



YMCA OF FREDERICK COUNTY FREDERICK, MARYLAND

Historically, flooding has not been a concern for the residents of Frederick, Maryland. One uncharacteristically torrential rainstorm in 2015 changed that for good. The sudden influx of water caused storm drains throughout the city to back up and overflow into the streets. Floodwater rose to dangerous levels in a matter of hours and quickly began to make its way into homes and businesses, including the YMCA of Frederick County. Having operated in the same building for more than 60 years without any flooding issues, the YMCA didn't have flood protection in place at the time.

Floodwaters devastated the building, filling the basement with four feet of water and destroying classrooms as well as the children's learning center. The building suffered a total of \$1.5 million in floodwater damage. Following the disaster, building officials concluded that it was necessary to find permanent flood

protection. It was while attending a local trade show that they discovered the solution they were searching for. After learning about case after case of PS Flood Barriers™ successfully protecting facilities in similar situations, YMCA leadership knew they had found their flood-protection partner.

The YMCA's substantial number of access points proved to be the biggest hurdle to effective flood protection. After studying the recent flood damage and considering the client's budget, the team of experts at PS Flood Barriers determined which openings were the most crucial to protect. The building's large back entrance and two side-door openings presented the most significant vulnerabilities. The back entrance contained multiple openings, and its two surrounding side walls acted like a canal that allowed water to collect and flow into the building when flooding conditions were present.



PS Flood Barriers knew that the back entrance would require a flood-protection solution that was both strong enough to stand up to high water pressure and portable enough to be removed for vehicle access. Because Frederick's flooding issues were unpredictable, a passive system (always in place and requiring no human intervention) would be important for the side doors. After studying the site, PS Flood Barriers determined that a combination of HydroDefense™ Flood Planks™ and Pedestrian Flood Doors would be the best options to address the YMCA's flooding issues. Once a plan of action was put in place, the PS Flood Barriers team customized the HydroDefense Flood Planks to meet the opening requirements, and in a matter of weeks they were installed along with the Pedestrian Flood Doors to protect against potential flooding.

The first true test of the newly installed HydroDefense Flood Planks and Pedestrian Flood Doors came in the spring of 2018. Six inches of rainfall within two hours caused flood levels to reach four feet at the base of the planks, but not a single drop made its way through. The two Pedestrian Flood Doors successfully protected the building from a stream of water that would have otherwise filled the basement for the second time. Unfortunately for the YMCA, a few parts of the facility still suffered damage due to openings that had not been fitted with flood protection (due to budget limitations). "I'll have to admit, I was pretty skeptical at first," says Tim Dunn, vice president of Facilities and Information Technology at the YMCA. "But after seeing the flood planks and pedestrian doors in action, I'm completely amazed at how effective they are. They not only stopped the water, they stopped history from repeating itself. We may have suffered damage in those areas without flood protection, but it's nothing compared to what it would have been without the new flood barriers in place."



Following 2018's flood, the YMCA installed two more Pedestrian Flood Doors as well as an additional HydroDefense Flood Plank system. It also received a \$200,000 state grant to implement further flood-protection measures, in which it plans to install additional flood-protection solutions from PS Flood Barriers. "Sometimes in Frederick, when it rains it pours, and everyone throughout the community is forced to deal with the same situation as us," says Dunn. "We're beyond grateful for the peace of mind that PS Flood Barriers has provided, and that's only one of the many reasons why I've recommended them to businesses all around town. To say that we're satisfied with the outcome would be an understatement."

To learn more about PS Flood Barriers products, visit psfloodbarriers.com or contact Terry Smith at 877-446-1519.

About The YMCA Of Frederick County:

The YMCA of Frederick County is a nonprofit organization based in Frederick, Maryland. Its goal is to strengthen and enrich the development of individuals and families through quality programs and services that build a healthy spirit, mind, and body for all.