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INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS

IAPMO GUIDE CRITERIA FOR WATERLESS URINALS WITH A MECHANICAL TRAP

IGC 161-2009

1. PURPOSE

- 1.1** The purpose of this standard is to provide the minimum design and performance criteria for waterless urinals containing a mechanical trap seal. This standard is not intended to be a specification guide nor is it intended to restrict design. Its purpose is to serve as a guide for producers, distributors, architects, engineers, contractors, inspectors, and users; to promote understanding regarding materials, manufacture and installation; and to provide for identifying waterless urinals containing a mechanical trap seal that conform with this standard.
- 1.2** The provisions of this standard are not intended to prevent the use of any alternate material or method of construction, provided any such alternative meets the intent and requirements of this document and changes are amended to this standard.

2. SCOPE

- 2.1** This standard applies to waterless urinals with a mechanical trap as complete plumbing fixtures. It covers definitions, materials and finishes, general requirements, performance requirements and marking requirements for waterless urinals.

3. REFERENCE STANDARDS

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

ANSI Z124.9	Plastic Urinals
ASME A112.19.2/CSA B45.3	Ceramic Plumbing Fixtures
ASME A112.19.3/CSA B45.4	Stainless Steel Plumbing Fixtures
ASME A112.19.19	Vitreous China Nonwater Urinals

4. DEFINITIONS

- 4.1** Waterless Urinal - a plumbing fixture which is designed to receive and convey only liquid waste through a trap seal into the gravity drainage system without the use of water for such function or its operation and which is typically installed in public or special use

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building including hospitals, penal facilities, schools, facilities, factories, places of assembly and similar structures.

5. GENERAL REQUIREMENTS

5.1 Waterless Urinals with a Replaceable Self Sealing Waterless Waste Valve

5.1.1 Fixtures. The fixtures and components shall comply with the material requirements in ASME A112.19.2/CSA B45.1 for Ceramic or ASME A112.19.3/CSA B45.4 for Stainless Steel and the performance requirements in ASME A112.19.19, section 6 entitled "Urinal Tests". Plastic fixtures and components shall meet the material requirements of ANSI Z124.9 and the performance requirements of ASME A112.19.19, section 6 entitled "Urinal Tests".

5.1.2 One Way Sealing Performance of the Valve

5.1.2.1 Apparatus:

- a) Length of rubber tubing 6mm bore
- b) Tee-junction suitable for use with the rubber tubing
- c) U-tube manometer with a range of 0 to 4" water gauge
- d) Reducer to enable the rubber tube to be connected to the outlet of the valve

5.1.2.2 Prime the valve by running a gallon of water through the valve to waste. Connect the rubber tubing through the reducer to the outlet of the valve. Connect the other end the tube to the tee-junction, one leg of which is connected to the U-tube manometer and the remaining leg to another length of tubing. Apply air pressure to the free end of the tubing until a pressure of 1.5" water gauge is registered on the U-tube manometer. Clamp the end of the tube and maintain pressure for 10 seconds.

5.1.2.3 Performance Requirements. The valve shall retain a seal under a backpressure, equivalent to 1.5" water gauge for 10 seconds.

5.1.3 Waterless Urinals with a Replaceable Self Sealing Waterless Waste Valve with or without integral scented cartridge shall comply with the performance requirements in ASME A112.19.19, Section 6 entitled "Urinal Tests".

6. MARKINGS

6.1 The fixture shall be permanently and legibly marked with the following information:

- (a) Manufacturer's name or trademark
- (b) Model number or designation

6.2 The carton and instructions shall be marked with the following information:

- (a) Manufacturer's name or trademark

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