

STANDARD INFORMATION

Standard Number: CSA B45.5 / IAPMO Z124
Standard Name: Plastic Plumbing Fixtures
Standard Edition and Issue Date: 2nd Edition Dated March 1, 2017
Date of Revision: March 1, 2017
Date of Previous Revision of Standard: January 1, 2016

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **November 5, 2018**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: A review of all Listing Reports is necessary to determine which products comply with new/revise requirements and which products will require re-evaluation. **NOTE:** Effective immediately, this revised standard will be exclusively used for evaluation of new products unless the Applicant requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revise requirements.

Overview of Changes:

- Overflow requirement for lavatories, sinks, and bathtubs
- Spacing between the finished wall and the inside greppable surface of the grab bar revised
- Non-instrumented evaluation of colourfastness added
- Added inlet connection test procedure and performance requirements
- Added hydrostatic load test procedure and performance requirements

Specific details of new/revise requirements are found in table below.

If the applicable requirements noted in the table are not described in your report(s), these requirements will need to be confirmed as met and added to your report(s) such as markings, instructions, test results, etc. (as required).

Client Action Required:

Information – To assist our Engineer with review of your Listing Reports, please submit technical information in response to the new/revise paragraphs noted in the attached or explain why these new/revise requirements do not apply to your product (s).

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.



STANDARD INFORMATION

| CLAUSE | VERDICT | COMMENT |
|---------|---------|--|
| | | <i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined out below.</i> |
| 4 | Info | General requirements |
| 4.2 | Info | Waste fitting openings, drainage, and overflows |
| 4.2.2 | Info | Overflows |
| | | <i>New clause added;</i> |
| | | Bathtubs |
| 4.2.2.2 | | Overflows in bathtubs may be provided at the option of the manufacturer. When overflows are provided, their dimension, location, and position in relation to the waste outlet in the fixture shall be as shown in Figure 7. |
| | | Variations in location, geometry, diameter, and angle of orientation of the overflow opening shall be acceptable when factory-provided waste and overflow fittings are used. |
| | | Note: Local plumbing codes might require bathtub overflows. |
| | | 4.4.4 Diameter, spacing, and grippable length of grab bars |
| 4.4.4 | | Grab bars intended for residential and commercial installations shall have a <ul style="list-style-type: none"> a) diameter of between 22 and 40 mm (0.9 and 1.6 in) or an equivalent cross-sectional area; b) minimum spacing of 25 mm (1 in) <u>38 mm (1.5 in)</u> between the finished wall and the inside grippable surface of the grab bar; and c) minimum grippable length of <ul style="list-style-type: none"> i) 228 mm (9.0 in), <u>for bars mounted horizontally (see Figure 18(a)); and</u> ii) <u>152 mm (6.0 in), for bars mounted vertically (see Figure 18(b)).</u> |
| 5 | Info | Test requirements |
| 5.10 | Info | Colourfastness test |
| 5.10.3 | Info | Procedure |



New clause added;

Exposure procedures

The test sample shall be subjected to the following exposure procedures:

5.10.3.1

- a) Subject the test sample to conditions specified in Clause 5.10.2 for 200 h in accordance with ASTM D2565.
- b) At the conclusion of the 200 h test period, store the test sample away from any light source at a temperature of 23 ± 5 °C (73 ± 9 °F) for not less than 72 h.
- c) Clause 5.10.3.2 shall be used to evaluate the colourfastness. Clause 5.10.3.3 shall be used if the results of Clause 5.10.3.2 are uncertain.

New clause added;

Non-instrumented evaluation

Non-instrumented evaluation shall be conducted as follows:

5.10.3.2

- a) The test sample shall be examined with the unaided eye from a distance of between 300 and 610 mm (1 and 2 ft) for significant change in colour or surface texture when compared with the control sample using the light source as specified in Clause 5.4.1(d).
- b) The samples shall be placed next to each other while completing the examination.
- c) The test sample shall comply with the performance requirements in Clause 5.10.4.1.

New clause added;

Instrumented evaluation

Instrumented evaluation shall be conducted as follows:

5.10.3.3

- a) Colour readings shall be taken on the test sample before and after accelerated aging with the reading instrument set to read at an illumination of D65, a CIE 10° observer with the specular 35 component excluded, and using the CIELAB colour scale. The location on the sample where the readings are taken, as well as the orientation of the sample in relation to the reading instrument, shall be noted. The same sample location and orientation shall be used for both measurements.
- b) A minimum of three delta E readings shall be taken and averaged.
- c) The test sample shall comply with the performance requirements in Clause 5.10.4.2.

