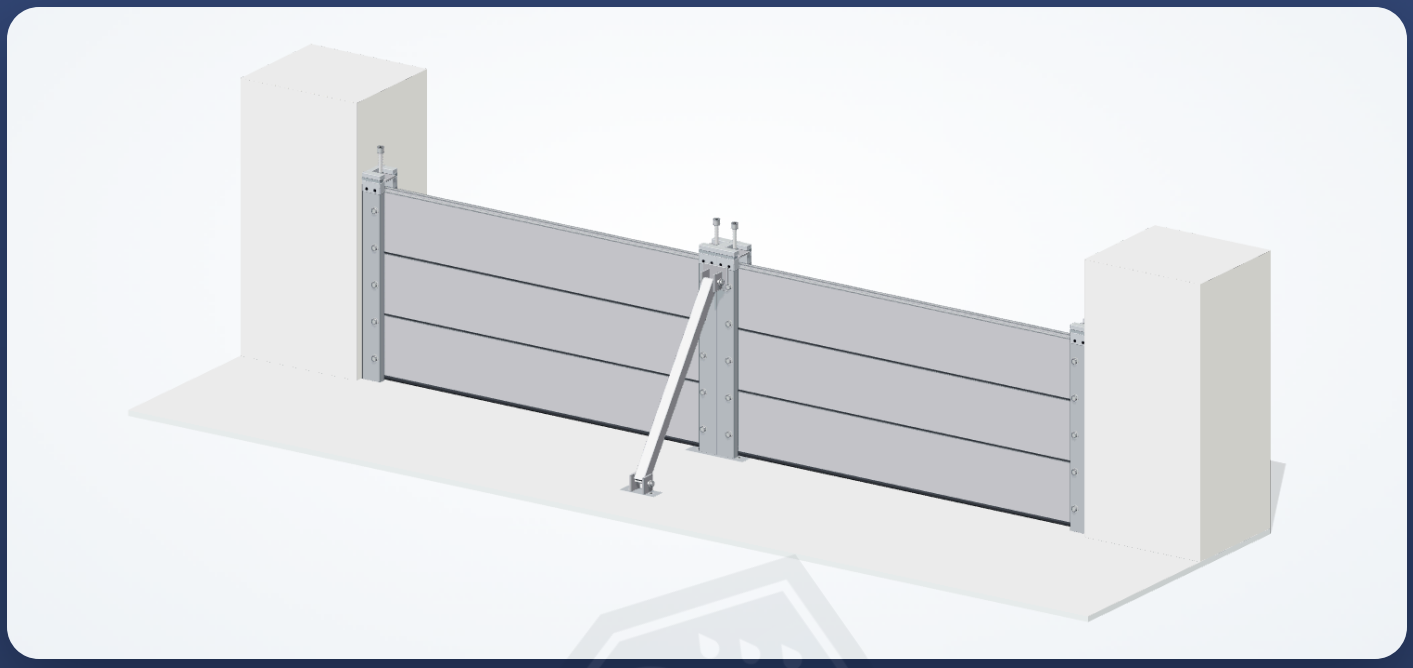
FLOOD GUARD
LLC



REMOVABLE ALUMINUM FLOOD BARRIER SYSTEM

System Components & Installation Details

Every part of the Flood Guard system, shown and labeled, plus the typical ways it installs — from a single door to a fully enclosed bump-out. Designed, fabricated and installed by one team in St. Petersburg, Florida.

MATERIALS
Coated structural aluminum, 316 stainless steel & EPDM rubber gaskets

SEALING
Tongue-and-groove planks, EPDM track seals & neoprene backing

CONFIGURABLE
Internal, external, 90° and center-post layouts for any opening

SYSTEM COMPONENTS

C-1	Internal Bracket
C-2	External Bracket
C-3	90° Corner Post
C-4	Center Bracket
C-5	Support Buttress
C-6	Flood Planks & Gaskets
	How It Goes Together
C-7	Anchor Plates

TYPICAL INSTALLATIONS

TD-1	Door Opening — Internal Brackets
TD-2	Door Opening — External Brackets
TD-3	Wide Opening — One Center Bracket
TD-4	Wide Opening — Multiple Center Brackets
TD-5	Long Window — Support Buttresses
TD-6	Corner Opening — 90° Configuration
TD-7	Box Enclosure — Bump-Out Window
TD-8	Box Enclosure with Center Bracket
TD-9	Window Opening — Aluminum Angle Sill
TD-10	Anchor Plate — Wet-Set Installation

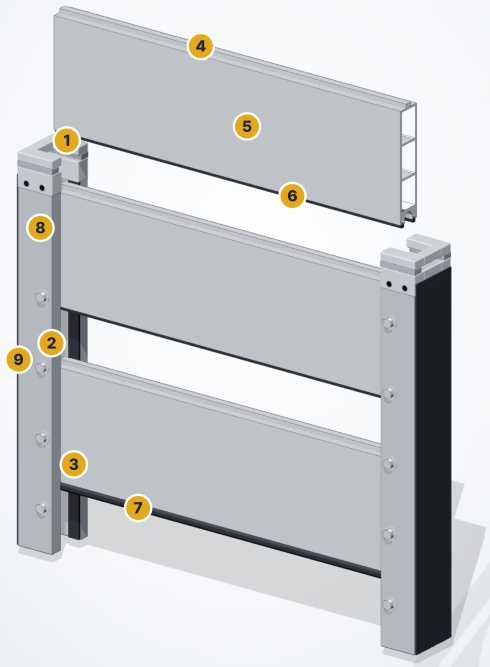
727-599-4275 · info@floodguardusa.com · floodguardusa.com

SYSTEM OVERVIEW

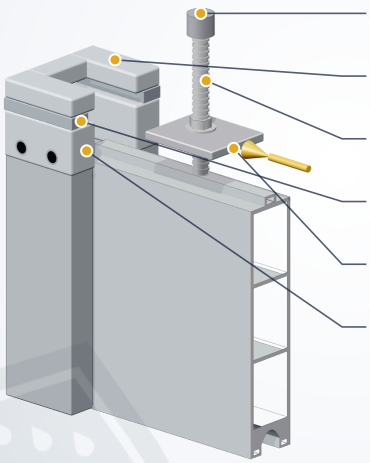
How the System Fits Together

Permanent tracks mount at each side of the opening. When a storm is coming, removable aluminum planks drop into the tracks, gaskets seal every joint, and a torque plate on top clamps the stack tight. Wider openings add removable center brackets, support buttresses and 90° corners.

EXPLODED VIEW · ONE BAY



CLOSE-UP · TORQUE PLATE INTO CAST CAP



Socket-head torque bolt
Tightened from above

Cast cap
On top of every post

Threaded rod
Drives down on the top plank

Slot
Cast into the cap

Torque plate
Slides into the cap slot

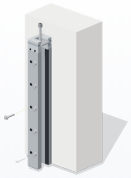
Top plank

1. **Cast cap** — torque plate slides in (close-up, right)
2. **Pressure strip** — slide-in plate in the track
3. **EPDM rubber seal** — planks seal against it
4. **Tongue** — top of every plank
5. **Aluminum plank** — 7.38" stack height
6. **Middle gaskets** — 0.23", under every plank
7. **Thick bottom gasket** — seals to the floor
8. **M12 × 35 bolts** — drive the pressure strip
9. **0.15" neoprene** — back of the track

