

IAPMO IGC 380-1 202y



PUBLIC REVIEW DRAFT

Industry Standard for
**Auxiliary Components for Plastic
Sanitary Latrine Pans**



IAPMO Standard

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Preface

This is the first edition of IAPMO IGC 380-1, Auxiliary Components Plastic Sanitary Latrine Pans.

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 2025.

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.*

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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.*
- (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.*

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IAPMO IGC 380-1-202y

Auxiliary Components for Plastic Sanitary Latrine Pans

1 Scope

1.1 General

1.1.1 This Standard covers Auxiliary components used with pour flush plastic latrine toilet fixtures with water seals intended for indoor, and outdoor applications, and specifies requirements for materials, construction, performance, testing, and markings.

1.1.2 Auxiliary Components covered under this Standard include but are not limited to:

- (a) Standalone footrest
- (b) Waste containment liner
- (c) Standalone lids (Cover)
- (d) Standalone seat

1.2 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.

1.3 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.

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.

CSA Group (Canadian Standards Association)

CSA B45.5/IAPMO Z124

Plastic Plumbing Fixtures

IAPMO (International Association of Plumbing and Mechanical Officials)

CSA B45.5/IAPMO Z124

Plastic Plumbing Fixtures

IAPMO Z124.5

Plastic Toilet Seats

3 Definitions

The following definitions shall apply in this Standard:

Footrest – a feature of a latrine pan that provides secure footing while using the toilet. Footrest may be raised from floor level of pan to minimize soiling of feet and may have a textured top surface to avoid slippage.

Non-customer interface surface/component – is an auxiliary element in which the user does not interact or which does not have aesthetic aspects. Examples: liners, connection box,

Pour Flush – water is poured into latrine pan with roughly 1 liter per second flowrate, using a cup or scoop like apparatus with a minimum opening diameter of 4 inches from 2 ft above the floor level, aimed directly at the waste specimen to evacuate waste.

Sanitary Latrine Pan – a receptacle that is used as a toilet and is not attached to a water source. Sanitary latrine pan may include but are not limited to squat pans, sit stools, footrests, and a gas seal.

Standalone seat— a component that provides an elevated sitting surface for comfort during usage of a latrine pan.

Waste Containment – a container or a pit hole that contains human excreta.

4 General Requirements

4.1 Materials

Accessories for Plastic latrine fixtures covered by this Standard shall comply with the applicable material requirements in CSA B45.5/IAPMO Z124.

5 Testing Requirements

5.1 Stain Resistance Test (Does not apply to non-customer interface surface/component)

The stain resistance test shall be performed in accordance with the requirements of Section 5.11, Stain Resistance Test of CSA B45.5/IAPMO Z124.

5.2 Colorfastness Test (Does not apply to non-customer interface surface/component)

The colorfastness test shall be performed in accordance with the requirements of Section 5.10, Colorfastness Test of CSA B45.5/IAPMO Z124.

5.3 Cleanability and Wear Tests (Does not apply to non-customer interface surface/component)

The cleanability test shall be performed in accordance with the requirements of Section 5.12, Cleanability Test of CSA B45.5/IAPMO Z124.

5.4 Burn Resistance Test

The burn resistance test shall be performed in accordance with the requirements of Section 7.2, Burn Resistance Test of IAPMO Z124.5.

Note: this test can be performed on material sample coupons

5.5 Chemical Resistance Test

The chemical resistance test shall be performed in accordance with the requirements of Section 5.15, of CSA B45.5/IAPMO Z124.

5.6 Impact Test for Footrest and Lid

5.6.1 Test Procedure

The impact test for the footrest shall be conducted as follows:

- (a) Set the fixture using a method equivalent to the manufacturer's installation instructions.
- (b) A 50 kg (110 lbs.) sandbag shall be dropped from a height of 30 cm (12 inches) above floor level.
- (c) Remove the sandbag and inspect for damage.

5.6.2 Performance Requirements

There shall be no visible cracks or permanent deformation of the specimen.

5.7 Load Test for Footrest and Lid

5.7.1 Test Procedure

The load test for footrest shall be conducted as follows:

- (a) Set the accessory using a method equivalent to the manufacturer's installation instructions.
- (b) Preload the specimen with a 150 ± 2.5 kg (330 ± 5.5 lb) test load applied to the center of the accessory using a 127 mm (5 in) diameter load-distribution disk resting on a 13 mm (0.5 in) thick sponge rubber or equivalent pad.
- (c) Leave the load in place for 10 minutes to allow for settlement of the test
- (d) Remove the load.
- (e) Measure the deflection under the load with a deflectometer with a reading accuracy of at least 0.025 mm (0.001 in).

(f) Measure the residual deflection 10 ± 1 minutes after removal of the test load.

5.7.2 Performance Requirements

There shall be no visible cracks of the specimen, deflections under the test load shall not exceed 4 mm (0.160 in); and the maximum residual deflection 10 minutes after removal of the load shall not exceed 2 mm (0.08 in).

6 Markings and Accompanying Literature

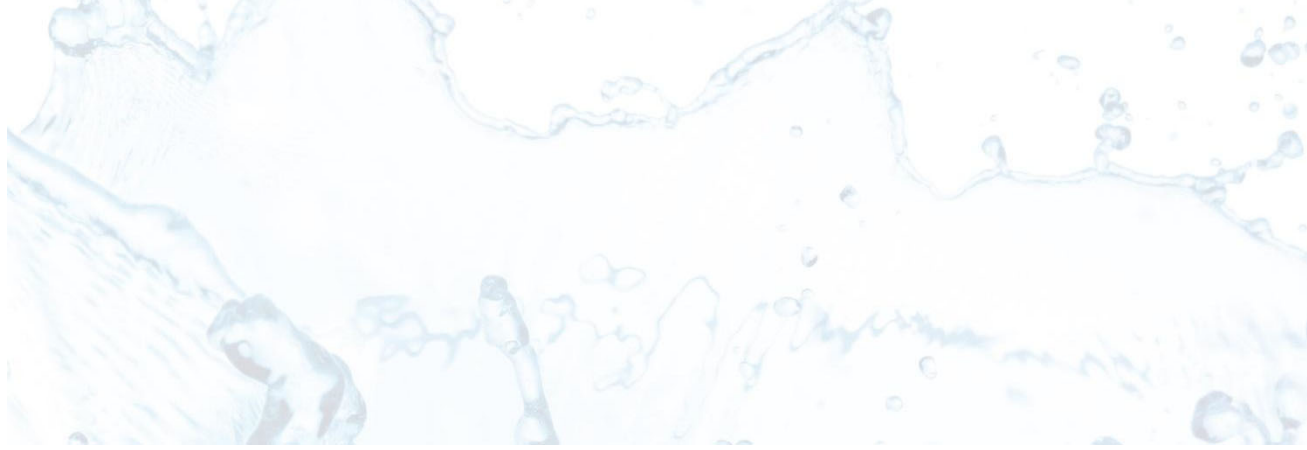
6.1 Markings

Auxiliary components for sanitary latrine pans complying with this Standard shall be marked with the:

- (a) manufacturer's name or trademark;
- (b) model number;
- (c) IAPMO standard designation (i.e., "IAPMO IGC 380-1");

6.2 Permanency

Markings shall be permanent, legible, or clearly listed under product page on manufacturer's website.



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