

**INTERNATIONAL ASSOCIATION OF PLUMBING
AND MECHANICAL OFFICIALS**

INTERIM GUIDE CRITERIA

FOR

**ABS (ACRYLONITRILE-BUTADIENE-STYRENE)
OR PVC (POLY VINYL CHLORIDE) COMBINATION PLASTIC TOILET FITTING AND
FLANGE FOR CONNECTING WATER CLOSETS TO THE DRAINAGE SYSTEM**

IAPMO IGC 165-2001

1. PURPOSE

- 1.1 The purpose of this IGC is to establish a generally acceptable standard for ABS or PVC, combination plastic toilet fitting and flange for connecting water closets to the drainage system. Its purpose is to serve as a guide for producers, distributors, architects, engineers, contractors, installers, inspectors, and users; to promote understanding regarding materials, manufacture, installation and performance; and to provide a means for identifying ABS or PVC combination plastic toilet fitting and flanges that comply with this IGC.
- 1.2 The provisions of this IGC are not intended to prevent any alternate material or method of construction, provided any such alternate meets the intent of this IGC.

2. SCOPE

- 2.1 This IGC covers definitions, general requirements, performance test requirements, and marking and identification.

3. GENERAL REQUIREMENTS

3.1 Materials

- 3.1.1 ABS compound used to make combination plastic toilet fittings and flange shall meet or exceed the requirements prescribed in ASME A112.4.3 section 2.2.3.1 for ABS.
- 3.1.2 PVC plastic compound used to make combination plastic toilet fitting and flanges shall meet or exceed the requirements prescribed in ASME A112.4.3 section 2.2.3.2 for PVC.
- 3.1.3 Rubber or elastomeric for ring seal and seal material covered by these criteria shall be free of defects such as cracks, holes, blisters or tears that may affect the use and serviceability.
- 3.2 Installation shall be in accordance with the manufacturer's recommendations and accepted plumbing procedures.

3.3 Closet Flange Outlet Dimensions

- 3.3.1 The closet flange outlet dimensions shall meet the following requirements:

<u>Material</u>	<u>Dimensions</u>
ABS	ASTM D2661 or CSA B181.1
PVC	ASTM D2665 or CSA B181.2

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- 3.3.2 The closet flange fitting pattern shall meet the applicable dimensions of ASTM D 3311.
- 3.4 The plastic toilet adaptor and adhesive ring mounted on top of the flange shall accommodate all water closets that comply with the dimensional requirements in ASME A 112.19.2M.

4. PERFORMANCE REQUIREMENTS

4.1 Hydrostatic Pressure Test/ Joint Tightness Test

- 4.1.1 **Test Method.** The outlet of the ABS or PVC combination plastic toilet fitting and flange shall be solvent welded to ABS or PVC pipe of appropriate size according to the manufacturer's installation instructions. With the inlet sealed the assembly shall be filled with water, expelling all air and pressurizing to 10 psi (69 kpa). The internal pressure shall be measured by a pressure gauge.

Note: For safety, the test device shall provide a means for bleeding air before commencing the hydrostatic pressure test.

- 4.1.2 **Test Results.** No leakage shall occur on the joint when held under continuous test pressure for a fifteen (15) minute test period.

4.2 Perpendicular Misalignment Joint Tightness Test

- 4.2.1 **Test Method.** The outlet of the ABS or PVC combination plastic toilet fitting and flange shall be solvent welded to ABS or PVC pipe of appropriate size according to the manufacturer's installation instructions. After 15 minutes in a normal installed position deflect the toilet adapter to an angle 5 degrees from the horizontal plane. With the inlet sealed the assembly shall be filled with water, expelling all air and pressurizing to 10 psi (69 kpa). The internal pressure shall be measured by a pressure gauge.

Note: For safety, the test device shall provide a means for bleeding air before commencing the hydrostatic pressure test.

- 4.2.2 **Test Results.** No leakage shall occur on the joint when held under continuous test pressure for a fifteen (15) minute test period.

5. MARKINGS AND IDENTIFICATION

- 5.1 The product shall have the following permanent markings:

- (a) Manufacturer's name or trademark;
- (b) Size or model number; and
- (c) The symbol PVC or ABS.

Adopted: 7/2001