



Zero International

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Back Cover

**Good News for
Flood-Zone Residents!**

**Flood Barrier Shields
for Doorways Can Help
Safeguard Household
Contents from Floodwaters**

Front Cover



Associated Press News photo showing makeshift barriers during a flood.

When rising waters from nearby streams, rivers or heavy rains threaten your property, your doorways are most likely the weakest link in your home's defenses against flooding. The gasketing used for most residential doors cannot resist the force of rising floodwaters. And seepage under and around the door quickly becomes a steady flow of water that can inundate the interior of your home and everything in its path.

Now there's an effective way to fortify your doorways and help protect the contents of your home from flood damage. Flood Barrier Shield (FBS) is a watertight barrier that you can easily put in place when needed. Available in models for both doors and windows, it comes with

lightweight panels custom-fitted for your openings. The panels fit snugly into channel-type brackets that are pre-mounted vertically onto door and window frames or adjacent walls, and on window sills.

When floodwaters begin encroaching on your property, simply insert the FBS panels into the channels – no tools needed. When not in use, the panels can be conveniently stored in a closet, maybe next to the spare leaf for your dinner table. Out of sight, like hidden reserves for your peace of mind!

Once inserted and secured in place, Flood Barrier Shield effectively blocks a foot or more of floodwaters. What that can mean for your home is illustrated in the real-life examples provided inside.

Why it works...

Known worldwide for its specialized door and window sealing systems, manufacturer Zero International put all its engineering know-how into the design of Flood Barrier Shield. The metal used for both the FBS panels and insertion channels is marine-grade aluminum. And Zero's own top-quality neoprene rubber lines the channel brackets and bottom of each panel section. The rubber helps fill in any gaps in your thresholds along with solidly sealing all frame edges. And pressure from the weight of rising floodwaters only makes the seals even tighter!

Things you need to know...

- You can order FBS panels in any height, but for fastest, easiest installation by one person, a maximum height of three feet is recommended for the base section. More panels can be stacked if you need greater total height for your barrier.
- Zero's engineers can assist you in determining the best FBS options for your specific situation. They can also answer any questions about installation.
- To order Flood Barrier Shield for doors, ask for Model #2070. The window version is Model #2080.
- To ensure that the seals provide maximum impermeability when they are needed, we recommend that you inspect the rubber linings periodically.
- Flood Barrier Shield complies with standards of the Federal Emergency Management Agency (FEMA) and Federal Insurance Administration (FIA) for use on doors in flood-prone areas.

How to order...or for more information

If you would like to request a price quote online for Flood Barrier Shields for your home, you can submit your request by visiting:

<http://floodbarrierfordoors.com/form.html>

Or call us at **800-635-5335** or **718-585-3230** to speak with a customer service representative for answers to any questions and to place an order.

FLOOD BARRIER SHIELD IN ACTION

Midwest Spring Floods No Match for Flood Barrier Shield

Two feet made all the difference for the owners of a home in Iowa surrounded by floodwaters in March, 2010. As ice jams forced waters of a nearby creek over its banks, the couple installed a Flood Barrier Shield (FBS) to seal off the doorway between the low-lying garage and the interior of the house. As floodwaters in the garage rose to three feet – two feet above the door threshold – FBS completely sealed off the opening. The only water penetrating the limestone-constructed house bubbled up through drains and was easily mopped up.



The owners ordered their Flood Barrier Shield from Zero after suffering substantial losses when their entire basement was inundated during an earlier flood. They then pre-installed the FBS vertical mounting channels on the frame of the door, as directed. So when the ice-jammed floodwaters began rising in 2010, they were ready. Reporting their personal experience they noted, "The river was coming up pretty fast, and we started moving belongings to higher levels. As soon as we saw water in the basement, we inserted two flood barrier panels into the channels, one on top of the other – they dropped right in place – and hoped for the best." The best turned out to be all that they hoped for – virtually no water seepage through the door, a dry interior, and safe possessions.



FBS protection in place

A Flood Barrier Shield installed in this doorway of a Midwest home protected the interior of the house when floodwater in the garage rose to a height of 2 feet above the threshold.

Flood Barrier Shield Protects Vermont Theatre in Epic Hurricane Irene

While floodwaters raged through the heart of Brattleboro, Vermont, in the aftermath of Hurricane Irene in August, 2011, the town's New England Youth Theatre (NEYT) remained dry. Flood Barrier Shields installed at the theatre's five doorways played a feature role in the successful flood defenses integrated in the building design by the Putney, Vermont, firm of Greenberg Associates Architects.

The theatre was designed and built in 2006, partly as renovation to an abandoned trucking facility and partly as new construction. Located within the 100-year flood plain of nearby Whetstone Brook, the building's floor slab is only a few inches above the flood plain. Prompted by recently strengthened Federal Emergency Management Association (FEMA) regulations, the building team implemented a floodproofing plan designed to keep the theatre as watertight as possible.

To protect the five doorways that compromised the perimeter wall, Greenberg Architects principal Chip Greenberg specified a solution which he describes as "inexpensive and effective." Custom-fitted Flood Barrier Shields from Zero were made for each door, and pre-mounted vertical channels attached to the interior-side door frames were in place and ready for 20-inch-high flood barrier panels to be inserted in preparation for rising waters.

The floodwaters from the hurricane peaked at 16 inches. When they receded, the debut of Flood Barrier Shield at New England Youth Theatre received accolades. The only post-Irene costs were for replacing a few square feet of damp carpet. And the theatre is now considering extending the barrier another 10 inches higher – for an extra margin of safety.



Theatre surrounded by Hurricane Irene floodwaters

Flooding in the parking lot of the New England Youth Theatre in Brattleboro, Vermont, reached a height of 16 inches in the aftermath of Hurricane Irene.

(Photo by Mara Williams, Brattleboro, Vermont)

Inside Spread



Theatre main entrance protected by FBS

Vertical channels for Flood Barrier Shields were mounted during construction in 2006 onto door frames at the theatre's five doorways, including the 8-foot span at the main entrance shown here. The custom-made aluminum panels were easily and quickly inserted in the channels as Hurricane Irene approached in 2011, providing a virtually watertight barrier that protected the building's interior. Above, Architect Chip Greenberg points to the high-water mark of Irene's floodwaters.



Inserting Flood Barrier Shield into the pre-installed tracks

Bari Shamas (at right), president of the Board of Trustees for the New England Youth Theatre, inserts Flood Barrier Shield panels into pre-installed channels, with an assist from Associate Technical Director Jerry Stockman.



Securing Flood Barrier Shield in place

Associate Technical Director Jerry Stockman tightens a set of thumbscrews to seal the Flood Barrier Shield panel against neoprene gaskets lining the installation channel. To accommodate the theatre's out-swinging doors, the channels were pre-installed on the interior of the door frame.

