Flood Protection Solutions®

FloodDefender®

Site Specific Flood Water Control Solutions

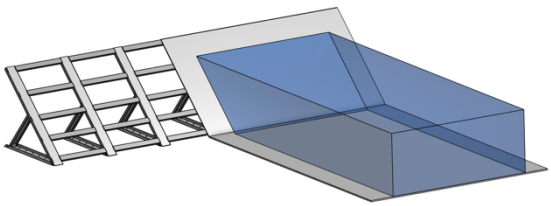
The Flood Protection Solutions team has an extensive history of successfully providing solutions that prevent damage from flood waters. The Flood Protection Solutions **FloodDefender®** system can be used to divert floodwaters away from key infrastructure such as healthcare facilities, critical infrastructure such as emergency response centers, treatment plants, power plants, substations, and reservoirs. **FloodDefender®** can be deployed to increase the height of existing levees/berms. Compared to sandbag walls of the same height, **FloodDefender®** can be setup with lightning speed. **FloodDefender®** can be deployed and demobilized one-hundred times faster than deploying sandbags.

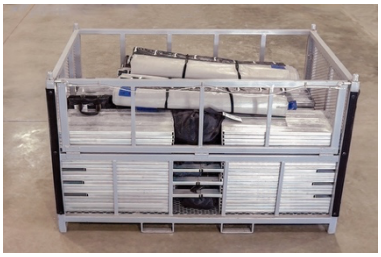
Example:
150 linear feet of 48" FloodDefender® can be installed by a crew of four in an hour or less.
In Contrast, 150 linear feet of sandbag wall that is 48" tall would take the same crew of four 20.31 days working around the clock to set up.

The design and engineering of **FloodDefender®** enables rapid deployment on any surface and along almost any desired line. Normal facility /plant operations can continue during deployment and possibly during the event.

FloodDefender® comes in two interchangeable heights, 48 inch and 72 inches. Thanks to our compact stackable storage system, 1,800 linear feet of **FloodDefender®** can be stored in an area the size of one parking space.

Example: 150 linear feet of 48" protection stored in a single, portable, stackable crate





Key Advantages

- No water or sand to produce, fill, or dispose
- Easy, Rapid Deployment
- Engineered for compact storage
- Less manpower and equipment for setup/removal than sandbags
- Modular design allows custom layout
- Designed, Engineered and Manufactured in the USA
- US Patent #11,486,107

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Contact our Flood Protection Experts

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Dependable flood protection solutions that you can trust.

PROUDLY MADE IN THE USA

FM APPROVED

Flood Protection Solutions®

FloodDefender®

Specifications

Meets or exceeds the following Standards, Guidelines and Regulatory Requirements:

- ANSI/FM 2510-2020 (American National Standard for Flood Mitigation Equipment)
- US Army Corps of Engineers – Maximum impact Forces of Woody Debris on Floodplain Structures (February 2018)
- International Building Code (IBC)
- American Institute of Steel Construction (AISC)
- American Iron and Steel Institute, North American Standard for Cold-Formed Steel Structural Framing (AISI)
- Steel Stud Manufacturers Association (SSMA)
- Steel frame components are galvanized and meet ASTM A-50 steel designation
- Synthetic liner materials have the following minimum properties:
  - Minimum grab tensile (Warp & Fill) per ASTM D5034 is 480 pounds
  - Minimum Tongue Tear (Warp & Fill) per ASTM D2261 is 80 pounds and 65 pounds respectively,
  - Synthetic fabric is polyester fiber reinforced
  - Coating distribution shall be 65% front and 35% back
  - Fabric shall include UV Inhibitor, be mildew resistant and have a dull finish

Deploys:

- Over uneven surfaces of varying composition such as concrete, asphalt, grass, or dirt
- Reusable multiple times
- Installed without the use of hand or power tools

Storage:

- Self-contained within a rack when not in use
- Weather resistance for long term storage inside or outside
- Compartmentalized and stackable

Performance:

- Withstands flowing water / tides parallel to, or at any angle to the face of the barrier.

Withstands water to the full height of the barrier

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System Testing Data

FloodDefender – Perimeter Test Data			
Test Description	*Water – Depth*	*Water - Other*	*Duration*
Deployment	N/A	N/A	Per Manufacturer's specifications
Hydrostatic Load	1.0ft (.30m)	N/A	22hrs
	2.0ft (.61m)	N/A	22hrs
	100% of H	N/A	22hrs
Wave-Induced Hydrodynamic Load	66.7% of H	Low waves 2 – 3 inches (51 – 76mm)	7hrs
	66.7% of H	Medium waves 6 – 8 inches (152 – 203mm)	10 minutes (3 times)
	66.7% of H	High waves 10 – 12 inches (254 – 305mm)	10 minutes
	80% of H	Low waves 2 – 3 inches (51 – 76mm)	1hr (min) – 7hrs (max)
	80% of H	Medium waves 6 – 8 inches (152 – 203mm)	10 minutes (3 times)
	80% of H	High waves 10 – 12 inches (254 – 305mm)	10 minutes
Overtopping	>= 1 inch (25mm) overflow	N/A	1hr
Debris Impact	66.7% of H	12-inch (30mm) Diameter log, 610lb (277kg) weight at 7ft/s (2.13m/s)	N/A
	66.7% of H	17-inch (43mm) Diameter log, 790lb (358kg) weight at 7ft/s (2.13m/s)	N/A
Current	66.7% of H	7ft/s (2.13m/s) current	1hr
Post Hydrostatic Load	100% of H	N/A	1hr (min) – 22hrs (max)
H = The manufacturer's specified maximum design water depth for the barrier			