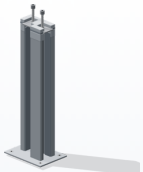
THE COMPONENTS



C-1
Internal Bracket



C-2
External Bracket



C-3
90° Corner Post



C-4
Center Bracket



C-5
Support Buttress



C-6
Planks & Gaskets



C-7
Anchor Plates

TYPICAL INSTALLATIONS

TD-1
Door Opening — Internal Brackets

TD-2
Door Opening — External Brackets

TD-3
Wide Opening — One Center Bracket

TD-4
Wide Opening — Multiple Center Brackets

TD-5
Long Window — Support Buttresses

TD-6
Corner Opening — 90° Configuration

TD-7
Box Enclosure — Bump-Out Window

TD-8
Box Enclosure with Center Bracket

TD-9
Window Opening — Aluminum Angle Sill

TD-10
Anchor Plate — Wet-Set Installation

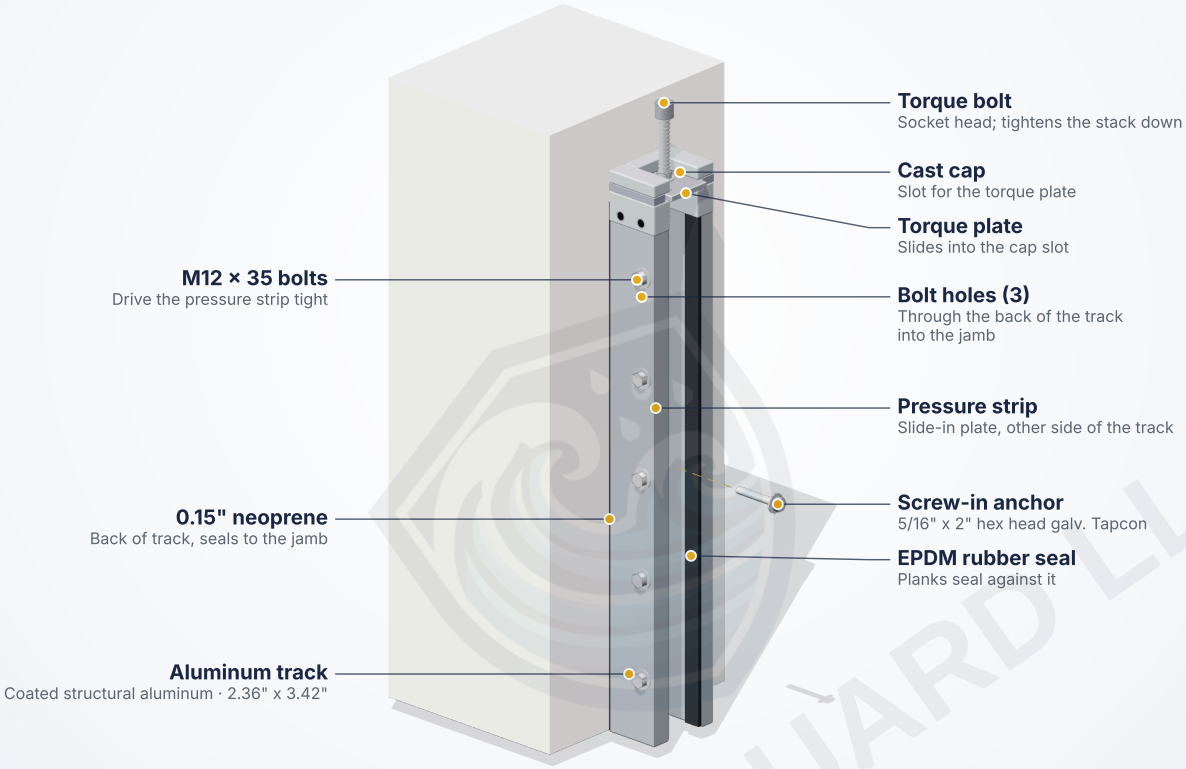
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SYSTEM COMPONENT · C-1

Internal Bracket

Mounts inside the opening on the jamb side face. The track sits within the door frame depth for a clean, recessed look.

ISOMETRIC VIEW · NOT TO SCALE



WHERE IT'S USED

Doors and openings with enough jamb depth to take the track.

TD-1 TD-3 TD-4 TD-7 TD-8

KEY FEATURES

- Fastens through the side of the track into the **jamb**
- **EPDM rubber seal** on one side of the track, **pressure strip** on the other
- **0.15" neoprene** on the back of the track seals to the jamb
- **Cast cap** on top with a slot for the **torque plate**; socket-head bolt tightens the stack

SPECIFICATIONS

Anchors	(3) 5/16" x 2" hex head galv. Tapcon w/ washers
Track	Structural aluminum, electrophoretic coating
Seals	EPDM rubber gaskets + pressure strip in track · 0.15" neoprene on back
Hardware	316 stainless steel
Sealant	Sikaflex construction sealant

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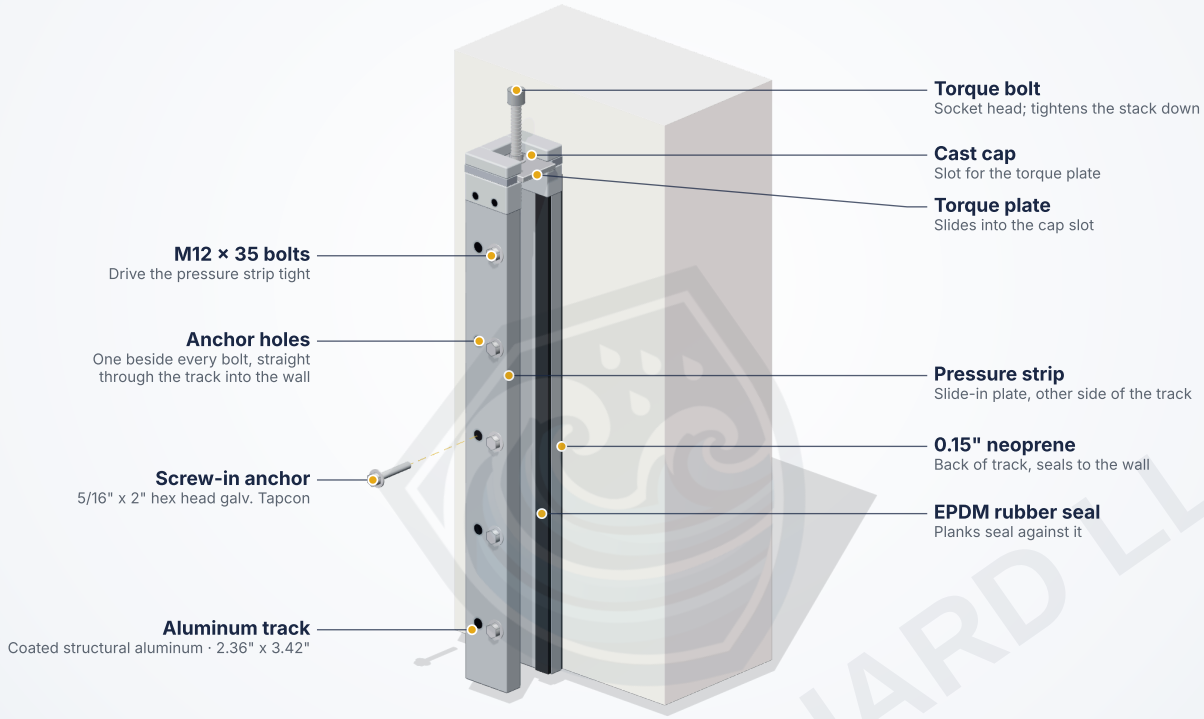
Illustrations for reference — not to scale, not for construction. Site-specific design & engineering per project.

SYSTEM COMPONENT · C-2

External Bracket

Mounts on the wall face outside the opening, with the planks overlapping the wall. The go-to when the jamb is too shallow or the frame can't take fasteners.

ISOMETRIC VIEW · NOT TO SCALE



WHERE IT'S USED

Shallow jambs, storefront frames, and window openings.

TD-2 TD-5 TD-6 TD-9

KEY FEATURES

- **Anchor holes on the front face**, one beside every bolt, straight through into the wall
- **M12 × 35 bolts** push the pressure strip evenly along the track
- **EPDM seal + pressure strip** in the track; **0.15" neoprene** on the back
- Works with a **4" aluminum build-out** where the wall needs it

SPECIFICATIONS

Anchors	(3) 5/16" x 2" hex head galv. Tapcon w/ washers
Track	Structural aluminum, electrophoretic coating
Seals	EPDM rubber gaskets + pressure strip in track · 0.15" neoprene on back
Hardware	316 stainless steel
Sealant	Sikaflex construction sealant

