
CONSTRUCTION SPECIFICATION
CS-OR-071 WATER CONTROL GATES

071.1 SCOPE

The work consists of furnishing and installing water control gates including gate stems, hoists, lifts, and other appurtenances.

071.2 MATERIAL

The gates furnished shall conform to the requirements of MS-OR-571, Slide Gates, MS-OR-572, Flap Gates, as appropriate, and as specified in Section 071.7 of this specification and on the drawings. All gates shall be furnished complete with hoisting equipment and other specified appurtenances.

071.3 INSTALLING GATES

The contractor shall install the gates in a manner that prevents leakage around the seats and binding of the gates during normal operation.

Surfaces of metal against which concrete will be placed shall be free from oil, grease, loose mill scale, loose paint, surface rust, and other debris or objectionable coatings.

Anchor bolts, thimbles, and spigot frames shall be secured in true position within the concrete forms and maintained in alignment during concrete placement.

Concrete surfaces against which rubber seals will bear or against which flat frames or plates are to be installed shall be finished to provide a smooth and uniform contact surface.

When a flat frame is installed against concrete, a layer of concrete mortar shall be placed between the gate frame and the concrete.

When a gate is attached to a wall thimble, a mastic or resilient gasket shall be applied between the gate frame and the thimble in accordance with the recommendations of the gate manufacturer.

Wall plates, sills, and pin brackets for radial gates shall be adjusted and fastened by grouting and bolting after the gates have been completely assembled in place.

071.4 INSTALLING HOISTS AND LIFTS

Gate stems, stem guides, and gate lifts shall be carefully aligned so that the stem shall be parallel to the guide bars or angles on the gate frame following installation.

071.5 RADIAL GATE SEALS

The rubber seals for radial gates shall be installed so that the seals contact the walls or wall plates throughout the entire gate length when the gate is in the closed position.

071.6 OPERATIONAL TESTS

After the gate(s) and hoist(s) (or lifts) have been installed, they shall be cleaned, lubricated, and otherwise serviced by the contractor in accordance with the manufacturer's instructions. The contractor shall test the gate and hoist by operating the system several times throughout its full range of operation. The contractor shall make any changes or adjustments necessary to ensure satisfactory operation of the complete gate system.

071.7 ITEMS OF WORK AND CONSTRUCTION DETAILS