IAPMO IGC 127-2022

Industry Standard for

Combined Hand-Washing Systems

For IAPMO Staff use only. Distribution Prohibited.

Full document details: IAPMO IGC 127-2022

IAPMO Standard

Approval of an IAPMO Industry Standard requires verification by the Standards Review Committee that the standard has been developed in accordance with the policies and procedures for standards development (S-001, *Standards Development Process*, S-008, *Appeals* and S-011, *Operation of the IAPMO Standards Review Committee*). Although IAPMO administers the process and establishes rules to promote fairness in achieving consensus, it does not independently test, evaluate, or verify the content of standards.

Consensus is established when substantial agreement has been reached by directly and materially affected interests. Substantial agreement means much more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that a concerted effort be made toward their resolution.

The use of IAPMO Industry Standards is completely voluntary; their existence does not in any respect preclude anyone, whether they have approved the standards or not, from manufacturing, marketing, purchasing, or using products, processes, or procedures not conforming to the standards.

The Standards Review Committee has final authority on interpretation of any IAPMO Industry Standard. Moreover, no person save IAPMO designated staff shall have the right or authority to issue an interpretation of an IAPMO Industry Standard in the name of IAPMO. Requests for interpretations should be addressed to the secretariat or sponsor whose name appears on the title page of this standard.

CAUTION NOTICE: This IAPMO Industry Standard may be revised or withdrawn at any time. The policies and procedures require that action be taken periodically to reaffirm, revise, or withdraw this standard. Interested stakeholders of IAPMO Industry Standards may receive current information on all standards by signing up to receive updates and notices at the IAPMO Standards website www.IAPMOstandards.org.

Published by
International Association of Plumbing and Mechanical Officials (IAPMO)
4755 East Philadelphia Street, Ontario, California, 91761, USA
1-800-854-2766 • 1-909-472-4100

Visit the IAPMO Online Store at: www.IAPMOstore.org
Visit the IAPMO Standards website at: www.IAPMOstandards.org

Copyright © 1998-2022 by International Association of Plumbing and Mechanical Officials (IAPMO)
All rights reserved.

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without prior written permission of the publisher.

Printed in the United States of America

Documents
Document Sharing Hub

For IAPMO Staff use only. Distribution Prohibited.

Full document details: IAPMO IGC 127-2022

Contents

Preface

IAPMO Standards Review Committee

1 Scope
- 1.1 Scope
- 1.2 Alternative Materials
- 1.3 Terminology
- 1.4 Units of Measurement

2 Reference Publications

3 Definitions

4 General Requirements
- 4.1 Materials
- 4.2 Supply and Waste Fittings
- 4.3 Electrical Requirements
- 4.4 Backflow Protection
- 4.5 Hinging Mechanisms
- 4.6 Systems with Hot Water On-Demand or Automatic Activated Hot Water Pumping Systems

5 Testing Requirements
- 5.1 Life Cycle Test for Hand Washing Systems with Plumbed-In Soap Dispensers
- 5.2 Life Cycle Test for Non-Plumbed-In Soap Dispensers
- 5.3 Life Cycle Test for Hand Dryers
- 5.4 Life Cycle Test for Waste Connections

6 Markings and Accompanying Literature
- 6.1 Markings
- 6.2 Installation Instructions

For IAPMO Staff use only. Distribution Prohibited.

Documents Document Sharing Hub

Full document details: IAPMO IGC 127-2022

Preface

This is the ninth edition of IAPMO IGC 127, Combined Hand-Washing Systems. This Standard supersedes IAPMO IGC 127-2018, Combined Hand-Washing Systems. The previous editions of this standard are: April 2018, January 2014, July 2013, April 2013, April 2009, February 2008, April 2002, June 1998.

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 July 11, 2022.

Notes:

(1) The use of the singular does not exclude the plural (and vice versa) when the sense allows.

(2) The use of IAPMO Standards is completely voluntary; their existence does not in any respect preclude anyone, whether he has approved the standards or not, from manufacturing, marketing, purchasing, or using products, processes, or procedures not conforming to the standards.

(3) This standard was developed using an open process and in accordance with IAPMO Standards Policy S-001, Standards Development Process*, which is available on the IAPMO Standards website (www.IAPMOstandards.org).*

(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.

(6) Although the intended primary application of this Standard is stated in its scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.

(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.

(9) IAPMO does not "approve", "rate", or endorse any item, construction, proprietary device, or activity.

Documents Document Sharing Hub
For IAPMO Staff use only. Distribution Prohibited.
Full document details: IAPMO IGC 127-2022

(10) IAPMO does not take any position with respect to the validity of any patent rights asserted in connection with any items mentioned in this Standard and does not undertake to insure anyone utilizing this Standard against liability for infringement of any applicable patents, nor assumes any such liability. Users of this Standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their responsibility.

