

## **108 PRIVATE FIRE PROTECTION**

### **108.1 COMMERCIAL/INDUSTRIAL PRIVATE FIRE PROTECTION SYSTEMS**

#### **108.1.1 OPERATION OF PRIVATE FIRE PROTECTION SYSTEMS**

Private fire protection systems are installed primarily for fire protection for the property on which they are installed and are not to be used for any other purpose without the express written permission of the Water Utility.

#### **108.1.2 DESIGN OF PRIVATE FIRE PROTECTION SYSTEMS**

Fire service connections and fire lines shall comply with applicable portions of Sections 105 (Water Service Installation), and 106 (Cross Connection and Backflow Prevention) of these Rules and Regulations.

#### **108.1.3 COMBINATION SERVICE FROM FIRE LINE**

A combination domestic service line and fire protection service line, as outlined in Section 105.7 of these Rules and Regulations, may be installed if approved by the owner's fire underwriter. In addition to the valve required at the main, an additional valve shall be installed on the domestic service line so that it may be controlled independently (see Appendix B, figure B-8). Access agreements shall be granted to the Water Utility to allow the access and operation of these valves. Domestic service branches shall be metered in accordance with Section 109 of these Rules and Regulations.

#### **108.1.4 ALTERATIONS TO PRIVATE FIRE PROTECTION**

When requested by the owner and approved by the Water Utility, a private fire system can be altered by a building owner who shall be responsible for any fees charged by the Water Utility.

#### **108.1.5 PRIVATE FIRE HYDRANTS**

- 1) Fire hydrants located on private mains are the responsibility of the owner and are to be used for fire protection only. These hydrants are designated "private fire hydrants". Where it is the owner's intention that these hydrants be used by the public Fire Department, these hydrants shall conform to the requirements of section 107 of these Rules and Regulations and also to the Standard Specifications (see Appendix B, figure B-11). Copies of the Standard Specifications are on file at the office of the Water Utility, 3720 86th Street in Urbandale, Iowa.

- 2) Private fire hydrants may be painted but shall meet the Water Utility's paint specifications. Paint may be purchased from the Water Utility.
- 3) Private hydrants installed at the owner's expense, in accordance with these Rules and Regulation, shall be reviewed by the Water Utility and the Fire Department. Replacement of obsolete hydrants and repair or replacement of hydrants, broken parts, damage caused by physical abuse or improper operation or change of grade will be done at the owner's expense. Standards are available upon request to the Water Utility.
- 4) If a customer would like to hire the Urbandale Water Utility to perform maintenance on his/her privately owned hydrants, a Private Hydrant Maintenance Agreement will need to be completed. Maintenance will include painting, operating, checking drainage, lubricating, replacing cap gaskets as necessary and recording pressure readings. Any additional parts or repairs will be at the owner's expense (See Fee Schedule XXVII).

#### **108.1.6 PENALTIES FOR IMPROPER USE**

When the owners or occupants of any premises are found to be using water from a private fire protection system for any purpose other than fire protection, the Water Utility may discontinue fire service. The Water Utility also reserves the right to require the installation of an approved fire line meter, or additional line meter, at the owner's expense. A penalty may also be imposed against the property owner at a rate as established by the Water Board.

#### **108.2 RESIDENTIAL FIRE PROTECTION SYSTEMS**

All residential fire sprinkler systems shall be metered.

The service line shall be sized according to the combined total of the domestic, Irrigation and fire system demands.

##### **108.2.1 CIRCULATING FIRE PROTECTION SYSTEMS**

This system shall utilize one meter servicing both the domestic and fire demand. (See B-12b)

A circulating system will not be allowed if the total combined flow of the domestic and fire system exceeds 50 gallons per minute (gpm).

This system shall be designed to ensure that there is no stagnant water within the system.

## **108.2.2 NON-CIRCULATING PROTECTION SYSTEMS**

The fire/irrigation demand shall be combined to utilize one water meter. The fire/irrigation meter shall be teed off the service line, after entering the building, so the domestic and the fire/irrigation systems are independently metered. (See B-12a)

Fire/irrigation meters shall be installed not more than 4 feet from the domestic meter. There shall be a valve on each side of the water meter.

This system shall have an approved backflow device as described in Urbandale Rules and Regulations, Chapter 106. The backflow device shall be installed inside the house directly after the fire/irrigation meter.