

### **Redlined Code Section**

Deleted language indicated by strikethrough and inserted language indicated by underline.

#### Chapter 94. Water Code – Interior Work

##### **Sec. 94.01. Interior piping size.**

- (a) The interior piping ~~continued~~ from the meter setting shall remain the same size as the service to the water heater branch or the first major take off~~be continued, to the last take off, the same size as the service~~ except; in the instance when the service is over one inch, the water utility may approve when and at what point such interior pipe beyond the meter may be reduced in size.
- (b) The minimum size cold water connection to a ~~hot~~ water heater shall be three-fourths inch, ~~and the full size of such connection shall be continued to a point directly over the heater. In no case shall the cold water supply of more than three (3) fixtures be supplied from a one-half inch pipe, and the hot water supply of not more than four (4) fixtures shall be supplied from a one-half inch hot water supply line.~~

##### **Sec. 94.02. Reserved. Interior piping, installation.**

- ~~(a) All interior piping shall be installed in a workmanlike manner. Horizontal piping shall be run to a practical alignment and at a uniform grade. The piping shall be well and sufficiently supported by approved hangers to prevent vibration due to water hammer or sagging. Pipes passing through walls shall be protected from breakage. All pipes encased in concrete or other corrosive material shall be protected against external corrosion.~~
- ~~(b) Soft annealed copper tubing may be bent cold but must be supported for its entire length to prevent sagging or trapping and, except where exposed, must be joined with sweat type fittings. Hard and semihard tubing must be adequately supported and may not be bent, suitable fittings being used for changes in direction.~~
- ~~(c) Wherever two (2) pipes of dissimilar materials are joined together, an insulating union shall be provided between them, and such insulation unions shall also be provided at both the inlet and the outlet of all new or replaced hot water heaters.~~

##### **Sec. 94.03. Interior piping branches.**

No branch will be allowed to be taken off the service except on the house side of the meter.

##### **Sec. 94.04. Reserved. Meters, settings, cable installation.**

- ~~(a) The meter setting shall include the water meter, the meter valves and check valve when required, installed in accordance with meter setting standards of the water utility. The normal setting from the centerline of the meter spuds to the wall shall not be less than eight (8) inches for one-inch and smaller meters, or closer than ten (10) inches for two-inch and one and one-half inch meters. The height above the floor in all instances shall not be less than twelve (12) inches or more than forty-eight (48) inches except by special permission.~~

- ~~(b) Piping and materials within the meter setting between the meter valves and at least one foot of the vertical riser shall be type K copper or lead-free brass. Copper materials used before the meter shall be brazed or flared type K. The meter setting and metallic portion of the vertical riser shall be strong and securely attached to an adjacent wall to prevent sagging, swaying or undue vibration. On new services or renewals, the meter shall in all cases be set above the floor.~~
- ~~(c) Large meters may be set directly on the floor when their weight cannot otherwise be properly supported. Where the owner requests a remote meter reading device, the owner or owner's representative shall install cable from the meter to the proposed remote meter reading device location. Cable installation and remote meter reading device location shall conform to water utility standards. Cable shall be furnished in sufficient length to facilitate connection by the water utility at the meter and the remote meter reading device.~~

**Sec. 94.05. Reserved. Curb or yard meter settings.**

- ~~(a) The use of the meter vaults for meter installation will be allowed on by special permission, or at the direction of the water utility. Where permitted or required the meter vault shall be constructed at a site approved by the water utility utilizing materials and design which meet water utility standards. The meter vault must be waterproof and the finished grade sloped to divert drainage away from the vault. Two (2) sets of drawings shall be furnished to the water utility showing a site plan and the details of construction of the vault. A remote meter reading device shall be required in vaults.~~
- ~~(b) It shall be the owner's responsibility to maintain the meter vault and accessibility to the vault so that the water meter can be read on a regular basis. This includes the removal of snow and ice which prevents access to the meter vault and the removal of water from the underground portions of the meter vault when necessary. The water utility, after proper notice, may terminate service if the owner fails to properly maintain the meter vault or accessibility to the meter vault.~~

**Sec. 94.06. Reserved. Removal of meters.**

- ~~(a) Meters shall be removed only by an employee of the water utility except in case of an emergency or when a plumber changes the meter location or drains the system. When a meter is removed for such reason it shall be reset or a spacer pipe shall be inserted, and the water utility shall be notified of such action immediately. It is unlawful to break the seal on any meter except for the purpose above indicated.~~
- ~~(b) Where disconnection of remote reading cable is required when removing a meter, the water utility shall be notified immediately. Reconnection of the cable shall be performed by an employee of the water utility.~~