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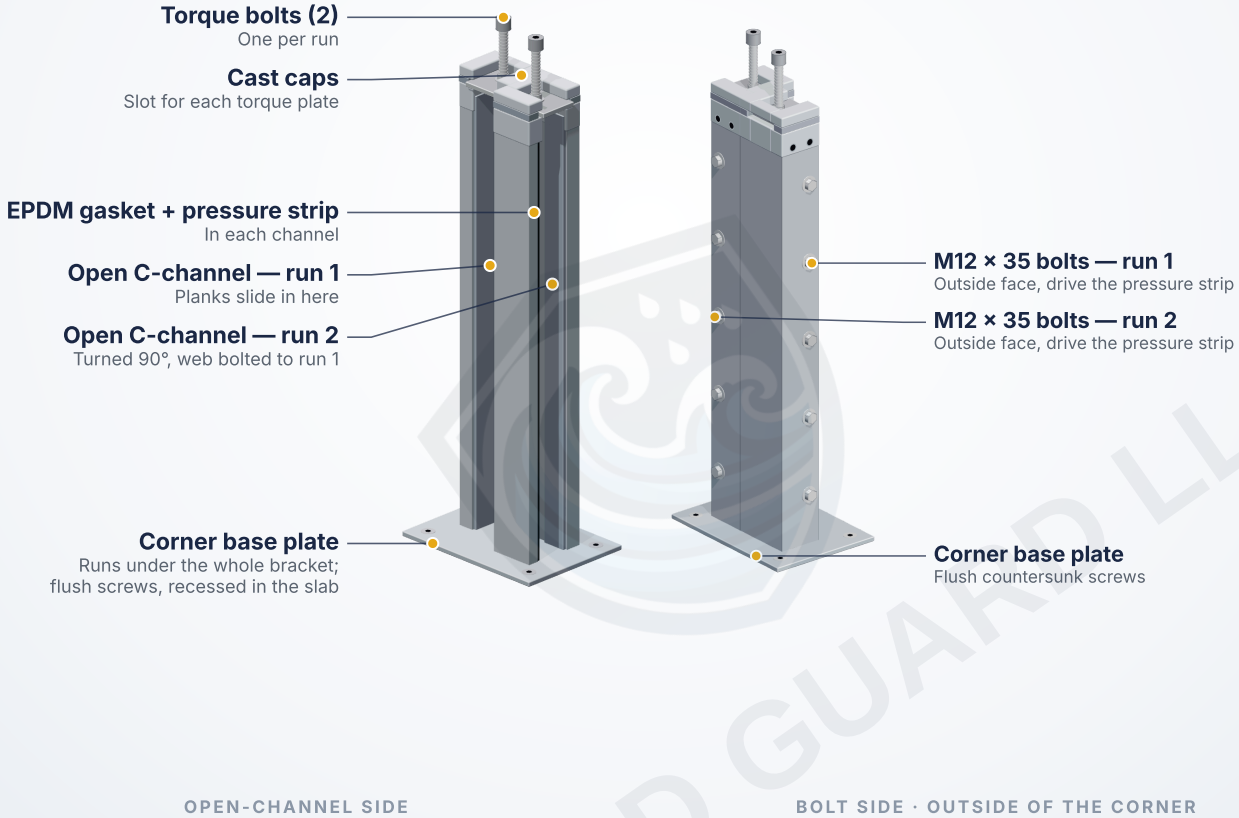
Illustrations for reference — not to scale, not for construction. Site-specific design & engineering per project.

SYSTEM COMPONENT · C-3

90° Corner Post

A removable corner post: two tracks joined at 90°, so one continuous barrier can turn a corner, wrap a building, or box in a bump-out.

ISOMETRIC VIEW · NOT TO SCALE



WHERE IT'S USED

Corner openings, wrap-around storefronts and box enclosures.

TD-6 TD-7 TD-8

KEY FEATURES

- **Two tracks bolted together at 90°** (M12 × 35)
- **Two torque plates** — one per run
- Sets on a **corner base plate** recessed flush in the slab
- **Removable** — nothing left standing between storms

SPECIFICATIONS

Body	Structural aluminum, coated
Tracks	2 at 90°, EPDM seal + pressure strip
Base	Corner base plate, wet-set flush
Hardware	316 stainless steel

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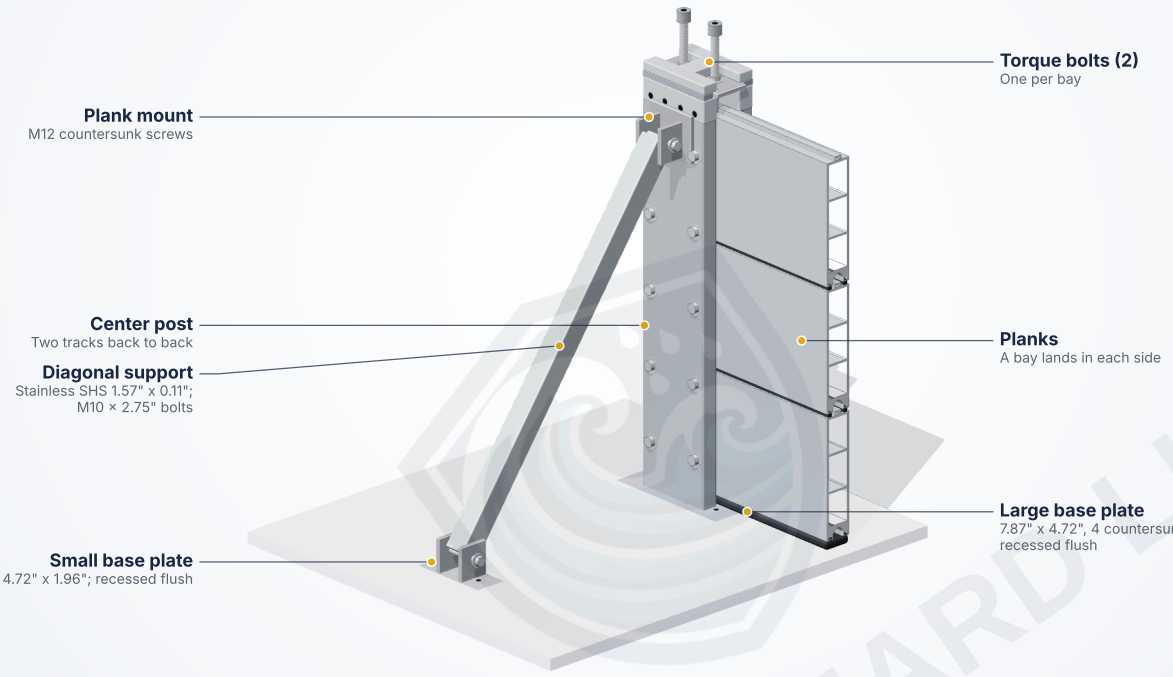
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SYSTEM COMPONENT · C-4

Center Bracket

A removable center post with a diagonal support. It splits wide openings into bays, keeping planks a manageable size. On openings over 112"-120" we highly recommend center supports.

ISOMETRIC VIEW · NOT TO SCALE



WHERE IT'S USED

Openings over 112"-120": double doors, storefronts, garages, mechanical rooms.

TD-3 TD-4 TD-8

KEY FEATURES

- **Center post** — two tracks back to back, a bay lands on each side
- **Diagonal support** on the flood side, facing the water load
- Post on a **large anchor plate**, diagonal on a **small anchor plate**
- **Two torque plates** — one per bay; all of it lifts out for storage

SPECIFICATIONS

Post	Structural aluminum, coated
Diagonal	SHS 1.57" x 0.11" stainless
Bolts	M10 × 2.75" top & floor
Bases	Large 7.87" x 4.72" · small 4.72" x 1.96"

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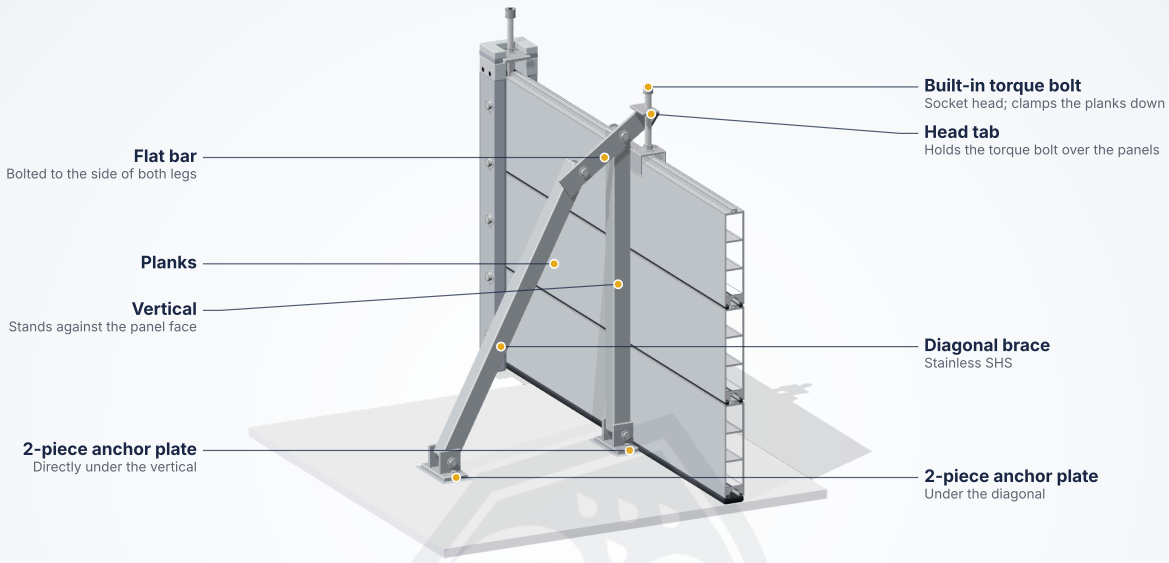
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SYSTEM COMPONENT · C-5

Support Buttress

Extra reinforcement wherever it's needed, like long windows where a center bracket isn't an option. A vertical leg braces the plank face, a diagonal leg braces the vertical, and a built-in torque bolt clamps the planks down from above.

