

## **Quick-Wall Flood Panels (WK Model# FB-QW) Specifications**

### **Part 1 – General**

- 1.01 Description:** Provide flood barrier(s) with side frames and all operating components in accordance with contract specifications and approved drawings.
- 1.02 Acceptable Manufacturers:** Flood barrier shall be as manufactured by Walz & Krenzer, Inc (203-267-5712; sales@wkdoors.com).
- 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, D1.2, D1.3, D1.6.
  - D. ASME Structural Welding Code Section IX.
  - E. FEMA Bulletin 3-93, #102 & #114.
- 1.04 Submittals:**
- A. Manufacturers Data: Submit installation and maintenance manuals for flood barrier.
  - B. Shop Drawings: Submit shop drawings approved by licensed Professional Engineer for flood barriers including dimensional plans, elevations, sections, details for all mountings/connections, and parts list.
  - C. Calculations (optional for critical applications): Submit calculations approved by licensed Professional Engineer verifying the flood barrier’s ability to withstand the design pressure loading.
  - D. QA Submittals: Submit test reports showing compliance with specified performance characteristics.
- 1.05 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:** Flood barrier shall be Model FB-QW as manufactured by Walz & Krenzer, Inc.
- 2.02 Materials:**
- A. Panel: custom extruded 6061-T6 aluminum shape.
  - B. Frame: ASTM A-36 steel (options include aluminum and 304 or 316 stainless steel).
  - C. Posts: custom extruded 6061-T6 aluminum shape.
  - D. Latches: stainless steel sliding latch bolts.

- E. Gasket: Walz & Krenzer EPDM gaskets. Custom shapes for posts, logs and frames.
- F. Finish: extruded aluminum mill finish.
- G. Storage rack: aluminum or mild steel pallet.

**2.03 Design:**

- A. Design Pressure: # (in feet of water). Specify seating (pushing gate closed) or unseating direction (pushing gate open).
- B. Side frames are custom fabricated to attach to existing wall geometry.
- C. Depending on floor surface, a bottom frame may not be required. Bottom gasket designed to seal against floor surface.
- D. Floor is to be flat within 1/16" between the posts with a typical spacing of 10 feet between posts.
- E. Bottom post frame is to be recessed into floor surface to achieve a flush sill. Depth of frame depends on the flood elevation.
- F. Slight leakage may occur in quick-wall design. Leakage rate is low and is comparable with other stop log type designs.
- G. Frames shall have mounting holes for expansion anchors (options include masonry subframe with welded anchors for embedment in concrete).
- H. Additional requirements such as hydrodynamic loads, impact loads and breaking wave loads shall be added as required by the specific application.

**2.04 Quality Assurance:**

- A. Perform shop dimensional test and compare with drawings.

**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.
- C. All butt welds in frame to be full penetration welds.

**3.02 Installation:**

- A. Install flood barrier in accordance with manufacturer's instructions and approved shop drawings.
- B. After installation, perform field operational test per manufacturer's instructions to verify seal.
- C. Finish paint (if applicable) after installation.

**3.03 Warranty:** Flood barrier 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.