

SECTION 15109 - GATE VALVES

City of San Diego, CWP Guidelines

PART 1 -- GENERAL

1.1 WORK OF THIS SECTION

- A. The WORK of this Section includes providing epoxy-coated gate valves.

1.2 RELATED SECTIONS

- A. The WORK of the following Section applies to the WORK of this Section. Other Sections of the Specifications, not referenced below, shall also apply to the extent required for proper performance of this WORK.

- 1. Section 15100 Valves, General

PART 2 -- PRODUCTS

2.1 GENERAL

- A. Buried valves shall be of the inside screw type and shall be designed for repacking under line pressure. Valves 14-inch and larger installed in vertical pipes with stems horizontal shall be fitted with bronze slides, tracks, rollers, and scrapers to assist the travel of the gate assembly. Quick-opening valves shall have quick opening levers and cams in lieu of handwheel operators. Where other operators are indicated, comply with Section 15101. Ferrous surfaces of the valves, 4-inch and larger and in contact with water shall be epoxy-coated conforming to Section 09800.

[2.2 METAL-SEATED GATE VALVES (3-INCH AND LARGER)]

- A. **Double-Disc Type:** Metal-seated gate valves for water service shall conform to ANSI/AWWA C 500. Valves shall be of the double-disc type with non-rising stem, opening counter-clockwise, and provided with a 2-inch square operating nut or handwheel, as indicated, except where operators are shown. Valves shall have flanged or mechanical joint ends.
- B. **Solid Wedge Type:** Gate valves for other than water service shall be of the iron-body, bronze-mounted, solid wedge type and shall conform to the double-disc type except as otherwise indicated.]

2.3 KNIFE GATE VALVES

- A. Knife gate valves shall include raised faces and resilient seats for positive seating. [Wetted parts shall be recommended by the manufacturer for use in connection with primary wastewater sludge.] Wetted parts shall be constructed of Type 316 stainless steel. Gates shall be finish-ground on both sides and shall prevent packing or seat damage. Valves 2 to 4 inches in size shall include cast stainless steel bodies; valves 6 to 24 inches in size shall include cast semi-steel bodies with stainless steel linings. Valve ends shall be flanged or

wafer design, as indicated. Gate guides and jams shall be steel. Actuator shall be handwheel operated. Port design shall be full-flow.

2.4 RESILIENT-SEATED GATE VALVES [3-INCH AND LARGER]

- A. Resilient-seated gate valves conforming to ANSI/AWWA C509 may be provided, in lieu of metal-seated double disc or solid disc gate valves. Resilient-seated gate valves shall have cast iron bodies with flanged, bell, or mechanical joint ends, rubber-coated cast iron disc, flanged bonnet, bronze stem, O-ring seals, and operators with handwheel or square nut except as otherwise indicated.

2.5 GATE VALVES (SMALLER THAN 3-INCH)

- A. **Construction:** Gate valves, smaller than 3 inches, shall be heavy duty type for industrial service, with threaded or soldered ends. The bodies shall have threaded tops or union bonnets, fabricated of bronze conforming to ASTM B-62, with bronze stems, solid wedges, metal handwheels, and Teflon-impregnated packing. Buried valves shall have non-rising stems. Exposed valves (above ground) shall have rising stems. Valves shall have a minimum pressure rating of 125 psi steam, or 200 psi coldwater except as otherwise indicated.

2.6 MANUFACTURERS

- A. Products of the type or size indicated shall be manufactured by one of the following (or equal):

[1. Metal seated gate valves (3-inch and larger):

American-Darling Valve Co.
Clow Corporation
Kennedy Valve Mfg. Co. (ITT Grinnell)
Milwaukee Valve Company
Mueller Company
Stockham Valves and Fittings]

2. Knife gate valves:

DeZurik Corporation
Fabri-Valves
Kennedy Valve Mfg. Co., (ITT Grinnell)
Rovang, Inc.

3. Resilient-seated gate valves:

A-C Valves, Inc.
Clow Corporation
Kennedy Valve Mfg. Co., (ITT Grinnell)
Mueller Company
Stockham Valves and Fittings

4. Gate valves (smaller than 3-inch)

Crane Company
Milwaukee Valve Company

PART 3 -- EXECUTION

3.1 INSTALLATION

- A. Gate valves shall be installed in accordance with Section 15100.

**** END OF SECTION ****