ISOMETRIC VIEW · NOT TO SCALE



BUTTRESS HEAD · ACTUAL PART



WHERE IT'S USED

Long windows and openings where a center bracket can't be used, or anywhere extra reinforcement is called for.

TD-5

KEY FEATURES

- **Vertical leg** stands against the plank face
- **Diagonal leg** braces the vertical
- Each leg on a **2-piece anchor plate** — one under each
- **Built-in torque bolt** sits over the planks and tightens them down; custom cut to the plank height

SPECIFICATIONS

Legs	Stainless SHS
Anchors	2 × 2-piece anchor plates
Top	Built-in torque bolt
Height	Custom cut to the plank stack

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SYSTEM COMPONENT · C-6

Flood Planks & Gaskets

Tongue-and-groove aluminum planks stack in the tracks to the protection height you need. Every joint is sealed: plank to plank, plank to floor, and plank to track.

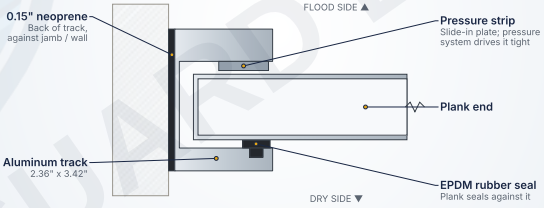
CUTAWAY · 3-HIGH STACK



FRONT VIEW · HOW THEY STACK



TRACK SECTION · PLAN



HOW IT SEALS

- **Middle gaskets (0.23")** sit in slots in the feet under every plank
- **Thick bottom gasket** seals the first plank to the floor
- **EPDM rubber seal** in the track — the plank end seals against it
- **Pressure strip** on the other side, driven tight by the M12 bolts
- **0.15" neoprene** on the back of the track seals it to the wall

PLANKS

Stack height	7.38" per plank
Thickness	1.58"
3 high	≈ 22.2"
Joint	Tongue & groove
Material	Coated structural aluminum, hollow 3-cell
Gaskets	EPDM rubber

TONGUE & GROOVE

Every plank has a **tongue** on top and a **groove** underneath. Stacked, each tongue locks into the groove above, keeping the planks aligned and the gaskets compressed evenly.

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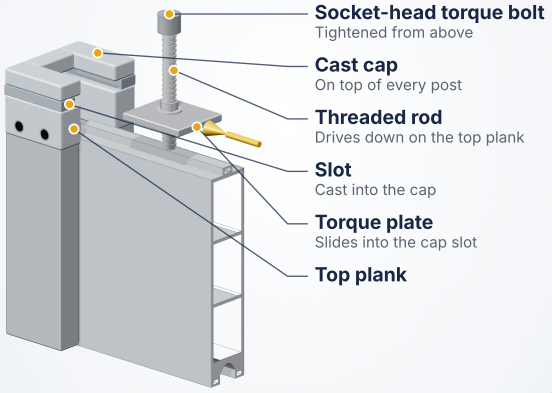
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SYSTEM OVERVIEW · DEPLOYMENT

How the System Goes Together

Five steps from empty tracks to a sealed barrier, the same order on every opening no matter how many bays.

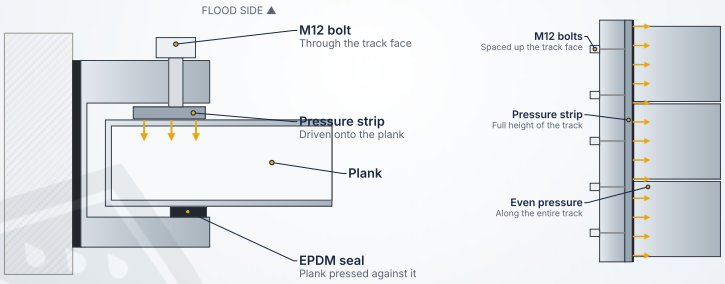
TORQUE PLATE · CAST CAP



LOCKED FROM THE TOP AND THE SIDE

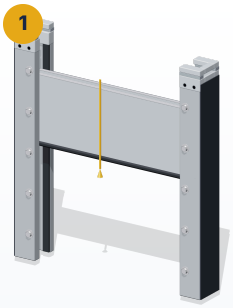
Every post wears a **cast cap** with a slot. The **torque plate** slides into that slot and its **socket-head torque bolt** drives straight down onto the top plank, compressing every gasket in the stack. The **M12 bolts** on the track face push the **pressure strip** against the plank ends, spreading the force evenly along the entire track.

FRONT BOLTS · EVEN PRESSURE



INSTALLATION SEQUENCE

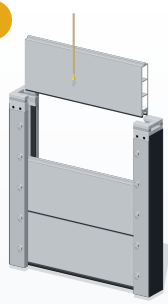
1



Bottom plank first

The bottom plank, with its thick gasket, slides down the tracks to the floor.

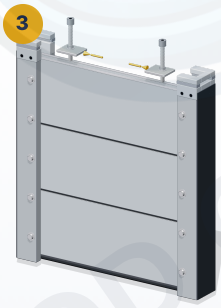
2



Stack tongue & groove

Each plank drops in on top; its groove locks over the tongue below.

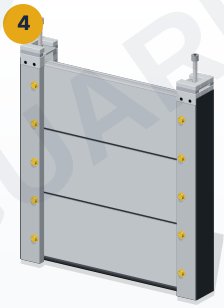
3



Torque plates slide in

Each torque plate slides into the slot in the cast cap on top of the post.

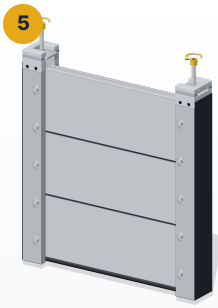
4



Tighten the front bolts

The M12 bolts push the pressure strip evenly against the planks along the whole track.

5



Tighten the torque bolts

Each socket-head torque bolt clamps the stack down, creating a strong mechanical seal.

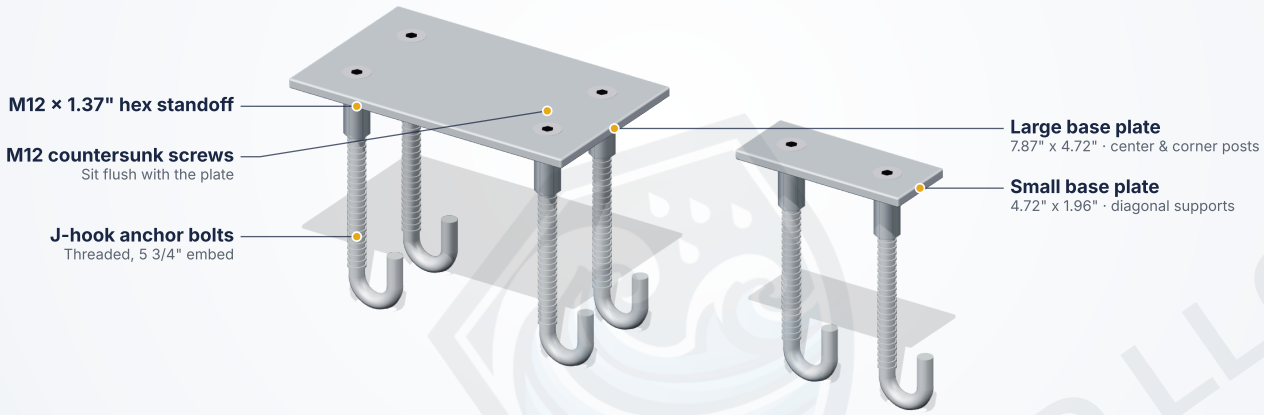
Illustrations for reference — not to scale, not for construction. Site-specific design & engineering per project.

SYSTEM COMPONENT · C-7

Anchor Plates

Recessed flush into the slab so center brackets and corner posts screw down when deployed and lift off when not, leaving nothing to trip over.

ISOMETRIC VIEW · NOT TO SCALE



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WHERE IT'S USED

Under every center bracket and corner post. Support buttresses use their own 2-piece anchor plates.