5.10.4

Info

Performance



New clause added;

The following shall apply for non-instrumented performance:

5.10.4.1

- a) There shall be no significant change in colour and surface texture between the test and control samples. A significant change in colour shall be defined as an observable colour difference when the samples are placed next to each other and examined using the conditions specified in Clause 5.10.3.2(a).
- b) If the sample fails to pass the test, two more samples shall be tested and both shall pass.

New section added;

5.26

Inlet connection test

Procedure

The inlet connection test shall be conducted only on water closet tanks which have the water supply shank below the tank water level, as follows:

5.26.1

- a) Connect a 150 mm (6 in) galvanized nipple with a 9.5 mm (0.375 in) inside diameter to the water inlet shank as illustrated in Figure 19 (i.e., the pivot arm).
- b) Fill the tank with water to the manufacturer's recommended maximum level with water at ambient temperature.
- c) Apply a load on the pivot arm with a 6.8 ± 0.5 kg (15 ± 1 lb) mass as illustrated in Figure 18.
- d) Maintain the load in place for approximately 2 min.
- e) Inspect the tank for visible damage and leakage while the load is in place.
- f) Rotate the pivot to two other positions (e.g., 120° and 240° from the original position).
- g) Repeat the steps in Items (c) to (e) in each of those positions.
- h) Remove the load.
- i) Inspect for damage in accordance with the procedure specified in Clause 5.4.

Performance

5.26.2

The following shall apply at the end of the test:

- a) There shall be no visible cracks or water leakage either when the load is in place or after removal of the load.
- b) There shall be no permanent distortion after removal of the load.

New section added;

5.27

Deflection test



The deflection test for water closet tanks shall be conducted as follows:

- 5.27.1
- a) Install the tank on a matching water closet bowl or suitable test fixture.
 - b) Install deflection gauges on the sides, front, back, and bottom of the tank. The side, front, and back gauges shall be positioned 13 mm (0.5 in) below the water level, centered along the tank. The bottom gauges shall be equally spaced. All gauges shall be positioned away from reinforcing ribs, when present. See Figure 20.
 - c) Fill the tank to the manufacturer's recommended maximum level with water at ambient temperature.
 - d) Measure and record the deflections.
 - e) Add the two side deflections, the front and back deflections, and the two bottom deflections.

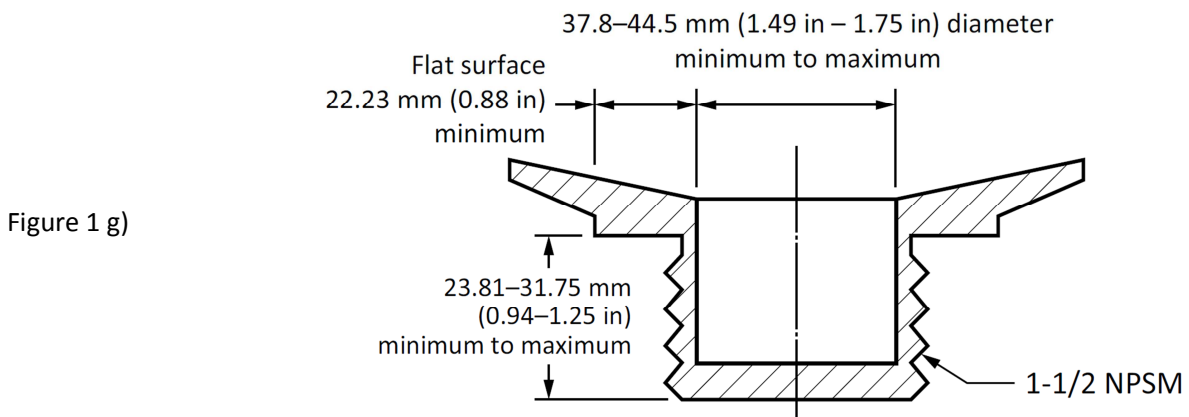
Performance

The sums of the deflections shall not exceed

- 5.27.2
- a) 1.5 mm (0.06 in) for the sides of the tank;
 - b) 4.6 mm (0.18 in) for the front and back of the tank; and
 - c) 1.0 mm (0.04 in) for the bottom of the tank.

In addition, each individual deflection shall not exceed 75% of the values specified in Items (a) to (c).

New figure added;



g) Laundry sink outlet with integrated drain fitting

CUSTOMERS PLEASE NOTE: This Table and column "Verdict" can be used in determining how your current or future production is or will be in compliance with new/revised requirements.