

**Installation Standard  
For  
PVC BUILDING DRAIN, WASTE AND VENT PIPE AND FITTINGS**

**IAPMO IS 9-2006**

**1.0 SCOPE**

**1.1** This installation standard shall apply to PVC building drain, waste, and vent systems as governed by the Uniform Plumbing Code. Material Standard ASTM D2665, "Standard Specification for Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste and Vent Pipe and Fittings", shall form part of this installation standard.

**1.2** Installation, material and inspection shall comply with the current edition of the Uniform Plumbing Code [UPC]<sup>TM</sup> published by the International Association of Plumbing and Mechanical Officials and shall also comply with this standard.

**Note:** The Building Official shall be consulted about penetration of fire separations, height and area, or other limitations.

**Note:** The following sections of the Uniform Plumbing Code apply.

- 101.4.1.1 Repair and Alterations
- 103.5 Inspections
- 103.5.3 Testing of Systems
- 218.0 Definition PVC
- 301.1 Minimum Standards
- 311.8 Screwed Fittings
- 310.0 Workmanship
- 311.0 Prohibited Fittings and Practices
- 313.0 Protection of Piping, Materials, and Structures
- 314.0 Hangers and Supports
- 316.1.6 Type of Joints – Solvent Cement Plastic Pipe Joints
- 316.2 Special Joints
- 316.3 Flanged Fixture Connections
- 316.4 Prohibited Joints and Connections
- 317.0 Increasers and Reducers
- 408.4 Closet Flanges
- 701.0 Materials (Drainage)
- 707.1 Cleanout Fittings
- 903.0 Materials (Venting)
- 903.3 Straining or Bending Pipe

- 1003.0 Traps Described
- 1101.3 Materials Uses
- Table 14-1 Pipe and Fittings
  - ASTM D 2665    ASTM D 2122
  - ASTM D 3311

**ABBREVIATIONS**

- ASTM    American Society for Testing and Materials
- IAPMO    International Association of Plumbing and Mechanical Officials
- UPC    Uniform Plumbing Code

**2.0 PRODUCT REQUIREMENTS**

**2.1 Minimum Standards**

**2.1.1 Pipe.** PVC pipe markings shall be in accordance with ASTM D2665. [UPC 301.1.2]

**2.1.2 Fittings.** PVC fitting markings shall be in accordance with ASTM D2665 or ASTM D3311. [UPC 301.1.2]

**2.1.3 Solvent Cement.** Solvent cement label markings shall be in accordance with ASTM D2564.

**2.1.3.1** Solvent cements shall not be purple in color.

**2.1.4 Primers.** Primer container markings shall be in accordance with F 656.

**2.1.4.1** Primer shall be purple.

**2.2 Workmanship**

**2.2.1 Alignment**

All piping systems components shall be aligned properly without strain. Pipe shall not be bent or pulled into position. Vertical piping shall be maintained in straight alignment between floors with midstory guides.

Pipe and fittings shall be so positioned that identifying markings shall be readily visible for inspection. [UPC 310.0]

**2.3 Protection of Piping**

**2.3.1 Storage**

Pipe and fittings should not be stored in direct sunlight; however, exposure to sunlight during normal construction periods

<sup>1</sup> Although referenced in this standard, some of the fittings shown in the standard are not acceptable under the Uniform Plumbing Code.

<sup>2</sup> It is common practice to dual mark Schedule 40 DWV and potable water piping in which compliance with each applicable standard is met.