

**ROGERS WATER UTILITIES WATER SYSTEM**  
**ROGERS, ARKANSAS**

**SPECIFICATIONS FOR**  
**RESILIENT-SEATED GATE VALVES**  
**REVISED DECEMBER 2004**

1. **SCOPE**

This product specification covers resilient-seated gate valves, with nominal diameters of 2 in., 3 in., 4 in., 6 in. and 8 in. in size, refer to the nominal diameter in inches, of the waterway through the inlet and outlet connections and the closure area. All products furnished shall conform to the American National Standards Institute and American Water Works Association C509 Standard (ANSI/AWWA C509-01) or latest revision thereof.

2. **GENERAL REQUIREMENTS**

- a. Except as otherwise modified or supplemented herein, AWWA Standard C509-01 or the latest revision thereof, shall govern the design, component materials, construction; manufacture and testing of all resilient seated gate valves. Valves shall be suitable for frequent operation as well as service involving long periods of inactivity. Valves shall be NSF-61 certified.
- b. The minimum design working water pressure for gate valves with nominal diameter of 2 in., 3 in., 4 in., 6 in. and 8 in. shall be 200 psig unless otherwise specified.
- c. Valves shall be resilient-seated types, bronze mounted with non-rising stems with 2-inch by 2-inch square operating nut. The closure member shall be fully encapsulated by an elastomer without thin spots or voids. When open the valve shall have a clear, full-port, obstructed waterway.
- d. Gray iron, ductile iron, steel, brass and bronze materials shall meet or exceed the material requirements of Section 2: Material of AWWA C509-01.
- e. The gate valves shall be designed and constructed for installation in either a horizontal. Valves shall be designed for buried installation with stem in vertical position and shall be furnished for mounting in a horizontal pipeline, unless otherwise specified.

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- f. Valve ends shall be either flanged, screwed, mechanical joint or as specified. All mechanical joint valves shall be supplied with glands, bolts, and gaskets. Valve body bolts and nuts shall meet the strength requirements of ASTM A307 with dimensions conforming to ANSI B18.2.1. The size of the bolts head shall be equal to the size of the nut and shall be stainless steel in accordance with ASTM 276.
- g. The following parts of the valve shall be made of either gray or ductile iron: bonnet, body, yoke, wrench nut, O-ring packing plate or seal plate, and gland follower. The gate may be made of gray or ductile iron.
- h. Resilient seats shall be applied to the gate and shall seat against a corrosion resistant surface. The non-metallic seating surface shall be applied in a manner to withstand the action of line fluids and the operation of the sealing gate under long-term service. A metallic surface shall have a corrosion resistance equivalent to or better than bronze. A non-metallic surface shall be in compliance with ANSI/AWWA C550. The gate must be fully encapsulated by an elastomer without thin spots or voids.
- i. All gate valves shall open left (counter clockwise), unless otherwise specified.
- j. Screw Ends: Screw ends (2 in. and 3 in. service valves) shall be normal pipe thread, NPT.
- k. Flanged ends: Flanged fittings have 150 lb. flanges and shall be faced and drilled in accordance with ANSI Specification B16.1, Class 125.
- l. Mechanical Joint Ends: Mechanical joint bell dimensions shall conform to ANSI A21.11/AWWA C111.

3. **PAINING**

All exterior and interior surfaces of the valves shall be coated with epoxy, NSF certified. The epoxy shall have a minimal dry film thickness of 8 mils, and shall be in accordance with AWWA C550, latest revision.

4. **QUALITY ASSURANCE**

- a. The Rogers Water Utilities may, at no cost to the manufacturer, subject random valves 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.

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- b. All valves shall be domestically manufactured.

The following manufactures are approved for resilient-seated gate valves.

**APPROVED MANUFACTURERS LIST**

American Flow Control  
Clow Valve Company  
Kennedy Valve  
Mueller Company

**Previous Specifications**

April 16,1997