609.3 Water piping installed within a building and in or under a concrete floor slab resting on the ground shall be installed in accordance with Section 315.0.

609.4 Testing. Upon completion of a section or the entire hot and cold water supply system shall be tested and proved tight under a water pressure of not less than the working pressure under which it shall be used. The water used for tests shall be obtained from a potable source of supply. Except for plastic piping, air pressure equal to 3.5bar (50psi) shall be permitted to be substituted for the water test. In either method of test, the piping shall withstand the test without leaking for a period of not less than 15 minutes.

609.5 Unions. Unions shall be installed in the water supply piping not more than 30cm (12 in.) of regulating equipment, heating, conditioning tanks, and similar equipment that requires service by removal or replacement in a manner that will facilitate its ready removal.

609.6 Location. Except as provided in Section 609.7, no building supply shall be located in any lot other than the lot that is the site of the building or structure served by such building supply.

609.7 Nothing contained in this code shall be construed to prohibit the use of all or part of an abutting lot to:

609.7.1 Provide access to connect a building supply to an available public water service when proper cause and legal easement not in violation of other requirements have been first established to the satisfaction of the Authority Having Jurisdiction.

609.7.2 Provide additional space for a building supply when proper cause, transfer of ownership, or change of boundary not in violation of other requirements have been first established to the satisfaction of the Authority Having Jurisdiction. The instrument recording such action shall constitute an agreement with the Authority Having Jurisdiction, which shall clearly state and show that the areas so joined or used shall be maintained as a unit during the time they are so used. Such an agreement shall be recorded as a part of the conditions of ownership of said properties, and shall be binding on heirs, successors, and assigns to such properties. A copy of the instrument recording such proceedings shall be filed with the Authority Having Jurisdiction.

609.8 Disinfection of Potable Water System. New or repaired potable water systems shall be disinfected prior to use whenever required by the Authority Having Jurisdiction. The method to be followed shall be that prescribed by the Health Authority or, in case no method is prescribed by it, the following:

609.8.1 The pipe system shall be flushed with clean, potable water until only potable water appears at the points of outlet.

609.8.2 The system or parts thereof shall be filled with a water-chlorine solution, containing not less than 30mm/L (30 parts per million) of chlorine, and the system or part thereof shall be valved-off and allowed to stand for 1 hour.

609.8.3 Following the allowed standing time, the system shall be flushed with clean, potable water until the chlorine residual in the water coming from the system does not exceed the chlorine residual in the flushing water.

609.8.4 The procedure shall be repeated if it is shown by bacteriological examination made by an approved agency that contamination persists in the system.

609.9 Water Hammer. Building water supply systems where quick-acting valves are installed shall be provided with water hammer arrester(s) to absorb high pressures resulting from the quick closing of these valves. Water hammer arresters shall be approved mechanical devices in accordance with the applicable standard(s) referenced in Table 14-1 or equivalent International Standard(s) approved by the Authority Having Jurisdiction and shall be installed as close as possible to quick-acting valves.

609.9.1 Mechanical Devices. When listed mechanical devices are used, the manufacturer's specifications as to the location and method of installation shall be followed.

610.0 Size of Potable Water Piping.

610.1 The size of each water meter and each potable water supply pipe from the meter or other source of supply to the fixture supply branches, risers, fixtures, connections, outlets, or other uses shall be based on the peak demand and shall be determined according to the methods and procedures outlined in this section, engineering methods, or appendices A and L. Water piping systems shall be designed to ensure that the maximum velocities allowed by the code and the applicable standard are not exceeded.

610.2 Where a water filter, water softener, backflow prevention device, or similar device is installed in any water supply line, the pressure loss through such devices shall be included in the pressure loss calculations of the system, and the water supply pipe and meter shall be adequately sized to provide for any such pressure loss.

No water filter, water softener, backflow prevention device, or similar device regulated by this code shall be installed in any potable water supply piping