what was the outlet temperature at T3? _____ °F (_____ °C)

A torque of _____ LBf•in (_____ N•M)
was applied to the temperature control handle/valve stem for _____ sec

While applying the torque for 1 minute, what was the outlet temperature at T3?
_____ °F (_____ °C)

Did the outlet temperature while applying the torque exceed the outlet temperature before applying the torque by 3.6 °F (2.0 °C) or greater? ○ Yes ○ No

Were there any observable fractures in the limit stop? ○ Yes ○ No

4.9 Outlet Temperature and Flow Capacity Test

Hot water inlet pressure _____ psi (_____ L/min)
Cold water inlet pressure _____ psi (_____ L/min)

During this test, were the inlet temperatures maintained within ±2.0 °F (±1.0 °C) without exceeding specified limits? ○ Yes ○ No

Valve V3 was adjusted to deliver _____ GPM (_____ L/min)

Cold inlet temperature was set to _____ °F (_____ °C)
Hot inlet temperature was set to _____ °F (_____ °C)

After setting the device to the full cold position, the device was adjusted to an outlet temperature of _____ °F (_____ °C)

After flowing for 1 minute, the outlet temperature was _____ °F (_____ °C)
and the flow rate was _____ GPM (_____ L/m)

Cold inlet temperature was set to _____ °F (_____ °C)
Hot inlet temperature was set to _____ °F (_____ °C)

After setting the device to the full cold position, the device was adjusted to an outlet temperature of _____ °F (_____ °C)

After flowing for 1 minute, the outlet temperature was _____ °F (_____ °C)
and the flow rate was _____ GPM (_____ L/m)

The temperature limit stop was set to _____ °F (_____ °C)

When the device was set to the full hot position and water flowed for 1 minute, the outlet temperature was _____ °F (_____ °C)

Cold inlet temperature was set to _____ °F (_____ °C)
Hot inlet temperature was set to _____ °F (_____ °C)

After setting the device to the full cold position, the device was adjusted to an outlet temperature of _____ °F (_____ °C)

After flowing for 1 minute, the outlet temperature was _____ °F (_____ °C)
and the flow rate was _____ GPM (_____ L/min)

The temperature limit stop was set to _____ °F (_____ °C)

When the device was set to the full hot position and water was flowed for 1 minute, the outlet temperature was _____ °F (_____ °C)

Cold inlet temperature was set to _____ °F (_____ °C)
Hot inlet temperature was set to _____ °F (_____ °C)
A minimum out temperature was maintained at _____ °F (_____ °C)

After flowing for 1 minute, the outlet temperature was _____ °F (_____ °C)
and the flow rate was _____ GPM (_____ L/m)

Did the device fail to flow a minimum of 2.25 GPM (8.5 L/min) or the manufacturer's minimum rated flow? ○ Yes ○ No

Was the device able to be adjusted to a minimum outlet water temperature of 100.0 °F (37.8 °C)? ○ Yes ○ No

Was the device able to limit the outlet temperature to a maximum of 120.0 °F (48.9 °C)? ○ Yes ○ No

SECTION V

5.0 Marking Packaging and Installation Instructions and Included Literature

Identify markings contained on the device: _____

_____

_____

Were markings clear, permanent and visible after installation? ○ Yes ○ No

Does the device have identifiable control settings? ○ Yes ○ No

Describe the settings: _____

_____

Were manufacturer's instructions for installation, adjustment and maintenance included in the packaging? ○ Yes ○ No

If the device is not equipped with an integral shut-off, was a warning included in the instructions to install check valves on the inlets? ○ Yes ○ No

Were instructions provided on how the handle position or the limit setting is to be adjusted? ○ Yes ○ No

Did the packing or literature specify the device's minimum flow rate, determined at a flowing pressure of 45.0 psi (310.3 kPa)? ○ Yes ○ No

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: _____