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INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS

IAPMO GUIDE CRITERIA FOR FLOOR DRAIN WITH INTEGRATED CLOSET FLANGE

IGC 249-2007

1. PURPOSE

- 1.1** The purpose of this standard is to establish a generally acceptable standard for floor drain with an integrated closet flange for water closets. Its purpose is to serve as a guide for producers, distributors, architects, engineers, contractors, installers, inspectors and users; and to promote understanding regarding materials, manufacture and installation.
- 1.2** The provisions of this standard are not intended to prevent the use of any alternate material or method of construction provided that any such alternate meets the intent and requirements of this document and changes are amended to this standard.

2. SCOPE

- 2.1** This standard covers physical requirements and tests for types of materials, dimensions and certain features of construction and finish of the final product are also given, together with the methods of marking and identification.

3. REFERENCE STANDARDS

- 3.1** All standards referenced herein shall be the current edition of that standard

ASME A112.6.3	Floor and Trench Drains
ASME A112.18.2/CSA B125.2	Plumbing Fixture Waste Fittings
ASTM A 888	Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping
ASTM D 1784	Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride)(CPVC) Compounds
ASTM D 3311	Drain, Waste, and Vent (DWV) Plastic Fittings Patterns
ASTM D 3965	Rigid Acrylonitrile-Butadiene-Styrene (ABS) Materials for Piping and Fittings
IAPMO/ANSI Z124.4	Plastic Water Closet Bowls and Tanks

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4. GENERAL REQUIREMENTS

- 4.1 Drain bodies and closet flange shall be complying with the material requirements in Section 4 of ASME A112.18.2/CSA B125.2.
 - 4.1.1 Finishes shall comply with Section 6.2 of ASME A112.6.3
- 4.2 The closet flange shall be approximately 7 inches (175 mm) in diameter and when installed, shall present a 1-1/2 inch (38 mm) wide flange or face to receive the fixture gasket or closet seal. The outlet of the fitting shall be sized in accordance with the manufacturer's specifications and shall accommodate to the nominal pipe size of the connecting pipe system.
 - 4.2.1 The extension sleeve of the flange shall provide a sleeve sized to accommodate the inside dimension of the drain and create a smooth transition through a spigot outlet into the connecting pipe system.
- 4.3 Fitting dimensions and other physical details shall be as indicated in the attached drawing.
 - 4.3.1 All tolerances, except as otherwise noted, shall be $\pm 1/32"$ for fractions and ± 0.005 for decimals.
- 4.4 Minimum wall thickness of plastic fittings shall be 0.062" (1.58 mm). Minimum wall thickness of cast iron fittings shall be 0.22" (5.6 mm).
- 4.5 Trap primers shall comply with the requirements in ASSE 1018, ASSE 1044 or IAPMO PS 76.
- 4.6 Screws, bolts and inserts shall be stainless steel.
- 4.7 Drain grid shall be made of 300 series stainless steel having a minimum 1/16" thickness and shall be easily removed without requiring tools for easy access to clean the receptor.
- 4.8 Copper tubing shall comply with ASTM B 88.
- 4.9 Shims or other components used for elevating the water closet shall be made of corrosive resistant material and comply with the requirements in Section 5.3 of this standard. Adhesive material used for attaching shims or components to water closet shall comply with the applicable standard.

5. TESTING REQUIREMENTS

- 5.1 **Thermal Cycle.** Fittings shall be tested in accordance with Section 5.3.2.2 of ASME A112.18.2/CSA B125.2 and shall comply with the performance requirements in Sections 5.3.1 of that standard.

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