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INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS

IAPMO GUIDE CRITERIA

FOR

FLOW SHUTOFF DEVICE WITH OR WITHOUT SHOWER HEAD

IAPMO IGC 244-2007a

1. PURPOSE

- 1.1** The purpose of this standard is to establish a generally acceptable standard for a flow shut-off device with or without a shower head. The intent of such devices is to minimize the flow of water through the shower head once a set temperature has been reached to reduce waste of water and energy.

The provisions of this standard are not intended to prevent the use of any alternate material or method of construction, provided any such alternate meets the intent and requirement of this document and changes are amended to this standard.

2. SCOPE

- 2.1** This standard covers minimum standards for materials in the construction of device and shower head, and to prescribe minimum test requirements for the performance of said devices, together with methods of marking and identification.
- 2.2** This device shall be used to reduce the flow of water when activated and manually reset to full flow when needed and shall not be used for anti-scalding purposes.

3. REFERENCED STANDARDS

- 3.1** All standards referenced herein shall be the current edition of that standard.

ASME A112.18.1/CSA B125.1
ASSE 1062

Plumbing Supply Fittings
Temperature Actuated, Flow Reduction
Valves for Individual Fixture Fittings

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4. GENERAL REQUIREMENTS

- 4.1 Materials.** Shower head and shut off device shall comply with the applicable material requirements in ASME A112.18.1/CSA B125.1
- 4.2 Connections.** Shut off device for installation on a standard shower arm shall be capable of being connected to a ½ NPT male thread. Threaded connections shall comply with the applicable section of ASME A112.18.1/CSA B125.1
- 4.3 Working Pressures.** The shower head and device shall comply with the requirements in ASME A112.18.1/CSA B125.1
- 4.4 Working Temperatures.** The shower head and device shall comply with the requirements in ASME A112.18.1/CSA B125.1
- 4.5 Shutoff Device with Thermal Actuator.** The thermal actuator shall meet the following performance requirements in Section 5.2 of this standard.
- 4.6 Operating Control.** The handle or stem shall not fracture when a force of 10 lbf or a torque of 15 lbf·in is applied in the manner required to operate the control.
- 4.7 Cross-Flow.** The shower head and device shall comply with the requirements in Section 4.12 of ASME A112.18.1/CSA B125.1

5. PERFORMANCE REQUIREMENTS

- 5.1 Shower Head and Shut off Device.** Shower head and shut off device shall comply with the applicable performance requirements in ASME A112.18.1/CSA B125.1. Manual shut off mechanism shall be tested in accordance with Section 5.2 of this standard in lieu of cycle test specified in ASME A112.18.1/CSA B125.1.
 - 5.1.1** In addition, the shut off device shall comply with Sections 3.1 and 3.2 of ASSE 1062.
- 5.2 Cycle Test.** The device shall be tested to 10,000 cycles without failure. One cycle shall consist of the following steps (a) through (d).
 - a) Flow water at an inlet pressure of 80 ±1 psi and at a temperature of less than 87.8°F (31.0°C) for one minute. Device will be in an open flowing condition.
 - b) Gradually increase the water temperature to 98.6°F (37.0°C). The device shall close such that the flow of water is less than 0.2 gpm but not less than 0.05 gpm.
 - c) Manually open the device to the maximum flow condition (2.5 gpm maximum at 80 ± 1 psi) by turning the manual open lever by hand.

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