# ROGERS WATER UTILITIES WATER SYSTEM ROGERS, ARKANSAS

#### SPECIFICATIONS FOR DRY-BARREL FIRE HYDRANTS REVISED AUGUST 2006

### 1. **SCOPE**

This product specification covers post-type, dry-barrel fire hydrants with compression shutoff (opening against pressure) or gate shutoff for use in water supply service in all climates. All products furnished shall conform to the American National Standards Institute and ANSI /AWWA C5502-94 or latest revision thereof, UL 246 and FM 1510 specifications.

### 2. GENERAL REQUIREMENTS

- a. Fire hydrant shall be designed for a minimum working pressure of 200 psi.
- b. The length of bury of the fire hydrant shall be as specified on project construction plans. The minimum depth of bury of the fire hydrant is 3½ feet.
- c. The fire hydrant shall have two ( $2\frac{1}{2}$  inch) hose nozzles and one ( $4\frac{1}{2}$  inch) pumper nozzle.
- d. The fire hydrant outlet-nozzle threads are to conform to the National Fire Protection Association (NFPA) 1963, Standard for Fire Hose Connections.
- e. The nominal diameter of the main fire hydrant valve opening shall be 5<sup>1</sup>/<sub>4</sub> inches.
- f. The fire hydrant seat shall be removable, using a short lightweight wrench that will fit all depths of bury of a fire hydrant.
- g. The fire hydrant shoe shall be provided with a mechanical flange (ANSI 125) connection to fit the water supply connecting pipe from the water main. Shoe mechanical flange shall be a non-rotating bolt design.
- h. The fire hydrant shall open left (counter clockwise).
- i. The fire hydrant shall have a non-rising stem.
- j. No more than one extension shall be provided if required to raise breakaway flange of the fire hydrant grade level.

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- k. The fire hydrant shall have a breakaway flange (safety flange) at the ground line as stipulated in Section 3.1 General Design of AWWA C502-94 or latest revision thereof.
- 1. The fire hydrant nozzle cap chains shall be required and shall be attached permanently to the fire hydrant as stipulated in Section 3.2 General Design of AWWA C502-94 or latest revision thereof.
- m. Parts of the fire hydrant that require lubrication and come within contact with water shall be lubricated with non-toxic lubricant that does not pose a health hazard to the public if consumed.

# 3. **<u>PAINT</u>**

- a. The exterior surface of the public fire hydrant shall be coated with a coating that shall meet or exceed the requirements of Federal Specifications TT-C-494b. A second coat of oil based enamel paint, aluminum in color with reflective glass beads, will then be applied from the top of the hydrant to the traffic breakaway flange connection at the ground. Private fire hydrants shall be coated in oil based enamel paint, red in color.
- b. All fire hydrant interior surfaces, machined surfaces, such as the threaded portion of the stem or stem nut that must fit closely with adjacent parts shall be coated with a coating that shall meet or exceed the requirements of Federal Specifications TT-C-494b.
- c. The interior and exterior of the fire hydrant shoe shall be coated with a fusionbonded epoxy having a nominal dry film thickness of 8 mils, conforming to AWWA C550-81 and certified to NSF 61.
- d. If damage to the aluminum exterior surface of the public fire hydrant occurs during the handling and/or installation of the hydrant, the material supplier and/or contractor shall be responsible for the touch-up/repair of said exterior surface. The touch-up/repair of the exterior surface shall involve the application of aluminum paint and the touch-up/repair coating of the exterior surface shall be 8 mils of dry film thickness.

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## 4. **QUALITY ASSURANCE**

- a. The Rogers Water Utilities may, at no cost to the manufacturer, subject random fire hydrants to testing by an independent laboratory for compliance with these standards. Any visible defect or failure to meet the quality standards herein will be grounds for rejecting.
- b. All fire hydrants shall be domestically manufactured.

The following manufactures are approved for fire hydrants.

# APPROVED MANUFACTURERS LIST

Mueller Company

Centurion A-423, Traffic Model

Clow Valve Company

Medallion F-2545, Traffic Model

Previous Specifications March 2006