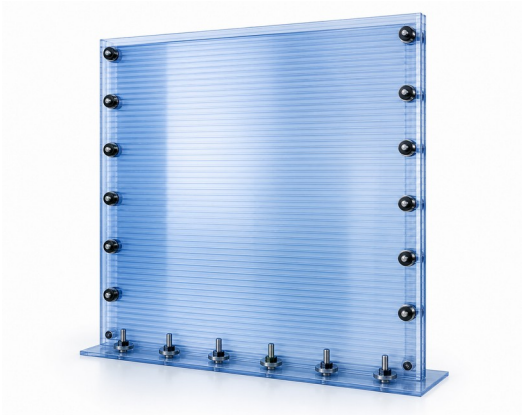


PC CLEAR FLOOD PANEL • TRANSPARENT. STRONG. TRUSTED. • REMOVABLE POLYCARBONATE FLOOD BARRIER



PC CLEAR FLOOD PANEL

TRANSPARENT. STRONG. TRUSTED.

The **PC Clear Flood Panel** is a removable flood barrier that protects an opening or an entire perimeter without obstructing visibility. A clear polycarbonate panel is framed in marine-grade aluminum with a solid polycarbonate angle at the sill, and sealed to the structure by a closed-cell neoprene compression gasket. Panels are custom fabricated to the opening, surface mounted with no embedment, deploy in minutes and are fully reusable.

CUSTOM FABRICATED
to each opening

SURFACE MOUNTED
no embedment required

RATED TO 4 FT	FULL VISIBILITY	DEPLOYS IN MINUTES	REUSABLE
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KEY SPECIFICATIONS

Rated flood depth	Up to 4 ft of standing water	Mounting	Face mount, perimeter or side mount
Panel	32 mm clear polycarbonate	Support posts	Structural fiberglass pultrusion
Perimeter frame	Marine-grade aluminum	Anchors	Stainless steel 304 — surface mount, no embedment
Sill member	Solid polycarbonate angle or marine-grade aluminum	Substrate	600 psi concrete, structurally reinforced (rebar, etc.), or 8 in grout-filled CMU (ASTM C90)
Gasket	Closed-cell neoprene compression seal	Sizing	Custom fabricated to each opening
Warranty	2-year manufacturer's warranty — material and workmanship defects only	Color	Blue tint

SEALING PERFORMANCE

The panel seals with a closed-cell neoprene compression gasket against a sound, flat, sealed substrate. Panels are **Type 2 closures** per USACE Flood Proofing Regulations Ch. 7 §701.1.1 — slight seepage may occur under hydrostatic and hydrodynamic conditions, not exceeding the **ANSI 2510/FM limit of 0.08 gal/hr per lineal foot** of protected opening. Always allow for control of seepage or condensation on the dry side.



PERIMETER INSTALLATION ON STRUCTURAL FIBERGLASS SUPPORT POSTS

PANEL, FRAME & HARDWARE

Panel	32 mm clear polycarbonate
Panel finish	Blue tint (see-through) — standard color
Perimeter frame	Marine-grade aluminum
Sill member	Solid polycarbonate angle or marine-grade aluminum
Gasket	Closed-cell neoprene, factory mounted, field replaceable
Gasket type	½ in compression gasket
Mounting hardware	Stainless steel, factory located on the panel
Anchors	Stainless steel 304, per shop drawings
Support posts	Structural fiberglass pultrusion (perimeter runs)
Operation	Non-operable removable closure
Loading direction	Positive pressure standard; reverse pressure optional
Labeling	Each panel and frame identified for matched installation
Sizing	Custom fabricated — all opening sizes available

DESIGN CRITERIA

Hydrostatic	To elevation indicated, based on 64 pcf water load
Hydrodynamic	Moving floodwater at 5 ft/sec
Load transfer	All loads transferred to the building structure
Seepage	Type 2 closure — ANSI 2510/FM, ≤ 0.08 gal/hr per lineal ft

REFERENCE STANDARDS

Standard	Title
ASCE 24-14	Flood Resistant Design and Construction
FEMA Technical Bulletin 3 (Jan 2021)	Non-Residential Floodproofing — scoped to commercial and residential applications.
SEI/ASCE 7-10*	Minimum Design Loads for Buildings and Other Structures
USACE EP 1165-2-314	Flood Proofing Regulations — Type 2 Closures, Ch. 7 §701.1.1
ANSI 2510/FM	Seepage limit for flood abatement equipment — leakage requirement tested; not an FM Approval/listing
ASTM D5628	Panel material impact/hail resistance (manufacturer test data)
ASTM D635 / ASTM E84 / EN 13501	Panel material flammability classification — CC-1 / Class A / B, s1, d0 (manufacturer test data; classification depends on thickness)

*Confirm current edition with engineer of record — 2024 IBC/IRC reference ASCE 7-22.

