

## 3-Part CSI Specifications CG22 – Lightweight Flood Panel with Mechanical Seals

These specifications are intended to be used as guidelines for architects and engineers as they establish the requirements for a particular project, and may be modified by them as deemed appropriate.

### Part 1 - General

- 1.01 Description
  - A. **Work Included:** Provide flood barrier(s) factory assembled with frame(s) and hardware in accordance with the contract documents.
- 1.02 Standards
  - A. Comply with the provisions of (as applicable).
    1. AWS Structural Welding Code.
    2. ASME Structural Welding Code Section IX.
- 1.03 Submittals
  - A. **Manufacturers Data:** Submit installation and maintenance instructions for flood barriers.
  - B. **Shop Drawings:** Submit shop drawings for flood barriers including dimensioned plans and elevations, sections, connections and anchorage, and parts list.
  - C. **Calculations (Optional):** Submit calculations, approved by a qualified engineer, to verify the barrier's ability to withstand the design pressure loading.
- 1.04 Qualifications
  - A. **Experience:** The manufacturer of the flood barrier(s) shall present evidence attesting to at least 5 years of successful experience in the design and manufacture of both the flood barrier and flood barrier seal of the type specified.

### Part 2 - Products

- 2.01 Flood barrier shall be Model CG22 as manufactured by Presray Corporation.
- 2.02 Materials
  - A. **Panel:** 6061 –T6 aluminum plate.
  - B. **Finish:** Bright Aluminum Finish.
  - C. **Gasket:** Presray low compression set type molded (extruded gaskets not acceptable).
  - D. Hardware

**Attachment bolts:** stainless steel bolts.

**Grab Handles:** Welded lift attachments on face of panel.

- 2.03 Design
  - A. Flood barrier(s) shall be designed with a minimum 2:1 factor of safety based on material yield strength, and shall provide an effective seal against the design flood level.
  - B. Panel shall be designed for installation using expansion anchors and bolts.
  
- 2.04 Inspection and Test
  - A. All welds on steel assemblies that may be potential “leak path” shall be liquid penetrant inspected in accordance with ASME section VIII Div. of Appendix.

### **Part 3 — Execution**

- 3.01 Installation
  - A. Install flood barriers in accordance with manufacturer’s instructions and approved shop drawings.

### **Part 4 — Warranty**

- 4.01 1-year limited against defects and workmanship from date of shipment.