



**INTERNATIONAL ASSOCIATION OF PLUMBING  
AND MECHANICAL OFFICIALS**

**IAPMO GUIDE CRITERIA  
FOR  
NON-METALLIC FIXTURES**

**TS 11–2011a**

**1. SCOPE AND PURPOSE**

- 1.1** This Standard covers non-metallic fixtures such as shower receptors, shower stalls, lavatories, sinks, bathtubs, and step tub/shower combination waste holding tanks intended for use in manufactured housing and recreational vehicles (e.g., trailers) and specifies requirements for materials, physical characteristics, performance tests, and markings and identification.
- 1.2** The purpose of this Standard is to enhance health and safety by:
- (a) specifying minimum acceptable criteria for non-metallic fixtures;
  - (b) serving as a guide for producers, distributors, architects, engineers, contractors, installers, inspectors, and users; and
  - (c) promoting understanding regarding materials and manufacturing of non-metallic fixtures.
- 1.3** The requirements of this Standard are not intended to prevent the use of alternate materials or methods of construction provided such alternates meet the intent of this Standard.
- 1.4** Amendments to this Standard will be made after processing according to the standards writing procedures of IAPMO.

**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 A112.19.2/CSA B45.1 | Ceramic Plumbing Fixtures                                                                     |
| ASTM E162                | Standard Test Method for Surface Flammability of Materials Using a Radiant Heat Energy Source |
| CSA B45.5/IAPMO Z124     | Plastic Plumbing Fixtures                                                                     |
| IAPMO TS 2               | Waste Holding Tanks                                                                           |
| IAPMO UPC                | Uniform Plumbing Code                                                                         |

### 3. GENERAL REQUIREMENTS

#### 3.1 Shower Receptor and Shower Stall Dimensions

- 3.1.1** Shower receptors and shower stalls which encompass a diameter of 760 mm (30 in) or more, measured when the door or curtain is closed, and have a minimum horizontal cross-sectional area of  $0.66 \text{ m}^2$  ( $1,024 \text{ in}^2$ ) shall comply with the shower stall requirements specified in Sections 411.4 to 411.7 of the UPC.
- 3.1.2** Shower receptors and shower stall floors shall have a
- (a) minimum area of  $0.15 \text{ m}^2$  ( $240 \text{ in}^2$ ); and
  - (b) clear standing space of not less than 305 mm (12 in) in its smallest dimension, measured at a height equivalent to the top of the threshold.
- 3.1.3** Shower stalls shall have a
- (a) cross-sectional area of not less than  $0.26 \text{ m}^2$  ( $400 \text{ in}^2$ ); and
  - (b) minimum dimension of 510 mm (20 in) measured at a height equivalent to the top of the threshold.
- 3.1.4** Shower receptors and shower stalls shall have a depth between 50 and 230 mm (2 and 9 in), measured from the top of the threshold to the top of the drain.

#### 3.2 Bathtub Dimensions

- 3.2.1** The distance between the wall surfaces of bathtubs shall be at least 460 mm (18 in) measured at a height of 50 mm (2 in) above the horizontal seating area.
- 3.2.2** The floor area of bathtub shall be at least  $0.39 \text{ m}^2$  ( $600 \text{ in}^2$ ).
- 3.2.3** Bathtubs shall have a minimum depth of 230 mm (9 in) measured from the top of the entry dam to the top of the drain outlet.

#### 3.3 Step Tub/Shower Dimensions

- 3.3.1** Minimum dimensions for step tub/showers seats shall be  $460 \times 190 \text{ mm}$  ( $18.0 \times 7.5 \text{ in}$ ) (width by length) measured at the vertical wall surface above the horizontal seating area.
- 3.3.2** The minimum dimensions of the floor (standing space) for step tub/showers with seats shall be  $410 \times 610 \text{ mm}$  ( $16 \times 24 \text{ in}$ ) or  $0.25 \text{ m}^2$  ( $384 \text{ in}^2$ ).

#### 3.4 Drainage and Slope

- 3.4.1** Waste fitting openings (outlets) shall comply with the applicable requirements of CSA B45.5/IAPMO Z124.
- 3.4.2** Except for lavatories and sinks, the floor of fixtures with flat bottoms shall slope uniformly to the drain with a gradient between 21 and 42 mm/m (0.25 and 0.50 in/ft).