STRUCTURAL REVIEW BY OTHERS

All flood loads are transferred to the building structure. Structural analysis of the building's capacity to withstand the flood barrier service loads is to be performed by the structure's engineer of record. Panels anchor into **cementitious material only** — 600 psi concrete with structural reinforcement (rebar, etc.) or 8 in grout-filled CMU (ASTM C90). Any other substrate must be evaluated by Flood Risk America engineers and voids the warranty of the panel and anchoring system if used without that review.

MOUNTING TYPES

Type	Description	Typical Use
Face mount	Panel mounts to the face of the structure across the opening. Mounting angles anchor to the wall each side and to the slab along the sill.	Windows, doors, storefronts, garage and vehicle openings
Perimeter	Free-standing run carried on structural fiberglass pultruded support posts anchored to the slab, with panels spanning between posts.	Plazas, courtyards, walkways, long spans and full-property perimeters
Side mount	Panel mounts to the side walls or reveals inside the opening rather than to the face of the structure.	Recessed openings, reveals and jambs where face mounting is not practical

SUBSTRATE & OPENING REQUIREMENTS

- **Cementitious substrate only.** Anchor into 600 psi concrete with structural reinforcement (rebar, etc.) or 8 in grout-filled CMU (ASTM C90). Other substrates require review by Flood Risk America engineers.
- **Sound, flat and even.** Gasket contact surfaces must be sound, flat and without blemish — gasket performance depends on the condition of the contact area.
- **Plumb, true and level.** Surfaces receiving the panel are to be prepared plumb, true and level before installation begins. Maximum 1/8 in deviation from true level over the length of the panel, to help ensure the best possible leakage rate.
- **Mounting surface.** Concrete — 5 in minimum continuous width.
- **Sealed by others.** The slab area surrounding the equipment shall receive a waterproof sealer treatment prior to installation, by the building contractor.
- **Structural capacity.** The building's ability to carry the transferred flood loads is to be verified by the structure's engineer of record.

MAINTENANCE & INSPECTION

- **Annual inspection program.** The owner should run an annual panel inspection and installation drill so users stay familiar with the product and procedure.
- **Inspect and repair neoprene seals annually** for optimum performance. Gaskets are field replaceable.
- **Inspect before every deployment** — panel, frame, gasket, anchors and hardware.

INSTALLATION SEQUENCE

1. Verify field conditions and confirm the opening is clean, plumb, true and level.
 2. Install the mounting angles or fiberglass support posts to the anchor pattern on the approved shop drawings.
 3. Set the panel into position, matching the panel and frame labels for the opening.
 4. Seat the panel against the gasket, ensuring continuous and even gasket contact along the jambs and sill.
 5. Fit the stainless hardware and tighten using the tightening sequence indicated during installation training, to best seat the panel.
 6. Check that the gasket is in full, continuous contact with the sealing surface, then tighten all hardware to specified torque.
 7. Walk the perimeter and confirm the gasket is in full contact and in compression against the sealing surface at every point.
- **Store to protect the gaskets.** Do not stack or store panels in a way that compresses or damages gaskets, frames, angles or hardware.
 - **Store dry and ventilated.** Keep panels dry, off the ground and protected from impact; store hardware in a controlled environment.
 - **Use only manufacturer-supplied fasteners.** Do not drill or penetrate any surface of the barrier without consulting the manufacturer.

IDEAL FOR

COMMERCIAL & RETAIL

- Storefronts and building entrances
- Loading docks and vehicle openings
- Garages and parking structures

RESIDENTIAL & MIXED-USE

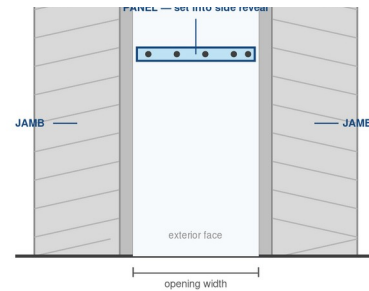
- Residential and lobby entrances
- Basement windows and doors

SITE & PUBLIC REALM

- Walkways and corridors
- Plazas, courtyards and amenity decks
- Full-property perimeter runs

Specified where flood protection is required but sightlines, daylight and appearance matter — the clear polycarbonate panel protects the opening without closing off the storefront or the view. Suitable for both commercial and residential properties.

INSTALLATIONS



FACE MOUNTED AT A BUILDING ENTRANCE

PERIMETER RUN ON FIBERGLASS POSTS

SIDE MOUNT — PANEL SET INTO SIDE REVEAL (schematic)



FACE MOUNTED ACROSS A VEHICLE OPENING

90° CORNERS AND LONG SPANS

FACE MOUNTED ACROSS DOUBLE DOORS

Every panel is custom fabricated. All opening sizes available.

Send opening dimensions, substrate details and design flood elevation for a specification. **561.578.4220** | www.floodriskamerica.com