

**Installation Standard
For
NON-METALLIC BUILDING SEWERS**

IAPMO IS 1-2006

1.0 SCOPE

1.1 Installation and material of non-metallic building sewer piping shall comply with this standard and the current edition of the Uniform Plumbing Code [UPC]TM published by the International Association of Plumbing and Mechanical Officials.

Note: The following sections of the Uniform Plumbing Code apply to non-metallic building sewer piping. The standard may include section numbers or may omit section numbers which pertain to non-metallic sewers.

- 301.1 Minimum Standards
- 310.0 Workmanship
- 311.0 Prohibited Fittings and Practices
- 313.0 Protection of Piping, Materials, and Structures
- 315.0 Trenching, Excavation, and Backfill
- 723.0 Building Sewer Test
- 103.5.3.3 Exceptions
 - 705.1 Types of Joints
 - 705.2 Use of Joints
- 316.2.3 Plastic Pipe to Other Materials
- 316.4 Prohibited Joints and Connections
- 317.0 Increasers and Reducers
- Chapter 7 Sanitary Drainage

2.0 GENERAL REQUIREMENTS

- 2.1** After inspection of the sewer pipe, carefully backfill the trench as prescribed by Sections 315.0 of the Uniform Plumbing Code.
- 2.2** The same water test procedure shall apply to all non-metallic house sewer materials as required in Section 723.0 of the Uniform Plumbing Code.
- Before laying non-metallic sewer pipe, prepare the bottom trench so that the piping shall lay on a firm bed throughout its entire length as required by Section 718.0 of the Uniform Plumbing Code.

3.0 PRODUCT REQUIREMENTS

3.1 ABS OR PVC-DWV PIPE

3.1.1 Minimum Standards

ABS or PVC Schedule 40 DWV pipe for use in domestic sewage, excluding special waste, shall be installed in accordance with IAPMO Standards IS 5 and IS 9 (latest edition), whichever is applicable. ABS or

PVC Schedule 40 DWV pipe, may be used in sizes 2 inch (51 mm) and larger. [UPC 301.1, 701.0]

3.1.2 Markings

3.1.2.1 ABS Pipe. ABS pipe markings shall be in accordance with ASTM D2661 or ASTM F628. [UPC 716.0]

3.1.2.2 ABS Fittings. ABS fittings markings shall be in accordance with ASTM D2661. [UPC 716.0]

3.1.2.3 PVC Pipe. PVC pipe markings shall be in accordance with ASTM 2665. [UPC 716.0]

3.1.2.4 PVC Fittings. PVC fittings markings shall be in accordance with ASTM F2135. [UPC 716.0]

3.1.3 Protection of Building Sewers

ABS or PVC Schedule 40 pipe shall be installed a minimum of 1 foot (305 mm) below the surface of the finished grade. Underground installation of thermoplastic sewer pipe shall be in accordance with ASTM D2321. [UPC 718.0]

3.1.4 Cleanouts

Cleanouts, extended to within 1 foot (305 mm) of grade, shall be of materials listed for that use. [UPC 719.0]

3.2 PVC SEWER PIPE

3.2.1 Minimum Standards

3.2.1.1 Pipe

PVC, PSM, SDR 35, ASTM D3034 and PVC, PS-46, ASTM F789 Non-Pressure Pipe may be used in sizes four (4) inches (102 mm) and larger. [UPC 301.1, 701.1]

3.2.1.2 Fittings

All fittings shall be PVC or other listed non-metallic materials having equivalent durability and equal or greater strengths. [UPC 301.1, 701.2]

3.2.2 Types of Joints

PVC sewer pipe shall be joined by using compression joints or by other methods recognized in the UPC. Pipe and fitting ends shall be lubricated with an approved soap jelly or soap solution to permit easy assembly. [UPC 705.1]

3.2.2.1 Use of Joints

PVC sewer pipe shall be installed using the same type of jointing throughout, except when connecting to existing piping, piping