

INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS

IAPMO GUIDE CRITERIA FOR

WATER CLOSETS WITH AUTOMATIC SEAT AND AUTOMATIC SEAT COVER DISPENSER

IAPMO IGC 177-2002 (R2014)

1. PURPOSE

- 1.1** The purpose of this standard is to provide the minimum design and performance criteria for water closets with an automatic seat and automatic seat dispenser. It is intended to serve as a guide for producers, distributors, architects, code officials, contractors, installers and end users; to promote understanding regarding materials, manufacture, installation and performance, and to provide a means for water closets with an automatic seat and automatic seat cover dispenser.
- 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 alternate meets the intent and requirements of this standard.

2. SCOPE

- 2.1** This standard applies to water closets with an automatic seat and automatic seat cover dispenser. This standard covers general requirements, dimensions and tolerances, materials, installation instructions, testing requirements, and markings and identification for water closets with an automatic seat and automatic seat cover dispenser.
- 2.2** Demonstration of compliance with this standard is merely an indication that the product meets the performance requirements and specifications contained in this standard. The responsibility for verification of the device's performance on any circulation system shall be the responsibility of the design professional.

3. REFERENCED STANDARDS

- 3.1** The standards referenced herein shall be the current edition of the standards, as published in Table 14-1 of the Uniform Plumbing Code.

ANSI Z124.4 Plastic Water Closet Bowls and Tanks

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ANSI Z 124.5	Plastic Water Closet Seats
ASME A112.19.2	Vitreous China Plumbing Fixtures
ASME A112.19.6	Hydraulic Performance for Water Closets and Urinals
CSA C22.2 #223	Power Supplies with Extra-Low Voltage Class 2 Outputs – Industrial Products
UL 1310	Class 2 Power Units
UL 1585	Class 2 and Class 3 Transformers
UL 1951	Electric Plumbing Accessories

4. DEFINITIONS

Water Closets With An Automatic Seat And Automatic Seat Cover Dispenser – Water closets equipped with an infrared sensor operated mechanism which lowers the toilet seat, applies a water closet seat cover with each use, releases the paper seat cover during the flushing operation, then returns the seat to the upright position after the toilet is flushed.

Infrared Sensors – The sensors are located on the left and right sides of the top of the tank. The toilet seat is lowered when a hand is passed over the right sensor; the toilet is flushed when a hand is passed over the left sensor, then the toilet seat will automatically return to the upright position.

Low Voltage – A circuit involving a peak open-circuit potential of not more than 42.2 volts supplied by a primary battery or a class 2 transformer.

5. GENERAL REQUIREMENTS

- 5.1 Water Closets.** Water closets shall comply with ASME A112.19.2 and/or ANSI Z124.4.
- 5.2 Water Closet Seat.** Water closet seats shall comply with ANSI Z124.5
- 5.3 Electrical Features.** Units incorporating electrical features shall be supplied by:
- (a) a low voltage battery;
 - (b) a suitable class 2 low voltage transformer complying with the requirements of UL 1310, UL 1585, or CSA C22.2 no. 223; or
 - (c) shall comply with the requirements of UL 1951

6. TESTING REQUIREMENTS

- 6.1 Cycle Test**
- 6.1.1** The toilet seat shall lower when an object is passed over the control sensor, then dispense an automatic paper seat cover.
- 6.1.2** When an object is passed over the control sensor, the toilet shall flush, release the paper seat cover during the flushing operation of the water closet, then return the toilet seat to upright position.