

3-Part CSI Specifications CG11FS – Lift-Out 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.
 3. Presray Corporation QA Program
- 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 CG11FS as manufactured by Presray Corporation.
- 2.02 Materials
 - A. **Panel:** 6061 –T6 aluminum plate (steel, stainless steel optional).
 - B. **Conversion Frame:** Low carbon steel (stainless steel optional).
 - C. **Finish:** Panel, bright aluminum finish. Conversion frame, brush-off blast clean per SSPC-SP7, primed with one coat rust inhibitive, lead free, red

primer.

D. **Gasket:** Presray type 25 durometer neoprene molded rather than extruded, with fully molded corners, no mitered joints allowed. (Optional materials include Viton[®], Consult Presray in cases of unusual environmental conditions).

E. Hardware

Attachment bolts: Presray type FS

Grab Handles: Welded lift attachments on top edge and/or face of panel for ease of handling.

- 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. Frame shall have mounting holes for expansion anchors and bolts (options available include epoxy anchors for block walls, and studs for imbedment in concrete).

- 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 8.

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.