**Sec. 94.07 Reserved. Meters, shutoff valves.**

~~(a) Each service shall be provided with two (2) valves, one (1) on either side of the meter. Both valves shall be the same size as the service pipe or larger. All meter shutoff valves shall comply with water utility standards.~~

~~(b) On combined fire and domestic water systems, the first shut-off valve on the domestic service shall be an approved full way valve with lockable handle.~~

#### **Sec. 94.08. Shock absorbers.**

Approved shock absorbers may be required by the water utility when it is necessary to reduce water hammer in the water utility ~~distribution~~ system. They shall be located ~~on the building side of the meter and~~ in close proximity ~~to fixtures appurtenances causing the water hammer thereto.~~ Fast closing valves shall not be utilized on the interior piping when such valves cause water hammer.

#### **Sec. 94.09. Reserved. SprinklerIrrigation valves.**

~~The shut-off on the sprinkler irrigation branch shall be a valve with waste with full minimum three-fourth inch opening full way valve of wasting type.~~

#### **Sec. 94.10. Flush valves.**

Flush valves will not be permitted if static pressure at fixture is under twenty-five (25) pounds where water is furnished directly from waterworks mains, or fifteen (15) pounds if water is supplied from an overhead tank for the building's exclusive use. Plumbers can ascertain water main static head by calling the engineering division of the water utility.

#### **Sec. 94.11. Reserved. Check valves.**

~~(a) Check valves shall be of the swing type pattern and either the gate or the seat must be faced with a suitable composition. Metal to metal will not be allowed.~~

~~(b) A check valve shall be placed on every installation between the meter and the second shutoff, except when the hot water tank is equipped with a fully automatic pressure-temperature relief valve as hereinafter specified, and where no danger of back siphonage exists.~~

#### **Sec. 94.12. Reserved. Relief valves.**

~~(a) All hot water storage tanks installed, replaced, repaired or relocated, and every such tank to which a water heating device or appliance, capable of heating water above a temperature of two hundred twelve (212) degrees Fahrenheit, is attached, shall be equipped with a self-closing combination pressure-temperature relief valve of an approved type which shall effectively prevent the temperature of any water in the tank from exceeding two hundred twelve (212) degrees Fahrenheit.~~

~~(b) Pressure-temperature relief valves shall be installed directly in the tank in a tapping provided for this purpose, not over six (6) inches down from the top of the tank, or in the~~

~~hot water supply pipe leading from the top of the tank, and within three (3) inches of the tank.—~~

- ~~(c) Pressure relief valves should be set to relieve at a pressure of approximately twenty (20) pounds higher than the city pressure.—~~
- ~~(d) Pressure relief valves when permitted separately shall be installed on the hot water storage tank or at some point in the hot water supply system.—~~
- ~~(e) The drip or discharge from pressure-temperature relief valves shall not be connected directly to a drainage system, but shall extend to an open fixture or to a point near the floor. The pipe shall be equal to or greater than the valve discharge outlet.—~~
- ~~(f) Temperature relief valves shall be rated as to their B.T.U. capacity and at two hundred twelve (212) degrees Fahrenheit shall be capable of discharging sufficient hot water to prevent any further rise in temperature.—~~
- ~~(g) All relief valves shall be marked by the manufacturer by stamping or casting in the metal of the valve, or on a metal tag permanently attached to the valve, as follows:—~~
  - ~~(1) Manufacturer's name or registered trade mark.—~~
  - ~~(2) The type or style of the valve.—~~
  - ~~(3) The pressure setting of the valve in pounds per square inch.—~~
  - ~~(4) The temperature setting in degrees Fahrenheit.—~~
  - ~~(5) Temperature relieving capacity in B.T.U. per hour.—~~
- ~~(h) All valves shall have been tested and approved by one of the following: The American Gas Association, The National Board of Boiler and Pressure Vessel Inspectors, The National Board of Casualty and Surety Underwriters, or listed under the Re-examination Service of the Underwriters Laboratories, Inc., or as otherwise directed by the board.—~~
- ~~(i) Whenever any existing hot water storage tank and heater installation does not meet the specified requirements and which, on inspection, is determined to be dangerous, such tank and heater shall be replaced or changed to conform to the above safety requirements.—~~

#### **Sec. 94.13. Water heating systems.**

- ~~(a) In the installation of plumbing for the heating of water for domestic use or for house heating purposes, approved safety devices shall be installed to protect against explosion and meter damage.—~~
- (b) Water heaters and water storage tanks having a capacity greater than six (6) gallons and that are connected to a potable water system shall be no higher than eighteen (18) inches above the floor.**