(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.

(12) Proposals for amendments to this Standard will be processed in accordance with the standards-writing procedures of IAPMO industry standards development, Policy S-001, Standards Development Process.

For IAPMO Staff use only. Distribution Prohibited.

Documents
Document Sharing Hub

Full document details: IAPMO IGC 127-2022

IAPMO Standards Review Committee

T. Collings	Building Services & Licensing - Retired Salt Lake City, Utah, USA	*Chair*
M. Durfee	Chief Building Official - Retired Saratoga Springs, Utah, USA	*Vice-Chair*
R. Coffman	Plumbing Inspector, City of Cedar Falls - Retired Cedar Falls, Iowa, USA	
C. Crimmins	MN State Pipe Trades - Retired Champlin, Minnesota, USA	
R. Garcia	Senior Mechanical Inspector San Diego, California, USA	
D. Gordon	Plumbing Inspector San Francisco, California, USA	
S. Peters	Plumbing & Mechanical Plans Examiner Santa Monica, California, USA	
G. Snider	Plumbing Section Supervisor, City of Surrey Surrey, British Columbia, CAN	
G. Istefan	IAPMO Ontario, California, USA	*Staff Liaison*
S. Choe	IAPMO Ontario, California, USA	Staff Liaison
H. Aguilar	IAPMO Ontario, California, USA	*Secretary*

For IAPMO Staff use only. Distribution Prohibited.

Documents
Document Sharing Hub

Full document details: IAPMO IGC 127-2022

IAPMO IGC 127–2022
Combined Hand-Washing Systems

1 Scope

1.1 Scope

This Standard covers combined hand-washing systems comprised of electronically actuated soap dispensers, faucets, and hand air-dryers, hot water on-demand or automatic activated hot water pumping systems and specifies requirements for materials, physical characteristics, performance testing, and markings.

Note: *In this Standard, "combined hand-washing systems" are referred to as "hand washing systems".*

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, the inch/pound 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.

Documents
Document Sharing Hub
For IAPMO Staff use only. Distribution Prohibited.
Full document details: IAPMO IGC 127-2022

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 A112.18.6/CSA B125.6
Flexible water connectors

ASME A112.19.1/CSA B45.2
Enamelled cast iron and enameled steel plumbing fixtures

ASME A112.19.2/CSA B45.1
Ceramic plumbing fixtures

ASME A112.19.3/CSA B45.4
Stainless steel plumbing fixtures

ASME A112.18.3
Backflow Protection Devices and Systems in Plumbing Fixture Fittings

ASTM International
ASTM C564
Standard Specification for Rubber Gaskets for Cast Iron Soil Pipe and Fittings

ASTM C1440
Standard Specification for Thermoplastic Elastomeric (TPE) Gasket Materials for Drain, Waste, and Vent (DWV), Sewer, Sanitary and Storm Plumbing Systems

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

ASTM D2000
Standard Classification System for Rubber Products in Automotive Applications

CSA Group (Canadian Standards Association)
CSA B45.5/IAPMO Z124
Plastic plumbing fixtures

CSA B45.12/IAPMO Z402
Aluminum and copper plumbing fixtures

Documents
Document Sharing Hub
For IAPMO Staff use only. Distribution Prohibited.
Full document details: IAPMO IGC 127-2022

CSA B64.10
Selection and installation of backflow preventers

CSA B602
Mechanical couplings for drain, waste, and vent pipe and sewer pipe

CSA C22.2 No. 14
Industrial Control Equipment

CSA C22.2 No. 36
Hairdressing Equipment

CSA C22.2 No. 68
Motor-operated appliances (household and commercial)

CSA C22.2 No. 88
Industrial Heating Equipment

CSA C22.2 No. 113
Fans and ventilators

CSA C22.2 No. 223
Power Supplies With Extra-Low-Voltage Class 2 Outputs

CSA C22.2 No. 60335-1
Safety of household and similar appliances - Part 1: General requirements

CSA E60335-2-3
Household and similar electrical appliances - Safety - Part 2-3: Particular requirements for electric irons

IAPMO (International Association of Plumbing and Mechanical Officials)
IAPMO PS 115
Hot Water On-Demand or Automatic Activated Hot Water Pumping Systems

SAE (The Engineering Society for Advancing Mobility Land Sea Air and Space)
SAE J200
Classification System for Rubber Materials

UL
UL 157
Gaskets and Seals

UL 499
Electric Heating Appliances

For IAPMO Staff use only. Distribution Prohibited.
Documents Document Sharing Hub
Full document details: IAPMO IGC 127-2022