

**Installation Standard
For
COPPER PLUMBING TUBE, PIPE, AND FITTINGS**

IAPMO IS 3-2006

1.0 SCOPE

1.1 Installation and material of copper tube, pipe and fittings in drainage, vent, and water systems 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 (IAPMO).

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

- 103.5.3 Testing of systems
- 301.1 Minimum standards
- 310.0 Workmanship
- 311.0 Prohibited fittings and practices
- 313.0 Protection of piping materials and structures
- 314.0 Hangers and supports
- 316.1 Types of joints
- 316.2 Special joints
- 316.4 Prohibited joints and connections
- 317.0 Increases and reducers
- 604.0 Materials
- 604.1 Water piping
- 604.2 Water piping
- 604.3 Marking of tubing
- 604.4 Flexible water connectors
- 604.7 Restriction of used piping
- 606.1.1 Flared joints
- 606.2.1 Use of joints, copper water tube
- 608.0 Relief valve drain
- 609.0 Installation, inspection, testing
- 610.0 Size of potable piping
- 701.1.4 Drainage and vent piping
- 704.4.1 Closet flanges
- 705.3.3 Ground joint, flared or ferrule connections
- 707.1 Cleanouts
- 701.0 Materials, drainage piping
- 811.1 Chemical or industrial waste piping
- 903.0 Materials, vent piping
- 903.2 Use of copper tubing
- 1101.3 Materials, rain water piping

1105.1 Materials, roof drains

Table 14-1 Standards

ASME B 16.18	Cast Copper Alloy Solder-Joint Pressure Fittings
ASME B 16.22	Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings
ASME B 16.23	Cast Bronze Solder-Joint Drainage Fittings - DWV
ASME B 16.29	Wrought Copper and Copper Alloy Solder-Joint Drainage Fittings
ASME B 16.50	Wrought Copper and Copper Alloy Braze-Joint Pressure Fittings
ASTM B 32	Solder Metal
ASTM B 42	Seamless Copper Pipe, Standard Sizes
ASTM B 75	Seamless Copper Tubes
ASTM B 88	Seamless Copper Water Tube
ASTM B 302	Threadless Copper Pipe, Standard Sizes
ASTM B 306	Copper Drainage Tube (DWV)
ASTM B 813	Liquid and Paste Fluxes for Soldering Applications of Copper and Copper Alloy Tube
ASTM B 828	Standard Practice for Making Capillary Joints by Soldering of Copper and Copper Alloy Tube and Fittings
Appendix A	Chart A-4 Friction loss per 100 ft. (30.5 m)

2.0 PRODUCT REQUIREMENTS

2.1 Minimum Standards

2.1.1 Materials. Materials shall comply with the appropriate standard in Table 14-1 of the UPC. [UPC 301.1]

Note: *The nominal or standard size of copper plumbing tube is always 0.125 inch (3.175 mm) or one-eighth (1/8) inch (3.175 mm) smaller than the actual outside diameter dimension of the tube. For example, 3 inch (76 mm) nominal size*