TD-3 TD-4 TD-5 TD-6 TD-8 TD-10

KEY FEATURES

- **Large plate** — center & corner posts, 4 screws
- **Small plate** — center bracket diagonal, 2 screws
- **J-hook anchors** embed 5 3/4" total
- Wet-set in **6,000 PSI cement** with #3 rebar (see TD-10)

SPECIFICATIONS

Large	7.87" x 4.72"
Small	4.72" x 1.96"
Screws	M12 countersunk, flush with the plate
Anchors	Hex standoffs + threaded J-hook anchor bolts

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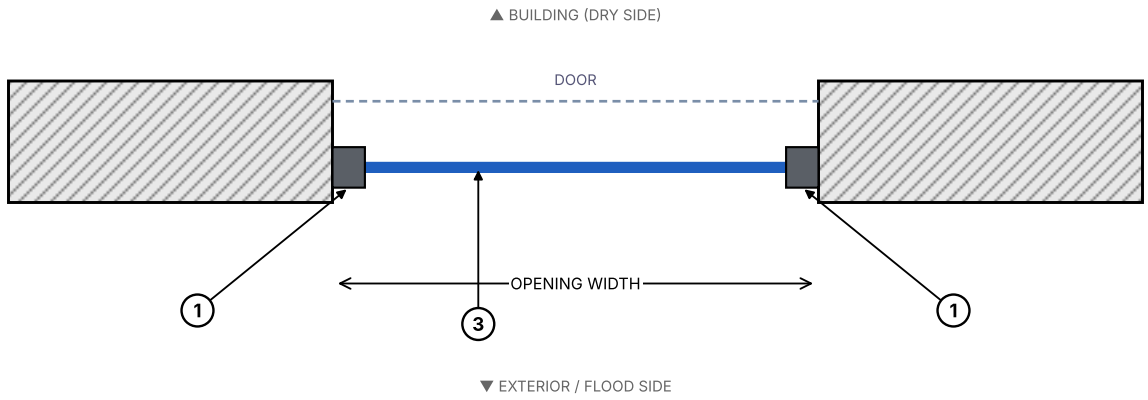
TYPICAL INSTALLATION · TD-1

Door Opening — Internal Brackets

Brackets mount inside the opening on the jamb side faces. Clean, recessed look; the barrier sits within the door frame depth.

PLAN VIEW

LOOKING DOWN



3D VIEW



COMPONENT KEY

1 **Internal bracket**
Bolt holes only; mounts to the jamb side face (or wall face on box layouts).

3 **Flood planks**
Removable aluminum planks, 7.38" each, stacked to the required height.

NOTES

1. Brackets anchored with screw-in anchors w/ washers (5/16" x 2" hex head galvanized Tapcon), 3 per bracket.
2. All wall-mounted components sealed to the wall w/ Sikaflex construction sealant.
3. Planks 7.38" each; quantity set by required protection height.
4. Typical for walk-through doors with enough jamb depth for the bracket.

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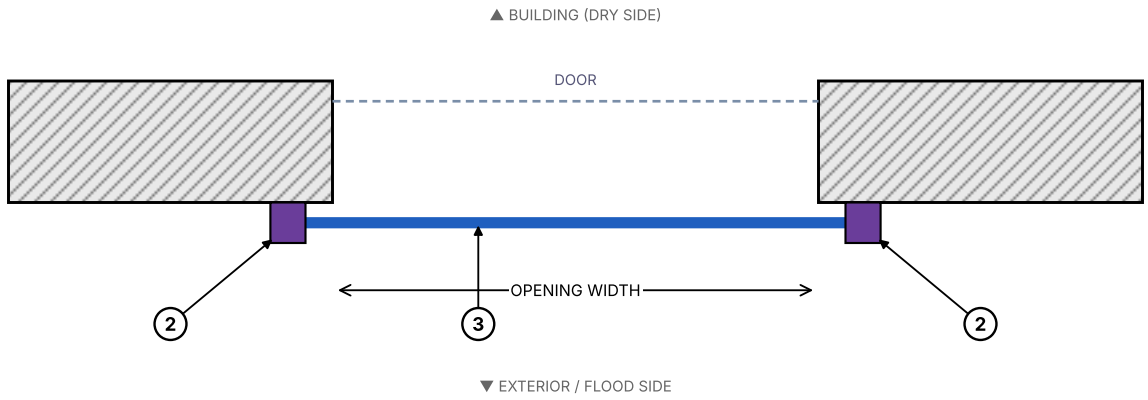
TYPICAL INSTALLATION · TD-2

Door Opening — External Brackets

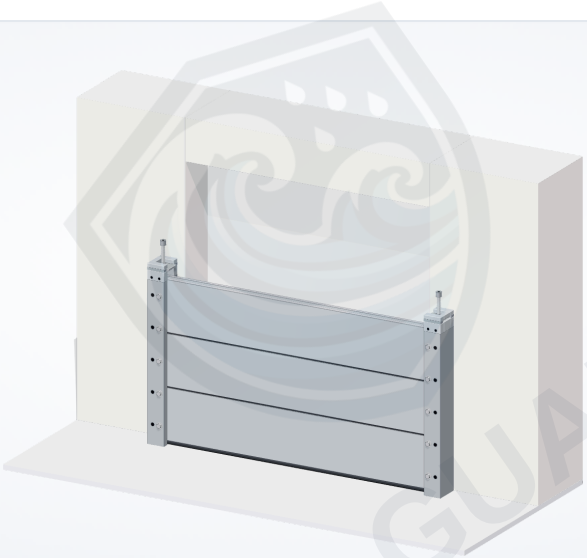
Brackets mount on the wall face outside the opening and the planks overlap the wall. Used where the jamb is too shallow or the frame can't take fasteners.

PLAN VIEW

LOOKING DOWN



3D VIEW



COMPONENT KEY

2 **External bracket**
Mounted on the wall face outside the opening.

3 **Flood planks**
Removable aluminum planks, 7.38" each, stacked to the required height.

NOTES

1. Brackets anchored with screw-in anchors w/ washers (5/16" x 2" hex head galvanized Tapcon), 3 per bracket.
2. All wall-mounted components sealed to the wall w/ Sikaflex construction sealant.
3. Planks 7.38" each; quantity set by required protection height.
4. Planks run past each side of the opening and seal against the wall face.

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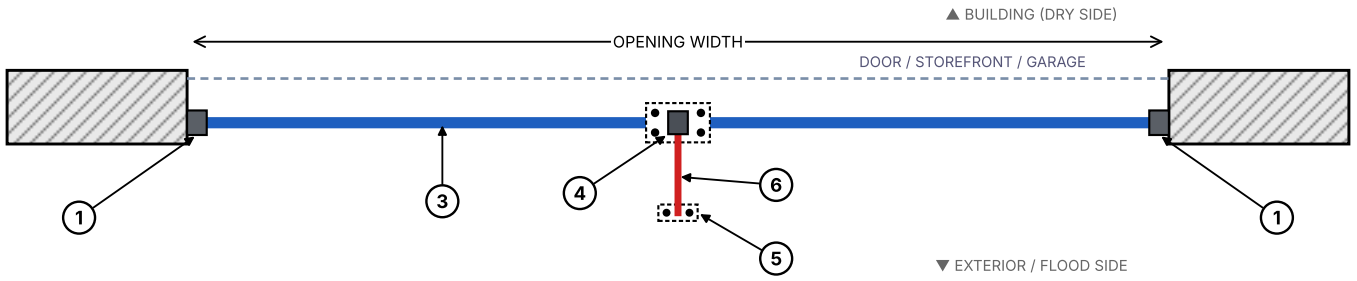
TYPICAL INSTALLATION · TD-3

Wide Opening — One Center Bracket

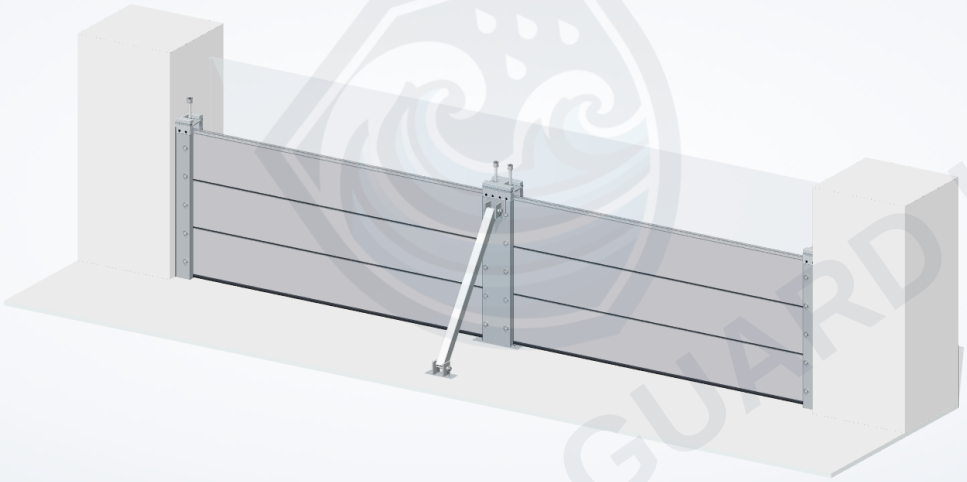
A removable center bracket (center post + diagonal support) splits the span into two bays. Recommended on openings over 112"-120".

