

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.



I-ADAPT

Exterior Adaptation

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Estimated Costs/Benefits

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

Potential Costs		Potential Benefits		
Item	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

- [FEMA Flood Mitigation Assistance Individual Flood Mitigation](#)
- [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.
- 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>.



This information is intended to be used for planning purposes. It is not intended to substitute or take precedence over the guidance of design engineers, contractors, utility companies or regulatory agencies.

For more information, contact DNREC's Division of Climate, Coastal and Energy at DNREC_IADAPT@Delaware.gov

