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 D1.1, 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.