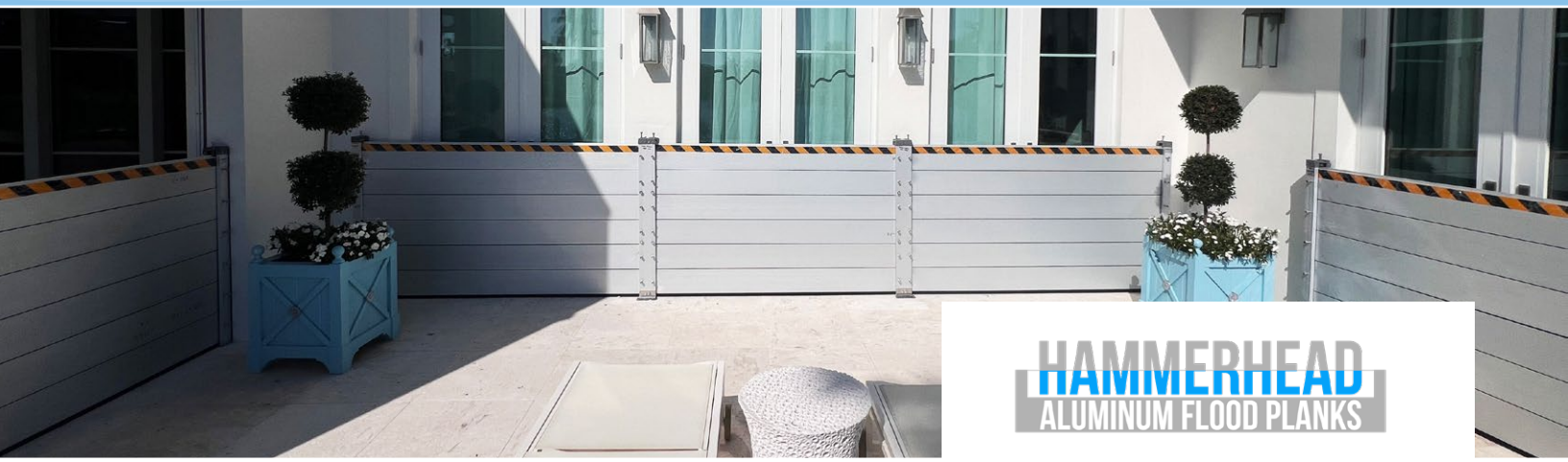
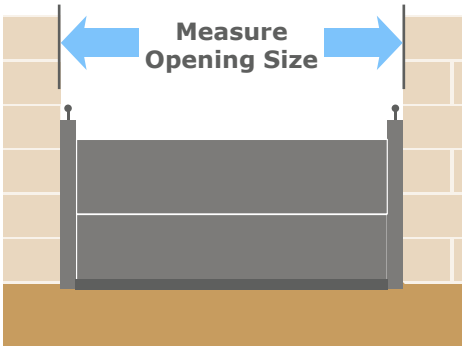
Installation Instructions



HAMMERHEAD
ALUMINUM FLOOD PLANKS

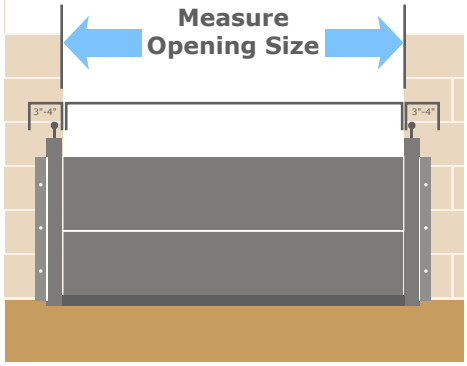
Measuring Your Opening

We typically recommend inside mounting if possible. However, note that this mounting method will narrow the opening slightly (about 4 inches on either side). Choose the best option for your opening or email us at StormSurgeXLLC@gmail.com.



