cold water distribution piping shall be installed with a smaller remote manifold at such locations where groups of fixtures are located. Such manifold shall be either flow-through or closed end. All manifolds shall be accessible. Individual water distribution piping shall be installed to each fixture.

611.2 Valves. Individual fixture shut off valves shall be installed at the manifold and identify the fixture served. All valves shall be accessible.

611.3 Installation. Tubing for the installation of manifold and gridded systems shall be installed in accordance with the manufacturer's instructions. Tubing shall be not less than 30cm (12 in.) vertically or 15cm (6 in.) horizontally from sources of high heat. Tubing shall be installed to permit expansion and contraction. Water distribution piping shall be bundled together and shall permit movement.

611.4 Sizing. Hot and cold water manifolds shall be sized in accordance with Table 6-5.

Individual water distribution piping for manifold systems shall be sized in accordance with Table 6-6.

612.0 Drinking Water Treatment Units.

612.1 Compliance with Standard. Drinking water treatment units shall meet the requirements of the appropriate standard referenced in Table 14-1 or equivalent International Standard(s) approved by the Authority Having Jurisdiction.

612.2 Airgap Discharge. Discharge from drinking water treatment units shall enter the drainage system through an airgap or an airgap device that meets the requirements of the appropriate standards referenced in Table 14-1 or equivalent International Standard(s) approved by the Authority Having Jurisdiction.

612.3 Connection Tubing. The tubing to and from drinking water treatment units shall be of a size and material as recommended by the manufacturer. The tubing shall comply with the requirements of the appropriate standards referenced in Table 14-1 or equivalent International Standard(s) approved by the Authority Having Jurisdiction.

612.4 Sizing of Residential Softeners. Residential-use water softeners shall be sized per Table 6-8.

TABLE 6-5
Manifold Sizing

Nominal Size Internal Diameter	Maximum Demand Litres per Minute (lpm)	
	Velocity at 1.22 Metres per Second	Velocity at 2.44 Metres per Second
mm	lpm	lpm
15	8	19
20	23	42
25	38	76
32	57	117
40	83	167

SI: 1mm = 0.04in.; 1m/s = 3.3 ft./s

TABLE 6-6
Minimum Sizes of Individual Water Distribution Piping for Manifold Systems

Fixture	Minimum Pipe Size
	mm
Bathtubs and Whirlpool Tubs	15
Tub and Shower Combination	15
Shower (Single Head)	15
Lavatory	10
Water closet (Private) Flush Tank	10
Water closet (Public) Flush Tank	15
Water closet (Public) Flush Valve	20
Urinal (Private) Flush Tank	10
Urinal (Public) Flush tank	15
Urinal (Public) Flush Valve	15
Bidet (Private) Flush Tank	10
Bidet (Public) Flush Valve	15
Kitchen Sink	10
Laundry or Washing Machine	10
Utility Sink	10

SI: 1mm = 0.04 in.