

ASSE International
Product (Seal) Listing Program
FACTORY AUDIT INSPECTION TEST REPORT
ASSE 1070-2020 / ASME A112.1070-2020 / CSA B125.70-20
Performance Requirements for Water Temperature Limiting Devices

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.

4.3 Temperature and Pressure Test

For devices integral to a fixture fitting, test the device in accordance with ASME A112.18.1/CSA B125.1

Ambient temperature of laboratory environment: _____°F (_____°C)

Does the device have an integral closure mechanism?

Yes No Questionable

If questionable, explain: _____

If yes, close the mechanism. If no, skip to next table.

| | <u>Temperature</u> | <u>Pressure</u> | <u>Time</u> | <u>Leak?</u> |
|----|--------------------|---------------------|-------------|--|
| a) | _____°F (_____°C) | _____psi (_____kPa) | _____min | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| b) | _____°F (_____°C) | _____psi (_____kPa) | _____min | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| c) | _____°F (_____°C) | _____psi (_____kPa) | _____min | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| d) | _____°F (_____°C) | _____psi (_____kPa) | _____min | <input type="checkbox"/> Yes <input type="checkbox"/> No |

Open the mechanism if available. Block the outlet.

| | <u>Temperature</u> | <u>Pressure</u> | <u>Time</u> | <u>Leak?</u> |
|----|--------------------|---------------------|-------------|--|
| a) | _____°F (_____°C) | _____psi (_____kPa) | _____min | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| b) | _____°F (_____°C) | _____psi (_____kPa) | _____min | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| c) | _____°F (_____°C) | _____psi (_____kPa) | _____min | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| d) | _____°F (_____°C) | _____psi (_____kPa) | _____min | <input type="checkbox"/> Yes <input type="checkbox"/> No |

Is the device in compliance with this section? Yes No Questionable

If no or questionable, explain _____

4.6 Pressure and Temperature Variation Test

4.6.2 Data gathering

Can temperature-measuring equipment detect a 63.2% step change within 0.3 seconds?

Yes No Questionable

If no or questionable, explain _____

Data collection frequency: _____Hz

Outlet temperature averaged every _____seconds

Temperature sensors are in a Type _____copper water tube.

Are the sensors located per section 4.6.1(d) of the standard?

Yes No Questionable

If no or questionable, explain _____

Size of the outlet tube inner diameter: _____in (_____mm)

4.6.2.2(a) For devices integral to plumbing fittings that comply with ASME A112.18.1 / CSA B125.1, fully open valves V1, V2, and V3. If the device uses a flow control, remove V3 from test assembly for flow control to be used.

For all other devices, output flow rate set at: _____ gpm (_____ Lpm)

4.6.2.2(b) Hot water supply pressure (P1): _____ psi (_____ kPa)

Cold water supply pressure (P2): _____ psi (_____ kPa)

4.6.2.2(c) Hot water supply temperature (T1): _____ °F (_____ °C)

Cold water supply temperature (T2): _____ °F (_____ °C)

4.6.2.2(e) Outlet temperature (T3): _____ °F (_____ °C)

4.6.2.2(g) Water flowed for _____ min

Outlet temperature (T3): _____ °F (_____ °C)

4.6.2.3.

4.6.2.3(a) Hot water supply pressure (P1): _____ psi (_____ kPa)

Average outlet temperature (T3) over 20±5 seconds after first 5 seconds: _____ °F (_____ °C)

Hot water supply pressure (P1) returned to: _____ psi (_____ kPa)

4.6.2.3(b) Hot water supply pressure (P1): _____ psi (_____ kPa)

Average outlet temperature (T3) over 20±5 seconds after first 5 seconds: _____ °F (_____ °C)

Hot water supply pressure (P1) returned to: _____ psi (_____ kPa)

4.6.2.3(c) Cold water supply pressure (P2): _____ psi (_____ kPa)

Average outlet temperature (T3) over 20±5 seconds after first 5 seconds: _____ °F (_____ °C)

Cold water supply pressure (P2) returned to: _____ psi (_____ kPa)

4.6.2.3(d) Cold water supply pressure (P2): _____ psi (_____ kPa)

Average outlet temperature (T3) over 20±5 seconds after first 5 seconds: _____ °F (_____ °C)

Cold water supply pressure (P2) returned to: _____ psi (_____ kPa)

4.6.2.3(e) Hot water supply temperature (T1): _____ °F (_____ °C)

Rate at which temperature was increased: _____ °F/min (_____ °C/min)

Average outlet temperature (T3) over 20±5 seconds after first 5 seconds: _____ °F (_____ °C)

Hot water supply temperature (T1) returned to: _____ °F (_____ °C)

Is the device in compliance with this section? Yes No Questionable

If no or questionable, explain _____

4.7 Cold Water Supply Failure Test

Install device per Figure 1 of the standard.

Hot inlet supply pressure: _____psi (_____kPa)

Cold inlet supply pressure: _____psi (_____kPa)

Cold water supply closed over _____seconds

Maximum allowable temperature specified by manufacturer, if present: _____°F (_____°C)

Flow rate at which outlet reached the above temperature or 120°F (49°C), whichever is lesser:

_____gpm (_____Lpm)

Minimum rated flow as specified by manufacturer: _____gpm (_____Lpm)

Is the device in compliance with this section? Yes No Questionable

If no or questionable, explain _____

4.8 Hydrostatic Pressure Test

Flow water to remove air from device. Close outlet.

Hot inlet supply pressure, flowing: _____psi (_____kPa)

Cold inlet supply pressure, flowing: _____psi (_____kPa)

Test period: _____ minutes.

Was there any 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 _____

Section V

5.6 Did the literature include (check if present):

Rated temperature if less than 120°F (49°C)

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: _____