

IAPMO IGC 408-2024



PUBLIC REVIEW DRAFT

Industry Standard for

**Workstation Sink with Ozone Spray
and UV Light**



IAPMO Standard

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Preface

This is the 1st edition of IAPMO IGC 408, Workstation Sink with Ozone Spray and UV Light.

This Standard was developed by the IAPMO Standards Review Committee (SRC) in accordance with the policies and procedures regulating IAPMO industry standards development, Policy S-001, Standards Development Process. This Standard was approved as an IAPMO Industry Standard on Month, day, year.

Notes:

- (1) *The use of the singular does not exclude the plural (and vice versa) when the sense allows.*
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- (4) *During its development, this Standard was made available for public review, thus providing an opportunity for additional input from stakeholders from industry, academia, regulatory agencies, and the public at large. Upon closing of public review, all comments received were duly considered and resolved by the IAPMO Standards Review Committee.*
- (5) *This Standard was developed in accordance with the principles of consensus, which is defined as substantial agreement; consensus implies much more than a simple majority, but not necessarily unanimity. It is consistent with this definition that a member of the IAPMO Standards Review Committee might not be in full agreement with all sections of this Standard.*
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- (7) *IAPMO Standards are subject to periodic review and suggestions for their improvement will be referred to the IAPMO Standards Review Committee. To submit a proposal for change to this Standard, you may send the following information to the International Association of Plumbing and Mechanical Officials, Attention Standards Department, at standards@IAPMOstandards.org or, alternatively, at 4755 East Philadelphia Street, Ontario, California, 91761, and include "Proposal for change" in the subject line:*
 - (a) *standard designation (number);*
 - (b) *relevant section, table, or figure number, as applicable;*
 - (c) *wording of the proposed change, tracking the changes between the original and the proposed wording; and*
 - (d) *rationale for the change.*
- (8) *Requests for interpretation should be clear and unambiguous. To submit a request for interpretation of this Standard, you may send the following information to the International Association of Plumbing and Mechanical Officials, Attention Standards Department, at standards@IAPMOstandards.org or, alternatively, at 4755 East Philadelphia Street, Ontario, California, 91761, and include "Request for interpretation" in the subject line:*
 - (a) *the edition of the standard for which the interpretation is being requested;*
 - (b) *the definition of the problem, making reference to the specific section and, when appropriate, an illustrative sketch explaining the question;*
 - (c) *an explanation of circumstances surrounding the actual field conditions; and*
 - (d) *the request for interpretation phrased in such a way that a "yes" or "no" answer will address the issue.*
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- (11) Participation by federal or state agency representative(s) or person(s) affiliated with industry is not to be interpreted as government or industry endorsement of this Standard.*
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IAPMO Standards Review Committee

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M. Durfee	Chief Building Official - Retired Saratoga Springs, Utah, USA	<i>Vice-Chair</i>
R. Garcia	Senior Mechanical Inspector San Diego, California, USA	
E. Gilbreath	Plumbing Inspector, King County Public Health Puyallup, Washington, USA	
D. Gordon	Plumbing Inspector San Francisco, California, USA	
G. Hile	Chief of Inspections, Municipality of Anchorage – Retired Anchorage, AK, USA	
G. Snider	Plumbing Section Supervisor, City of Surrey Surrey, British Columbia, CAN	
M. Wang	Plan Check, City of Los Angeles Monterey Park, California, USA	
T. Burger	IAPMO South Euclid, Ohio USA	<i>Staff Liaison</i>
J. Higdon	IAPMO Matthews, North Carolina, USA	<i>Staff Liaison</i>
H. Aguilar	IAPMO Ontario, California, USA	<i>Secretary</i>

IAPMO IGC 408–2024

Workstation Sink with Ozone Spray and UV Light

1 Scope

1.1 Scope

This Standard covers workstation sinks with ozone spray and UV light, and specifies requirements for materials, physical characteristics, performance testing, and markings.

1.2 Alternative Materials

The requirements of this Standard are not intended to prevent the use of alternative materials or methods of construction provided such alternatives meet the intent and requirements of this Standard.

1.3 Terminology

In this Standard,

- (a) “shall” is used to express a requirement, i.e., a provision that the user is obliged to satisfy to comply with the Standard;
- (b) “should” is used to express a recommendation, but not a requirement;
- (c) “may” is used to express an option or something permissible within the scope of the Standard; and
- (d) “can” is used to express a possibility or a capability.

Notes accompanying sections of the Standard do not specify requirements or alternative requirements; their purpose is to separate explanatory or informative material from the text. Notes to tables and figures are considered part of the table or figure and can be written as requirements.

1.4 Units of Measurement

SI units are the primary units of record in global commerce. In this Standard, imperial units are shown in parentheses. The values stated in each measurement system are equivalent in application, but each unit system is to be used independently. All references to gallons are to U.S. gallons.

2 Reference Publications

This Standard refers to the following publications, and where such reference is made, it shall be to the current edition of those publications, including all amendments published thereto.