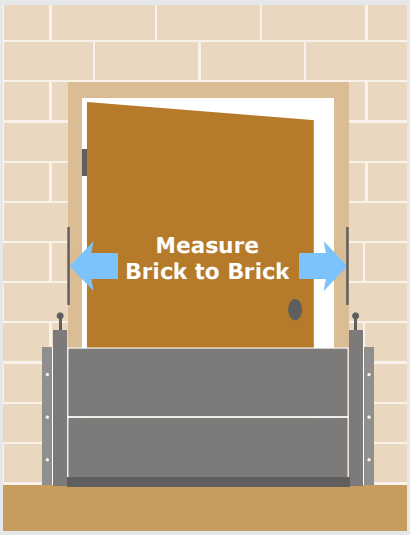
Inside Mount

- Measure exact opening size to the nearest ⅛" remembering that you need enough room on either side of the opening to accommodate the depth and width of the support posts.
- For outward swinging doors, allow enough room for the door to clear the posts.
- Consider mounting posts on the inside of your door if adjacent side walls are concrete, cinder block or brick.
- We will calculate necessary panel size, so we just need measurement of the actual opening size.



Outside Mount

- Measure exact opening size.
- Posts will be positioned on the outside of the desired opening.
- A few inches will typically be added to panel spans on either side of the opening.
- If that is not desired due to space constraints, please let us know.



Mounting Outside Door Frame

- Use for door frames without large enough opening to support posts.
- Mount posts brick to brick as shown, outside of door frame.
- Applicable for brick, cinder block or concrete.

Support Post Installation

Installing Inside Mount Posts

- Align posts so that outside neoprene seal is positioned between aluminum post and opening frame.
- Ensure panel tensioning bolts are facing outwards, towards water.

Drill Mounting Holes

- Use a hammer drill to drill holes through the pre-drilled guide hole in the post and into the wall or frame to which it will be mounted.

Expansion Bolts

- Insert the masonry bolts into newly drilled receiver holes and tighten down the bolts using a ratchet to secure in place.

Installing Outside Mount Post

- Position posts so that the neoprene seal is between the post and the wall while mounting tabs are against the wall.
- Tabs should be positioned away from the opening so that the left post has tabs on the left and right.

Drill Mounting Holes

- Use a hammer drill to drill holes through the pre-drilled guide hole in the post and into the wall or frame to which it will be mounted.

Expansion Bolts

- Insert the masonry bolts into newly drilled receiver holes and tighten down the bolts using a ratchet to secure in place.

Things to Note:

- *We supply masonry bolts with every order and if you decide to use the included bolts, you will need an 12mm drill bit to drill the hole for the masonry bolt.*
- *If your wall is of questionable quality, such as cinder block or old bricks, you may want to purchase double expansion anchors to use in place of the included expansion bolts.*
- *You may also wish to initially drill a smaller receiver hole, into which you place the bolt, to ensure a snug fit.*
- *When installing posts on hollow walls, you will need to purchase butterfly bolts that will expand in the opening and provide a more secure hold.*
- ***Urethane Silicone** - Apply some urethane silicone on the water side, at the base of the post and along the seam line between the post and the wall.*
- *Posts are removable using drop-in anchor bolts. The threaded sleeves are left in the wall and the flood barrier posts are able to be removed and reinstalled in advance of a flood event. It is important to confirm a good seal between the post, neoprene, and wall during each installation.*

Support Post Installation

Installing Center or Corner Posts

Center posts are used for longer spans than the recommended maximum panel length. Center posts come with a kicker leg which provides additional resistance to hydrostatic pressure from flooding. Corner posts are used to make a turn and can be used for perimeter protection.

Center Post

Center Post
Kicker Leg

90-Degree
Corner Post

- Use the pre-drilled holes in the base of each post (and buttress if used) to mark where holes will be drilled.
- Using a hammer drill, drill necessary holes in concrete.
- Vacuum and clean holes to remove any debris.

