**SECTION \_\_\_\_\_\_\_\_\_\_\_ RUBBER FLAP GATES**

GENERAL

1. The flap gates shall be provided as specified and as shown in the Contract Documents.

PERFORMANCE REQUIREMENTS

1. Leakage for the flap gates shall be restricted to 0.1 gpm/ft or less of the seal perimeter at the design seating head.

SUBMITTALS

1. Submittals shall include, at a minimum, detailed custom drawings of the gate assembly with dimensional and mounting information and a listing of the materials of construction. General arrangement drawings and cut sheets are not considered acceptable drawings.

QUALITY ASSURANCE

1. The basis for the design of the flap gates is the Model RW5000-R as manufactured by RW Gate Company, Troy, NY.
2. All gates shall be shop inspected for proper operation prior to shipment.
3. Welds shall be performed by welders with ASME Section IX certification.
4. The gate manufacturer shall be ISO 9001:2015 certified.

MATERIALS OF CONSTRUCTION

1. All stainless steel referenced in this specification shall be Type 316 or Type 316L, ASTM A240 or ASTM A276 unless otherwise indicated herein.
   1. All welded stainless steel components shall be constructed of Type 316L stainless steel.
   2. Anchor bolts and assembly bolts shall be Type 316 stainless steel.

FLAP

1. The flap shall consist of a sheet of EPDM reinforced with stainless steel to withstand the specified seating head conditions.
   1. The EPDM flap shall have a minimum thickness of 1/2-inch for flap gate openings that are less than 12 inches in width.
   2. The flap shall be reinforced with plates, angles or channel shaped members to restrict deflection to 1/16-inch or less at the design head.
   3. The stiffeners shall be bolted to the flap.

FRAME / BODY

1. The frame shall be constructed of stainless steel plate and shall be reinforced to withstand the specified operating conditions.
   1. The frame shall be a rigid, one-piece assembly of the configuration shown on the Contract Documents.
   2. The flange portions of the frame shall have a minimum thickness of 3/16-inch.

ANCHORAGE

1. Pipe flange mounted gates shall be provided with a sufficient number of attachment bolts to properly secure the gate to the flange.
2. Anchor bolts, when required, shall be 316 stainless steel, fully threaded and shall have a minimum diameter of 1/2-inch.
   1. Anchor bolts shall be of the epoxy type.

FINISH

1. All heat tint and slag from the welding process shall be acid passivated or mechanically passivated through bead blasting in accordance with ASTM A380. Grinding or buffing is not acceptable in lieu of passivation.

INSTALLATION

1. Installation shall be performed in accordance with the gate manufacturer’s installation instructions and the approved installation drawings.
2. Installation instructions and installation drawings shall be found in the O&M manual.
3. Non-shrink grout or a resilient gasket shall be applied, by the Contractor, between the gate frame and the wall to ensure that there is no leakage around the gate.