ASME International (The American Society of Mechanical Engineers)

ASME A112.18.1/CSA B125.1
Plumbing Supply Fittings

ASME A112.18.2/CSA B125.2
Plumbing Waste Fittings

ASME A112.18.3
Performance Requirements for Backflow Devices and Systems in Plumbing Fixture Fittings

ASME A112.18.6/CSA B125.6
Flexible Water Connectors

ASME A112.19.3/CSA B45.4
Stainless Steel Plumbing Fixtures

ASSE International

ASSE 1008
Performance Requirements for Plumbing Aspects of Residential Food Waste Disposer Units

ASSE 1070/ASME A112.107/CSA B125.70
Performance Requirements for Water Temperature Limiting Devices

ASTM International

ASTM F409
Standard Specification for Thermoplastic Accessible and Replaceable Plastic Tube and Tubular Fittings

CSA Group (Canadian Standards Association)

CSA B45.5/IAPMO Z124
Plastic plumbing fixtures

UL

UL 1598
Luminaires

UL 1951
Standard for Electric Plumbing Accessories

UL 5085-3
Low Voltage Transformers – Part 3: Class 2 and Class 3 Transformers

3 Definitions

The following definition shall apply in this Standard:

Workstation Sink – a sink with a modular set of accessory options (tip-out apron, direct inject ozone rinse, garbage disposal, UV light produce washing basin, soap dispenser, etc.) intended to maximize functionality in a relatively small space

4 General Requirements

4.1 Materials

4.1.1 Stainless Steel

Stainless steel sink and hardware components shall be constructed of 300 series alloys and shall comply with ASME A112.19.3/CSA B45.4.

4.1.2 Plastic

Plastic plumbing fixtures and components shall comply with CSA B45.5/IAPMO Z124.

4.2 Coatings for Metals

Coatings for metallic plumbing fixtures and components shall comply with Section 5.2, Coatings, of ASME A112.18.1/CSA B125.1.

4.3 UV Light

4.3.1 UV Light Wavelength

High intensity violet light used for microbial inactivation shall have a wavelength of 405 nm.

4.3.2 Components Exposed to UV Light

Components exposed to UV light shall be manufactured of materials known to be UV resistant.

4.4 Ozone Spray

4.4.1 Ozone Concentration

Any device that produces and/or dispenses ozonated water shall not exceed a residual dissolved ozone concentration of 0.4 ppm.

4.4.2 Components Exposed to Ozone

Components exposed to ozone shall be manufactured of materials known to be ozone resistant.

4.5 Plumbing Fixture Fittings

Plumbing supply fittings shall comply with ASME A112.18.1/CSA B125.1.

4.6 Plumbing Waste Fittings

Plumbing waste fittings shall comply with ASME A112.18.2/CSA B125.2 or ASTM F409.

4.7 Backflow Protection Devices

Backflow protection devices supplied with the workstation sink shall comply with ASME A112.18.3.

4.8 Garbage Disposals

Garbage disposals supplied with workstation sinks shall comply with ASSE 1008.

4.9 Flexible Water Connectors

Flexible water connectors shall comply with ASME A112.18.6/CSA B125.6.

4.10 Temperature Limiting Controls

Manufacturer supplied temperature limiting controls shall comply with ASSE 1070/ASME A112.107/CSA B125.70. High limit controls may be adjustable or non-adjustable. Non-adjustable components shall not exceed a set temperature of 43 °C (110°F).

4.11 Electrical Components

Electrical components exceeding 24 V shall comply with UL 1598, UL 1951, or UL 5085-3.

5 Testing Requirements**5.1 Life Cycle Test for Pull-Out Drawer****5.1.1 Test Procedure**

Using a cycling device on the drawer, cycle the drawer for 25,000 cycles with 73 kg/m² (15 lb./ft²) static load on shelf bottom. One cycle shall consist of opening drawer two thirds of its extension length and returning to closed position. Operate at a speed of 20 +/- 2 cycles per minute.

5.1.2 Performance Requirements

The drawer shall be operable with no failure in any part of the drawer assembly or operating system. The drawer bottom shall not have deflected to a position that interferes with drawer operation.

5.2 Load Test for Tip-Out Apron**5.2.1 Test Procedure**

With the apron open, apply a 50 lbf load to the top edge of the apron front, positioning the load at the corner of the top edge of the apron front opposite of the support hinge. If there are two support hinges, apply the load in the middle of the top edge of the apron front. Apply the load for 2 minutes

5.2.2 Performance Requirements

The apron shall be operable with no failure in any part of the apron operating system. The gap between the apron face and frame shall not shift more than 1.65 mm (0.065 in).

6 Markings and Accompanying Literature

6.1 Markings

6.1.1 Workstation sinks complying with this Standard shall be marked with the manufacturer's name or trademark.

6.1.2 The model number or designation shall be marked on the fixture or on the packaging and the accompanying literature.

6.2 Visibility

Markings shall be permanent, legible, and visible after installation.



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