Making Posts Removable

To make post removable there are two methods you may use:

Method 1

Drilling For
Mounting

Drop-In
Anchor Bolts

Mounting Bracket
with Bolts

- Use standard drop-in anchor bolts.
- Insert the drop in anchor bolt into the drilled holes with the open side facing up.
- Use a setting tool to lock the drop-in anchor bolt into place. Place the setting tool into the anchor and strike the top of the setting tool with a hammer, until the lip of the tool touches the rim of the anchor.
- Remove the tool and the anchor should remain firmly in place, ready to receive a bolt.
- Place machine threaded bolts through each hole in the post base and into the anchor bolt.
- Tighten down to secure the post to the floor below.

Method 2

Center Post
Baseplate and
In-Ground Anchors

Base[illegible]ker
Base[illegible]te and
In-Ground Anchors

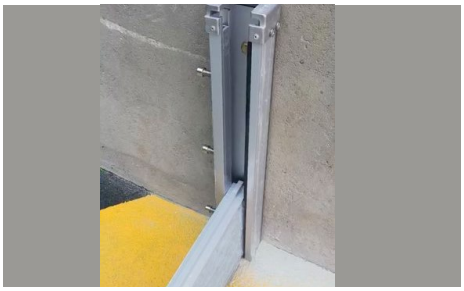
Installed Base
Plate

- Utilize our in-ground base plate, which is cemented into the concrete.
- To place the baseplate, cut into existing concrete to a depth and size sufficient to accommodate the baseplate, the bolt receivers welded to the bottom of the baseplate, and the in-ground anchors screw into the underside of the receivers (designed to give greater support depth into the concrete).
- Pour concrete around the baseplate, fully enclosing the plate, bolt receivers and in-ground anchors.

Panel Installation

Slotting in Panels

Identify bottom panel with larger seal off compared to supporting panels.



Slide out the post tensioning cap and bolt to gain access to the U-Channel. Then insert the bottom panel.

Continue to stack panels finishing with the safety tape top panel.

Tightening Down Panels

Insert the post tensioning plate with bolt into the notch at the top of the post.

Use the included Allen wrench to tighten down the panels. Be sure not to over tighten the panels.

Use the included Allen wrench to screw down the panel tensioning bolts on the posts.

Once all panels are tightened down, your barrier is ready to protect against flooding.

Adding Wall Spacer Columns

If you need to move the posts out further than the wall, say to clear door hardware or a door frame, then you can use spacers to move the posts further away from the wall.

These can be recycled wood lumber, treated lumber, or steel extrusions.

Recycled wood spacers come in various sizes and can be purchased at most home improvement stores.

To install post spacers, simply bolt the spacers to your wall using standard anchors. Caulk around the edges to seal the connection point and ensure that it is waterproof.

Once spacers are installed, mount Hammerhead posts onto the spacer, as you would to a standard wall. Simply bolt these into position using the same methodology indicated in our instructions.

Adding a Concrete Footer to Enhance The Watertight Seal

To improve the seal between the Hammerhead and the ground below, it is important to have a level and smooth surface.

In situations where there are pavers in sand, gravel, or dirt as a subsurface, it is important to add a concrete footer underneath the Hammerhead bottom rail to ensure a good seal.

This footer should extend across the entire width of the barrier, including the U-Channel Posts.

The footer should be positioned right up against your structure, to ensure a good connection and seal off. If the footer is being placed between two property walls, make sure that it is positioned to abut these walls to create a secure seal.

Installation of the Footer:
Cut into the existing ground to a depth and size that can accommodate the Posts (and Baseplates in some instances) prior to installation. Frame out the area to receive concrete.

Pouring and Smoothing:
Once leveled, pour concrete into the hole and smooth out the top to create a level surface. This enhances the watertight seal against the Hammerhead Bottom Plank's thick neoprene gasket.

Rebar Reinforcement:
It is recommended to consult with your local contractor to determine if rebar reinforcement is recommended for the Footer area before concrete pour. Usually rebar is required for driveways and other high traffic areas.





Storm SurgeX
Storm Surge Barriers

For Additional Help or

Support Contact:

StormSurgeXLLC@gmail.com
(941) 999-7287 | www.StormSurgeX.com