PLAN VIEW

LOOKING DOWN



3D VIEW



COMPONENT KEY

1. **Internal bracket**
   Bolt holes only; mounts to the jamb side face (or wall face on box layouts).
3. **Flood planks**
   Removable aluminum planks, 7.38" each, stacked to the required height.
4. **Center bracket — post**
   Removable mid-span post; sets on a large anchor plate.
6. **Center bracket — diagonal support**
   Braces the center post to its own small anchor plate.
5. **Anchor plate (wet-set)**
   Recessed flush in slab; post / leg removed when not deployed. See TD-10.

NOTES

1. Openings over 112"-120": we highly recommend center supports.
2. Center bracket = center post + diagonal support, each on a wet-set anchor plate recessed flush (see TD-10). Both remove when not deployed; plates stay flush.
3. Bracket anchors: screw-in anchors w/ washers (5/16" x 2" hex head galv. Tapcon), 3 per bracket. Sealed to wall w/ Sikaflex.
4. Typical for double doors, small storefronts and single-car garage openings.

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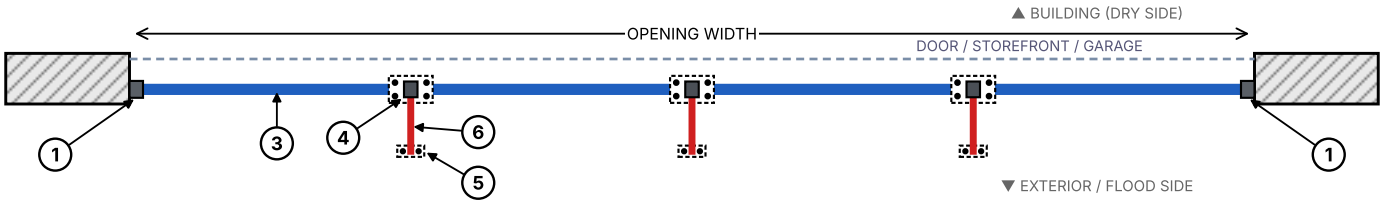
TYPICAL INSTALLATION · TD-4

Wide Opening — Multiple Center Brackets

Multiple removable center brackets for long spans. Bay widths are kept even so planks are interchangeable between bays.

PLAN VIEW

LOOKING DOWN



3D VIEW



COMPONENT KEY

1 **Internal bracket**
Bolt holes only; mounts to the jamb side face (or wall face on box layouts).

3 **Flood planks**
Removable aluminum planks, 7.38" each, stacked to the required height.

4 **Center bracket — post**
Removable mid-span post; sets on a large anchor plate.

6 **Center bracket — diagonal support**
Braces the center post to its own small anchor plate.

5 **Anchor plate (wet-set)**
Recessed flush in slab; post / leg removed when not deployed. See TD-10.

NOTES

1. Openings over 112"-120": we highly recommend center supports.
2. Center bracket = center post + diagonal support, each on a wet-set anchor plate recessed flush (see TD-10). Both remove when not deployed; plates stay flush.
3. Bracket anchors: screw-in anchors w/ washers (5/16" x 2" hex head galv. Tapcon), 3 per bracket. Sealed to wall w/ Sikaflex.
4. Typical for storefronts, two-car garages and mechanical room entries.

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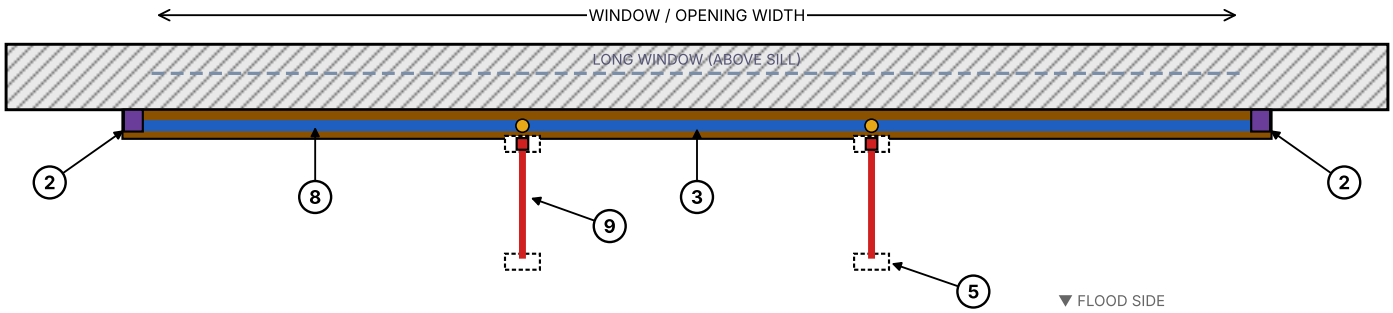
TYPICAL INSTALLATION · TD-5

Long Window — Support Buttresses

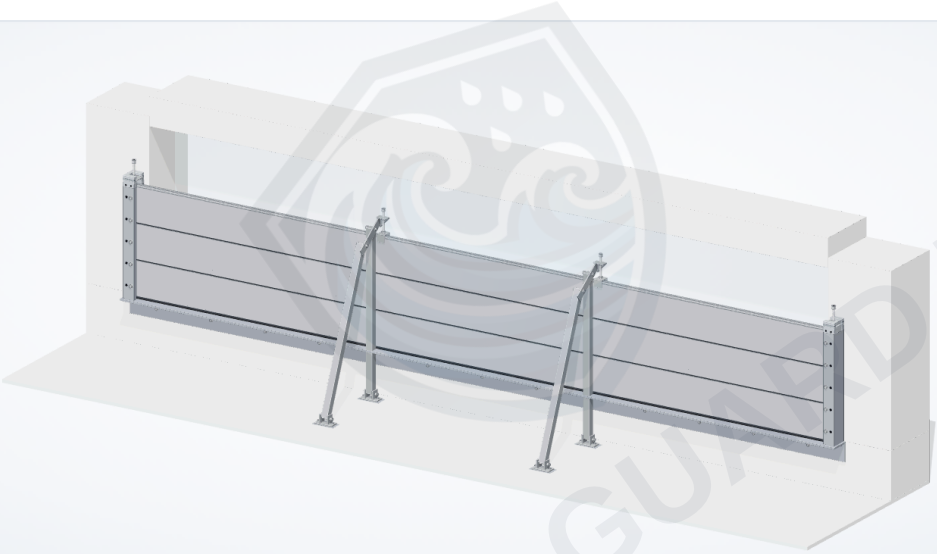
Where a center bracket isn't an option, like a long window, support buttresses add reinforcement. Each one braces the plank face and its torque bolt clamps the stack down from above.

PLAN VIEW

LOOKING DOWN



3D VIEW



COMPONENT KEY

- (2) **External bracket** — Mounted on the wall face outside the opening.
- (3) **Flood planks** — Removable aluminum planks, 7.38" each, stacked to the required height.
- (8) **4" x 4" aluminum angle sill** — Anchored to wall below window; planks seat on top.
- (9) **Support buttress** — Vertical + diagonal leg on 2-piece anchor plates; torque bolt over the planks.
- (5) **Anchor plate (wet-set)** — Recessed flush in slab; post / leg removed when not deployed. See TD-10.

NOTES

1. Support buttress: a vertical leg against the plank face and a diagonal leg, each on a 2-piece anchor plate.
2. Built-in torque bolt at the top of the vertical sits over the planks and tightens them down.
3. Custom cut to the plank height. Add where reinforcement is needed and a center bracket isn't an option.
4. Shown with external brackets on a 4" x 4" angle sill (see TD-9).

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Illustrations for reference — not to scale, not for construction. Site-specific design & engineering per project.

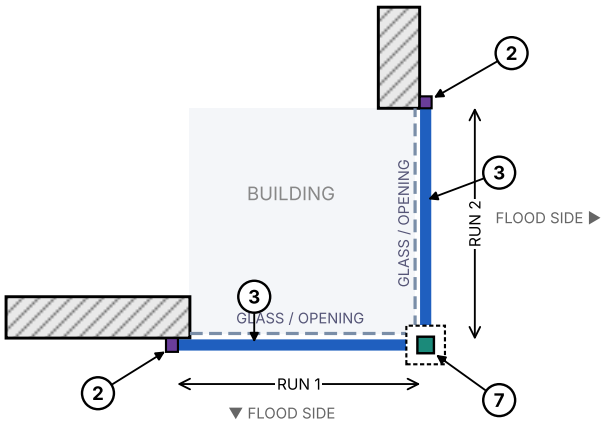
TYPICAL INSTALLATION · TD-6

Corner Opening — 90° Configuration

For openings that wrap a building corner. A removable 90° corner post turns the barrier so both faces are protected in one continuous system.

