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INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS

IAPMO GUIDE CRITERIA

FOR

EXCESS FLOW SHUTOFF DEVICE WITH OR WITHOUT SUPPLY STOP

IAPMO IGC 261-2010

1. PURPOSE

- 1.1** The purpose of this standard is to establish a generally acceptable standard for excess flow shut-off mechanism used in potable water systems which may incorporate a supply stop. The intent of such devices is to protect personal property and building structures against water damage caused by accidental breakage, rupture or damage to downstream water connectors, appliances and plumbing fixtures.

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 excess flow shut-off device which may incorporate a supply stop, and to prescribe minimum test requirements for the performance of said devices, together with methods of marking and identification.

3. REFERENCED STANDARDS

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

ASME A112.18.1/CSA B125.1	Plumbing Supply Fittings
ASME A112.18.6/B125.6	Flexible Water Connectors
NSF/ANSI 61	Drinking Water System Components – Health Effects

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4. GENERAL REQUIREMENTS

- 4.1 Supply Stops.** When supplied, Supply stops shall comply with the material and design requirements in Sections 4 and 5.2 of ASME A112.18.1/CSA B125.1.
- 4.2 Materials for Shutoff Device**
- 4.2.1** Copper alloy components shall not contain less than 58% copper.
- 4.2.2** Wetted stainless steel components shall have corrosion resistance equal to or greater than UNS S30200 stainless steel.
- 4.2.3** Wetted plastic components shall comply with applicable sections of NSF/ANSI 61 and shall be suitable for continuous use in hot water at 180 °F (82°C).
- 4.3** Materials coming in contact with potable water and for delivery of drinking water shall comply with the applicable sections in NSF/ANSI 61.
- 4.4 Connection.** Threaded connections shall comply with Section 4.4 of ASME A112.18.1/CSA B125.1 and/or Section 4.3 of ASME A112.18.6/CSA B125.6.
- 4.4.1 Alternate Connections.** Alternate end connection requirements shall comply with the dimensional requirements in the applicable ASTM standard.
- 4.5 Working Pressures.** Shutoff device with or without supply stop shall comply with the requirements in Section 4.1.1 of ASME A112.18.1/CSA B125.1.
- 4.6 Working Temperatures.** Shutoff device with or without supply stop shall comply with the requirements in Section 4.1.2 of ASME A112.18.1/CSA B125.1.

5. PERFORMANCE REQUIREMENTS

- 5.1 Samples.** Samples representative of each nominal diameter, inlet connection and material combination shall be tested and shall comply with the preconditioning and installation requirements in Section 5.1.1 and 5.1.2 of ASME A112.18.1/CSA B125.1.
- 5.2. Shutoff Flow Rate Test.** Connect the device in accordance with Figure 1. Open the manual shutoff valve and adjust the water flow to the application flow rate for which the supply stop is being tested. Insure that the supply stop with excess flow device is fully open.

Open the throttle valve to insure that all air is purged from the system. Continue to gradually opening the manual shutoff valve until the excess flow device closes. Observe the flow rate at which the device closed.

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