#### **Sec. 94.14. Reserved. Areaways, pipes in.—**

~~Pipes entering premises through exposed areaways must be protected from freezing frost.—~~

#### **Sec.94.15. Reserved. Roof tanks.—**

~~Roof tanks must be provided with automatic devices for completely shutting off the water when they are filled. They shall be provided with ample size overflows.—~~

**Sec. 94.16. Cross connections.**

- (a) No licensed plumber or other person shall cause a physical connection to be made between the city water supply and any other water supply for commercial, domestic, sanitary, fire protection or boiler feed purposes or for any other purpose whatsoever.
- (b) There shall be no connection or other arrangement from a plumbing fixture or device whereby unsafe water or other foreign material may be discharged or drawn into the city water supply system.

**Sec. 94.17. Reserved. Air gap.**

- ~~(a) Every plumbing fixture, receptacle, water supply tank, etc., shall be provided with a proper air gap or other acceptable device to prevent backflow in the water supply.~~
- ~~(b) The minimum air gap for commonly used plumbing fixtures or receptacles shall be as follows:~~

<del>(1)</del>	<del>Lavatories</del>	<del>1 inch</del>
<del>(2)</del>	<del>Laundry trays</del>	<del>1½ inch</del>
<del>(3)</del>	<del>Bath tubs</del>	<del>2 inches</del>
<del>(4)</del>	<del>Flush tanks</del>	<del>1 inch</del>
<del>(5)</del>	<del>Water supply tanks</del>	<del>Twice effective</del>
		<del>diameter of inlet.</del>
<del>(6)</del>	<del>Water supply tanks</del>	<del>Twice effective</del>
		<del>diameter of inlet.</del>

- ~~(c) The water supply to any fixture in which any part of the water supply inlet is located below the spill rim of the fixture, the water supply to any faucet from which the water outlet can be extended below a fixture spill line by any means, and the water supply to any aspirator or laboratory sink or table shall be protected by means of a vacuum breaker.~~
- ~~(d) If the city water is delivered to a tank which is also supplied with water from any source other than the public water supply, such tank shall be open to atmospheric pressure and the public supply shall be supplied above the maximum level of water in the tank and the tank overflow shall be of ample size to fix definitely the maximum level.~~
- ~~(e) Provision for a removable nipple in a new installation will be considered a physical connection and does not meet the requirements contained herein.~~
- ~~(f) The installation or insertion of a removable nipple in a line which connects the city water supply with any other source of supply shall be done only with the written permission of the board of water commissioners and then only in cases of emergency, and the nipple shall not be left in place longer than the period of the emergency.~~
- ~~(g) Where a water meter is set in the same box with the sewer cleanout the board may order the meter removed and set above the floor in accordance with present approved methods, whenever in its opinion there exists any danger of polluting the water supply.~~

#### **Sec. 94.18. Backflow preventers.**

Installation, maintenance and testing of testable backflow preventers shall be in according to the State of Minnesota Plumbing Code. Annual testing ~~of reduced pressure zone backflow preventers is required. Upon receipt of notice for annual testing from the water utility, property owners shall have thirty (30) days in which to have backflow preventer testing accomplished~~ must be performed by a licensed plumber with backflow testing certification or by ~~permanent noncontract staff~~ individuals who possess backflow testing certification and ~~are registered with the water utility. Test results shall~~ must be furnished submitted to the utility. The utility's annual fee per device for administering the backflow preventer testing program ~~shall be thirty five dollars (\$35.00) per device. This annual fee~~ ("Backflow Testing Administration Fee") shall be in the amount listed in the fee schedule established pursuant to Sec. 85.08 and will be applied to the regular water bill.

- (a) A First notice Letter shall be sent annually to owners from the water utility informing the property owner that compliance is required by the Compliance date. The Compliance date shall be defined as the date 30 calendar days after the date shown on the First Notice Letter.
- (b) After thirty (30) days from the Compliance Date, a Backflow Preventer 30-day Non-Compliance Fee in the amount listed in the fee schedule established pursuant to Sec. 85.08 will be applied to the regular water bill.
- (c) After sixty (60) days from the Compliance Date, a placard may be fixed to the building stating that the water service may be shut off and a Backflow Preventer 60-day Non-Compliance Fee, in the amount listed in the fee schedule established pursuant to Sec. 85.08 will be applied to the regular water bill.

Failure to comply with provisions of this section ~~shall be~~ is considered cause to ~~terminate~~ suspend water service, after proper notice., until testing is completed and results are submitted to the utility.