PLAN VIEW

LOOKING DOWN



3D VIEW



COMPONENT KEY

(2) **External bracket**
Mounted on the wall face outside the opening.

(3) **Flood planks**
Removable aluminum planks, 7.38" each, stacked to the required height.

(7) **90° corner post**
Removable corner post where the barrier turns a corner.

(5) **Anchor plate (wet-set)**
Recessed flush in slab; post / leg removed when not deployed. See TD-10.

NOTES

1. Corner post sets on a wet-set anchor plate recessed flush in the slab (see TD-10).
2. Corner post removes for storage; plate stays flush.
3. Shown with external brackets; internal brackets used where the jamb allows.
4. Bracket anchors: screw-in anchors w/ washers (5/16" x 2" hex head galv. Tapcon), 3 per bracket. Sealed to wall w/ Sikaflex.

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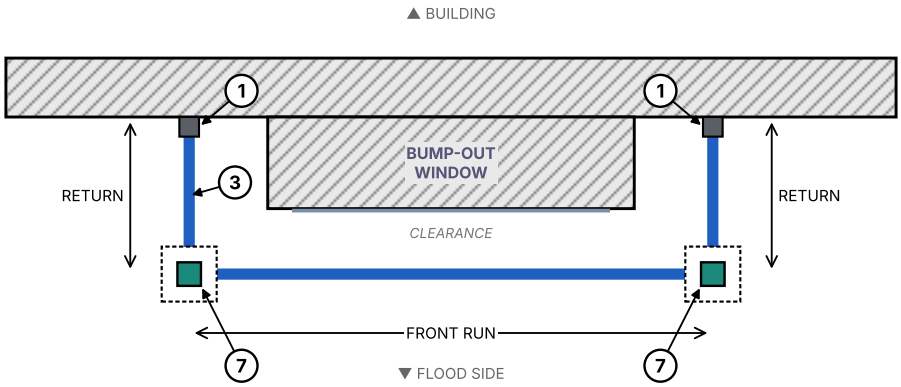
TYPICAL INSTALLATION · TD-7

Box Enclosure — Bump-Out Window

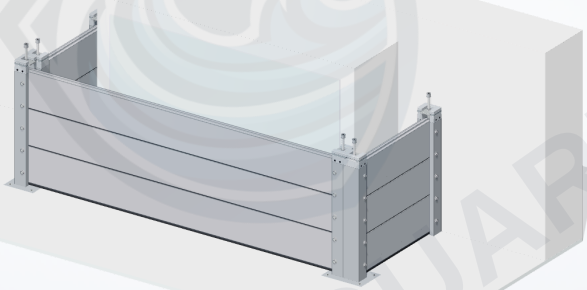
For low bump-out windows. Internal brackets on the wall each side, short returns that just clear the window, 90° corner posts, and one run straight across the front.

PLAN VIEW

LOOKING DOWN



3D VIEW



COMPONENT KEY

1 **Internal bracket**
Bolt holes only; mounts to the jamb side face (or wall face on box layouts).

3 **Flood planks**
Removable aluminum planks, 7.38" each, stacked to the required height.

7 **90° corner post**
Removable corner post where the barrier turns a corner.

5 **Anchor plate (wet-set)**
Recessed flush in slab; post / leg removed when not deployed. See TD-10.

NOTES

1. Internal brackets mount flat to the wall face each side of the bump-out, channel facing out.
2. Returns run out just far enough to clear the window; corners and front run close the box.
3. Corner posts set on wet-set anchor plates recessed flush in the slab (see TD-10); remove for storage.
4. Add a center bracket when the front run gets long (see TD-8).

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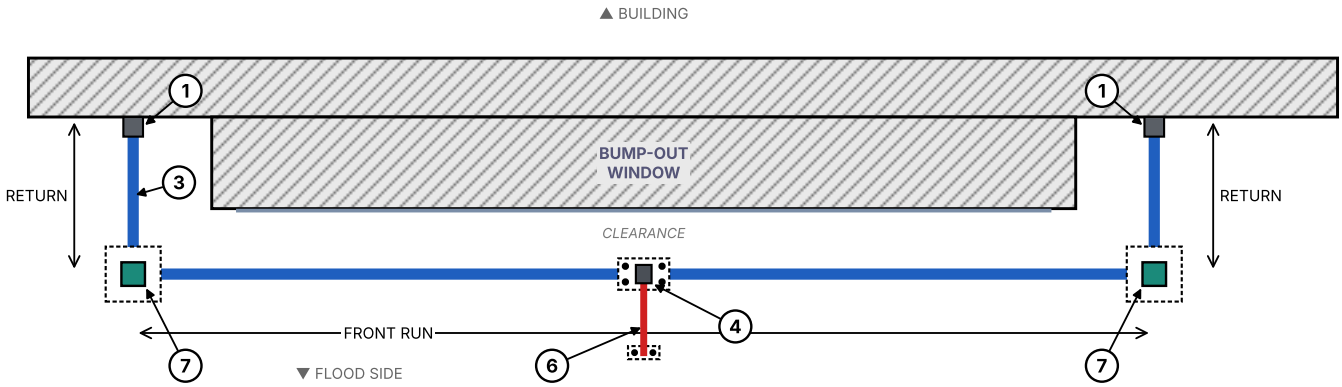
TYPICAL INSTALLATION · TD-8

Box Enclosure with Center Bracket

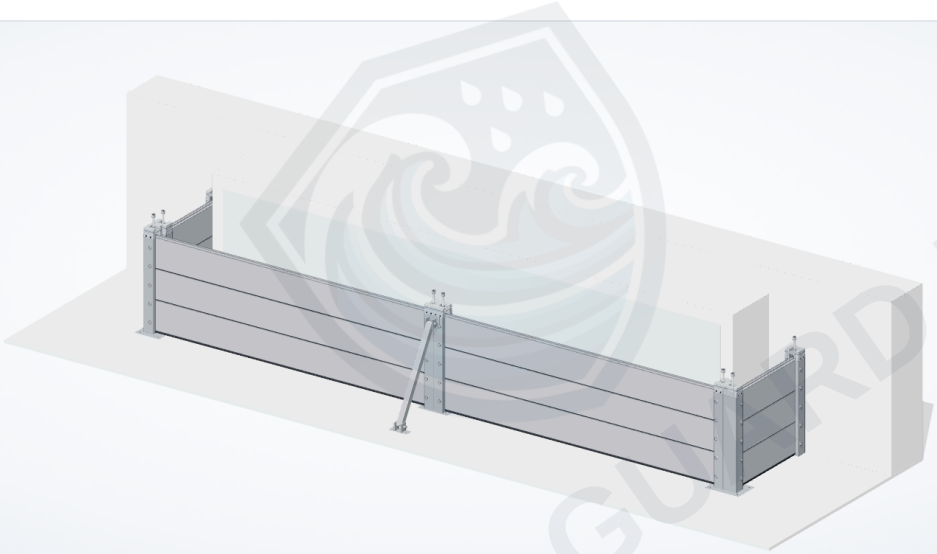
A longer bump-out: internal to 90° to center bracket to 90° back to internal. The same equipment adapts to almost any footprint.

PLAN VIEW

LOOKING DOWN



3D VIEW



COMPONENT KEY

1 **Internal bracket**
Bolt holes only; mounts to the jamb side face (or wall face on box layouts).

3 **Flood planks**
Removable aluminum planks, 7.38" each, stacked to the required height.

7 **90° corner post**
Removable corner post where the barrier turns a corner.

4 **Center bracket — post**
Removable mid-span post; sets on a large anchor plate.

6 **Center bracket — diagonal support**
Braces the center post to its own small anchor plate.

5 **Anchor plate (wet-set)**
Recessed flush in slab; post / leg removed when not deployed. See TD-10.

NOTES

1. Internal brackets mount flat to the wall face each side of the bump-out, channel facing out.
2. Returns run out just far enough to clear the window; corners and front run close the box.
3. Corner posts set on wet-set anchor plates recessed flush in the slab (see TD-10); remove for storage.
4. Center bracket splits a long front run into two bays; recommended on runs over 112"-120".

