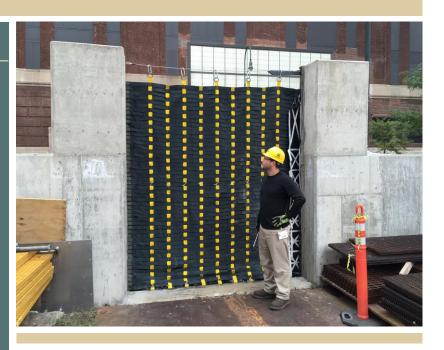
Point of Use Flood Barrier

Overview

- Point of use flood barriers can be used in combination with sealants to provide protection from a maximum of six feet of flooding for a single point of entry.
- A point of use flood barrier is a high-strength fabric wall that can be deployed quickly before a flooding event.
- This strategy requires permanent installation.
- The point of use barrier must be stored in a container in the area where it will be deployed to make deployment more efficient. Storage must be located above the point of entry or in a storage trench below.
- Prior to a flooding event, the barrier must be clamped to the opening walls and the ground.
- The point of use barrier is relatively simple to operate and can generally be deployed or stowed by two people within 30 minutes.
- All pre-flooding assembly only requires standard hand tools.
- Even with barrier installation, there will still be some water infiltration. Floodproof windows/doors and interior drainage systems may still be necessary.
- Prior to installation, the structural soundness of the building, walls, and floor slabs including their ability to withstand flood loads must be determined. A competent design professional is required in shield installation.
- If the amount of flooding exceeds the capacity of the structure's walls, the barrier can cause more damage to the structure.
- Point of use barriers are not recommended for structures that may experience flooding lasting longer than 12-24 hours.



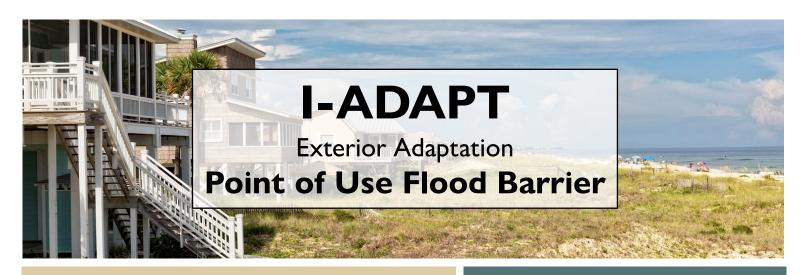
Key Takeaways

During flood events, water can enter a structure through un-sealed openings like doors and windows.

To avoid flood damage inside of a structure, point of use barriers can be installed on un-sealed openings.

Point of use barriers are water-tight systems that cover the un-sealed openings on the exterior walls of the structure. They transfer flood-induced forces to the surrounding exterior walls and help prevent water from entering the building.





Estimated Costs/Benefits

*U.S. dollars (2022), estimates are subject to change

Potential Costs		Potential Benefits		
ltem	Estimate	Post-Flood Recovery Actions	Estimate	
Point of use barrier customized to the entry way	\$3,000-\$8,000	Flood damage recovery (professional clean-up, mold removal, replacement/ repair of flood damaged items)	1 inch water	\$10,800- \$53,500+
Initial installation of permanent fixtures	\$300-\$800		4 feet water	\$43,400- \$203,500+
ESTIMATED TOTAL COST PER ENTRY WAY	\$3,300-\$8,800	ESTIMATED TOTAL SAVINGS	\$10,800- \$203,500+	

Additional Resources

- <u>FEMA Flood Mitigation Assistance Individual Flood Mitigation</u>
- o FEMA Homeowner's Guide to Retrofitting (Chapter 8)

Resources can also be found at https://de.gov/iadapt

Expected Maintenance

- Periodically check barriers and fixtures to ensure they have not corroded or been damaged in any way.
- o Follow product maintenance guidelines.
- Clean barriers after flooding events.

Additional Actions

- Apply waterproof sealants on exterior walls of structure.
- Point of use barriers must be manually installed immediately before each flooding event.

Permitting Agencies

Contacts for permitting requirements include but are not limited to the following:

- Your city and/or county government for local flood ordinances or regulations
- Your city and/or county government for building permits

Who to Contact

- Design professional or engineer
- Floodproofing contractor

Technical definitions and more information are located on the I-ADAPT website: https://de.gov/iadapt.



