

SECTION 11291 - FLAP GATES

City of San Diego, CWP Guidelines

PART 1 - GENERAL

1.1 WORK OF THIS SECTION

- A. The WORK of this Section includes providing flap gates with wall thimbles, bracing, mountings, gaskets, sealants, and coatings.
- B. The WORK also requires that one manufacturer accept responsibility for furnishing all gates as indicated but without altering or modifying the CONTRACTOR'S responsibilities under the Contract Documents.
- C. The WORK additionally requires that the one manufacturer who accepts the indicated responsibility shall manufacture all the flap gates.

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 11290 Hydraulic Gates, General

PART 2 - PRODUCTS

2.1 LAP GATES

- A. **Design:** Flap gates and frames shall be fabricated of cast iron with fully-adjustable top pivot points and bronze sealing surfaces. Gate frames shall be designed with flat backs for attachment to wall thimbles, except as otherwise indicated.
- B. **Wall Thimbles:** Except as otherwise indicated, flap gates shall be mounted against wall thimbles with Type 316 stainless steel bolts and sealant or gaskets. Thimbles shall be of the cast iron F-pattern type designed to match the thickness of the walls in which installed. Thimbles and gates shall have matching bolt hole dimensions.
- C. **Epoxy Coating:** Ferrous parts of the gates, frames, and wetted parts of thimbles shall be epoxy-coated complying with Section 09800.
- D. **Sealant:** The elastomeric sealant shall be Rubber Caulk Sealer as manufactured by the following (or equal):
 - 1. Products Research Company, Los Angeles.
- E. **Grout:** Gates mounted on concrete walls without wall thimbles shall be installed with one-inch of non-shrink grout between the wall and the gate flange. The anchor bolts and nuts shall be of Type [316] [304] stainless steel.

2.2 MANUFACTURERS

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

1. Hydro Gate Corp., Model 20C
2. Rodney Hunt Company, Series FV-AC

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Flap gates shall be installed in accordance with the manufacturer's written instructions and as indicated.
- B. Prior to setting each gate, a 1/8-inch thick layer of mastic grade polysulfide elastomeric sealant shall be applied to the back of the gate frame. After setting the gate, the nuts shall be run down on the anchor bolts far enough to make them snug and to cause the rubber sealant to begin to ooze out but without causing stress in the frame. Excess sealant at the edges shall be removed. The sealant shall be allowed to cure for at least 7 days, after which the anchor bolt nuts shall be tightened to their final positions. If gaskets are installed, they shall be installed over the studs in one piece, or dovetailed, and cemented with a liquid-type gasket material.

** END OF SECTION **