

SUGGESTED SPECIFICATIONS FOR MODEL FG-C SIDE HINGED COMPRESSION GASKET FLOOD GATE

Part 1 – General

- 1.01 **Description:** Provide floodgate(s) factory assembled with frame(s) and all operating components in accordance with contract specifications and approved drawings.
- 1.02 **Acceptable Manufacturers:** Floodgate shall be as manufactured by Walz & Krenzer, Inc. or approved equal.
- 1.03 **Standards:** Comply with the provisions of the following (as applicable):
- A. AISC “Specifications for Design, Fabrication, and Erection of Structural Steel for Buildings”.
 - B. The Aluminum Assoc. “Aluminum Design Manual”.
 - C. AWS Structural Welding Code D1
 - D. ASME Structural Welding Code Section IX
 - E. FEMA Bulletin 3-93, #102 & #114
- 1.04 **Submittals:**
- A. Manufactures Data: Submit installation and maintenance manuals for flood barriers.
 - B. Shop Drawings: Submit shop drawings approved by licensed Professional Engineer for floodgate including dimensional plans and elevations, sections and details for all mountings and connections, and parts list.
 - C. Calculations (optional for critical applications): Submit calculations approved by licensed Professional Engineer verifying the flood gates ability to withstand the design pressure loading.
 - D. QA Submittals: Submit test reports showing compliance with specified performance characteristics.
- 1.04 **Qualifications:** Manufacturer shall present evidence attesting to at least five years successful experience in the design and manufacture of similar closures.

Part 2 – Products

2.01 Product Description: Side hinged floodgate shall be Model FG-C as manufactured by Walz & Krenzer, Inc.

2.02 Materials:

- A. Panel – 5052-H32 aluminum plate with 6061-T6 aluminum stiffeners (mild steel and stainless steel available).
- B. Frame – A-36 steel (aluminum and stainless steel available).
- C. Gasket – ASTM D2000 GR DE neoprene gasket, 25 duro with fully molded corners.

- D. Dogs/drop bolts – stainless steel/bronze dogs or drop bolts. Utilize drop bolts for reduced maintenance and lower cost where operation is from outside only.
- E. Hinges – hinges to include bronze oil-impregnated thrust bearing and stainless steel hinge pins. Hinges to have slotted hinge blades.
- F. Finish – aluminum panel painted with INSL-X CheckRust acrylic paint. Mild steel frame blast clean per SSPC-SP7, primed with inorganic zinc primer. Other finishes, including powder coating and anodizing available.
- G. Removable bottom ramp available as an option to be placed over raised bottom sill (for vehicular traffic).

2.03 Design

- A. Side frames are angles for mounting on the exterior face of the wall surface.
- B. Bottom frame is a flatbar with a raised machined knife-edge. Standard bottom sill is raised 1-1/2” from floor surface.
- C. Roller assembly is provided on gates wider than 6’.
- D. Frame(s) shall have mounting holes for expansion anchors (options include masonry subframe with welded anchors for embedment in concrete).
- E. Dual panel hinged floodgates available for wide openings.
- F. Frame knife-edge shall be rounded and smooth to maximize sealing.

2.04 Quality Assurance

- A. Perform shop operational test
- B. Perform shop chalk test
- C. Liquid Penetrant Test (for critical applications): Welds in the “potential” leak path shall be liquid penetrant inspected in accordance with Appendix VIII of Section VIII of ASME Code Div. 1

Part 3 – Execution

3.01 Fabrication

- A. The finished product shall be rigid, neat in appearance, and free from all defects, warps, and buckles. All exposed joints and corners shall be well rounded.
- B. The panel and frame shall be flat within 1/8” in any 6’ length.

3.02 Installation: Install floodgate in accordance with manufactures instructions and approved shop drawings.

3.03 Warranty: Floodgate shall operate satisfactorily and be free of defects in material and workmanship for a period of not less than one year from the date of delivery.