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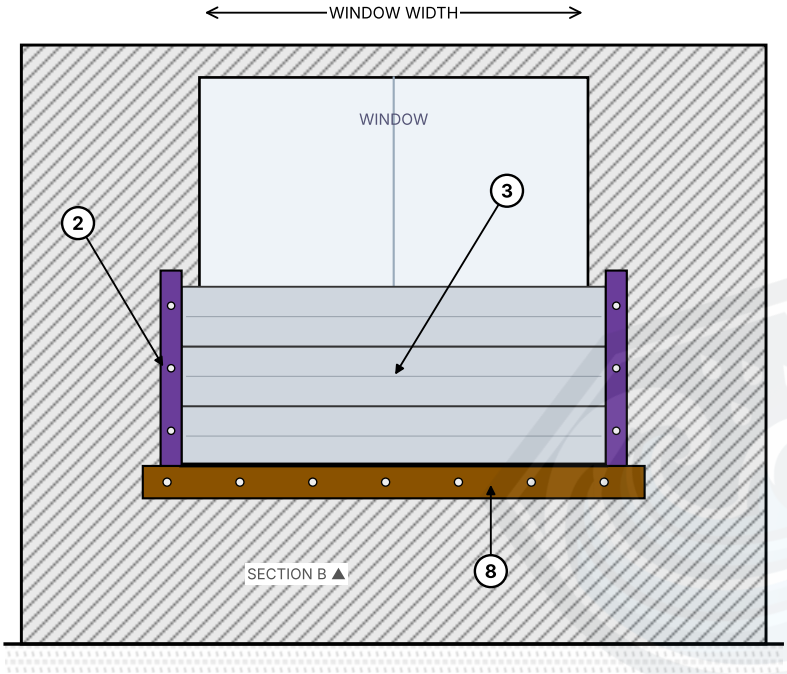
TYPICAL INSTALLATION · TD-9

Window Opening — Aluminum Angle Sill

For ground-floor windows. A 4" x 4" aluminum angle anchored to the wall below the window acts as the sill: the planks seat on it and seal across the bottom.

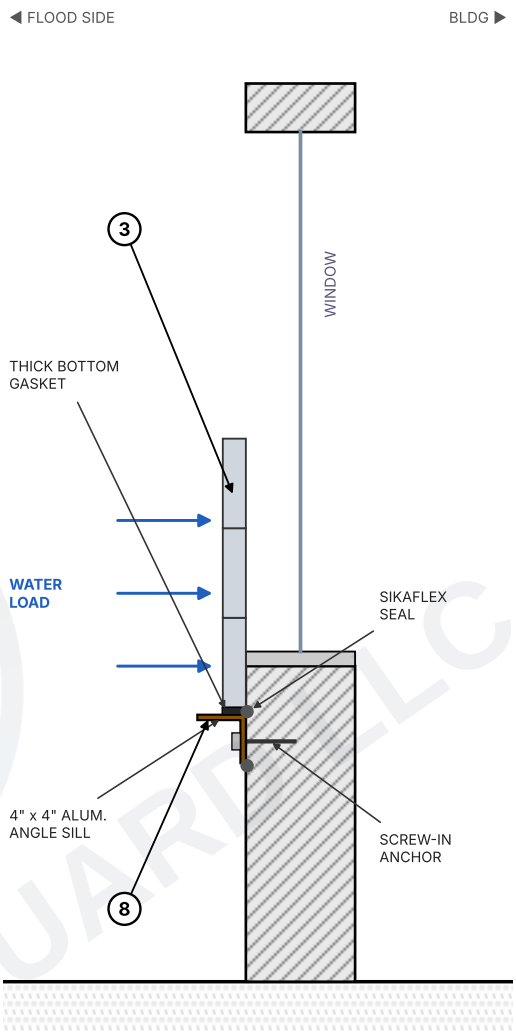
FRONT ELEVATION

FROM FLOOD SIDE



SECTION B

THROUGH SILL



COMPONENT KEY

- 2 — **External bracket**
  Mounted on the wall face outside the opening.
- 3 — **Flood planks**
  Removable aluminum planks, 7.38" each, stacked to the required height.
- 8 — **4" x 4" aluminum angle sill**
  Anchored to wall below window; planks seat on top.

NOTES

1. Sill: 4" x 4" aluminum angle (6061-T6 structural), vertical leg anchored to the wall below the window w/ screw-in anchors (5/16" galv. Tapcon); spacing per design.
2. Angle and brackets sealed to wall w/ Sikaflex construction sealant.
3. Brackets set tight to the wall face each side of the window; planks seat on the angle, tight to the block.
4. Sill height, angle length and plank count per window size and required protection height.

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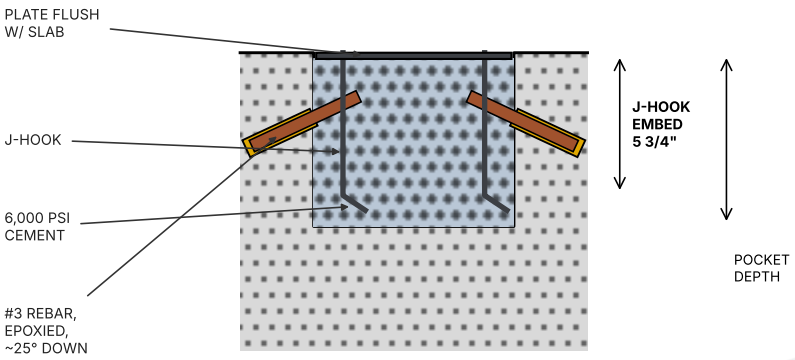
TYPICAL INSTALLATION · TD-10

Anchor Plate — Wet-Set Installation

Anchor plates are recessed flush into the existing slab so center posts, legs and corner posts can be removed when not deployed, leaving nothing to trip over.

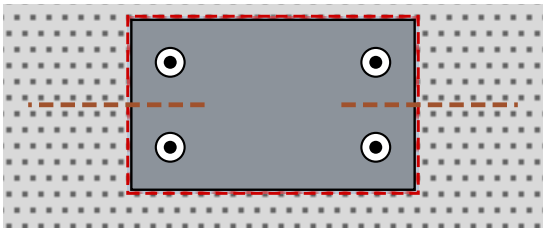
SECTION

THROUGH SET PLATE



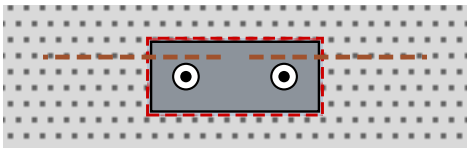
LARGE PLATE — PLAN

CENTER / CORNER POST, 4 SCREWS



SMALL PLATE — PLAN

SUPPORT LEG, 2 SCREWS

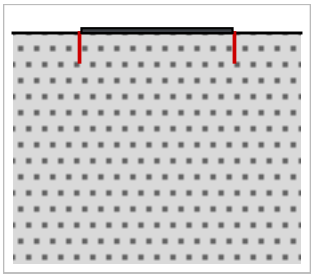


REBAR OFFSET TO CLEAR J-HOOKS

INSTALLATION SEQUENCE

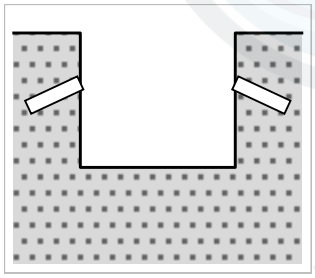
1. MARK & SAW-CUT

Use the plate as a jig; trace and saw-cut.



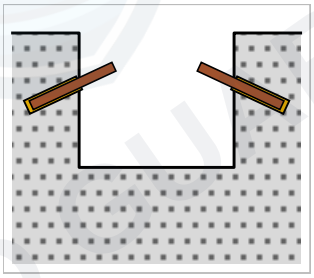
2. REMOVE & DRILL

Chip out pocket; drill angled holes in sides.



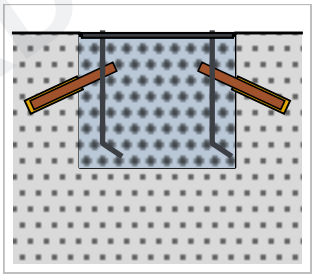
3. EPOXY REBAR

Epoxy #3 rebar into side holes.



4. WET-SET PLATE

Fill w/ 6,000 PSI cement; set plate flush.



MATERIALS

Large plate	7.87" x 4.72" w/ J-hooks — center & corner posts
Small plate	4.72" x 1.96" w/ J-hooks — support legs
J-hook embed	5 3/4" below slab surface
Rebar	#3, 5" long, 2 per plate, in 1/2" holes angled ~25° down: 3" into slab side, 2" into pocket
Fill	High-strength 6,000 PSI cement, wet-set

NOTES

1. Rebar is drilled into the pocket sides, not down, so the slab depth does not limit the install.
2. Plate top finishes flush with the slab; posts and legs screw to the plate when deployed.
3. Same method at every center post, support leg and corner post location.

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