



DESIGN GUIDELINE 331000 **WATER SUPPLY SYSTEMS**

General

The City of Ann Arbor's local plumbing codes supplement the State and National codes. Consult the City Engineer through the University Design Manager for specific interpretation.

The purchase of the water meter is the responsibility of the University; however, installation will be by the City. The Contractor is responsible for obtaining all necessary permits. The water use and sewer use fees for the water meter will be the responsibility of the University.

Related Sections

[6.0 DG 230000 - Basic Mechanical Requirements](#)

[6.0 DG 221113 – Basic Piping Materials and Methods](#)

Material Requirements

Materials from the City main to the entrance into the building shall meet City of Ann Arbor requirements.

Piping inside the building downstream of the City water meter should be copper. Brass nipple and/or dielectric flanges shall be used between dissimilar metals. Dielectric unions are not acceptable.

Installation Requirements

An approved backflow preventer shall be installed at the point of entry in new buildings, and at the point of take-off of new piping in renovation projects whenever the water is to be used for non potable purposes. See Section DG220010. Backflow preventers shall be tested and certified upon installation of unit.

All fixtures connected to purified water systems shall contain approved vacuum breakers.

The A/E shall consult with the University Design Manager to determine if the existing building distribution system is sufficiently large to support the new demands.

All water pipes should be pitched to facilitate complete drainage.

Water hammer arresters should be installed at all fixture groups.

Newly installed pipes should be cleaned and chlorinated. The method used should be as set forth in AWWA Standard Specifications, latest edition, including all amendments thereto. The treatment should consist of a solution of not less than 50 ppm of available chlorine (liquid chlorine or sodium

hypo chloride). After sterilization the system should be flushed with clean water until the chlorine residual is not greater than 0.2 ppm.

The high oxygen content of Ann Arbor water should be compensated for. One acceptable method is treating with sodium silicate prior to occupancy.

System must pass inspection by City of Ann Arbor.