STEINHARDT®
HYDROSWIZZ
FLOOD BARRIER

HydroSwizz Flood Barrier

The innovative flood barrier system –
quick to set up and take down

STEINHARDT
WATER TECHNOLOGY SYSTEMS
A WILO COMPANY

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The Challenge

Global warming resulting in climate change and shifts in weather patterns has resulted in increased risk of heavy rainstorms and their accompanying floods. This does not only apply to areas already identified or well-known as flood plains but extended flood areas are more common.

The Way

The innovative **HydroSwizz Flood Barrier** is ready for service within a very short time and, when the flood has subsided, it is as quickly dismantled and packed away, requiring only a minimum of storage space.

The Advantages

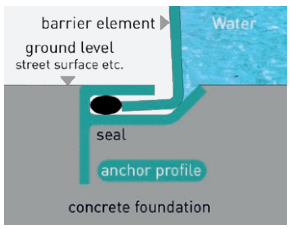
- quick and easy mounting
- competitive cost compared to other flood protection systems
- up to 2 m protection height
- no supports
- no ground bolting
- robust system, premium VA steel, steel or aluminium
- easy logistics with one design for all protecting elements
- ready for re-use after simple cleaning
- 90% storage gain in comparison to stoplogs or sandbags
- elements and tools for 30 or 60 cm barrier in one transportation and storage case

The System

The innovative zigzag design is based on "anchor profiles", set at an angle of 135° to each other and fitted flush to the ground into a prepared concrete foundation.

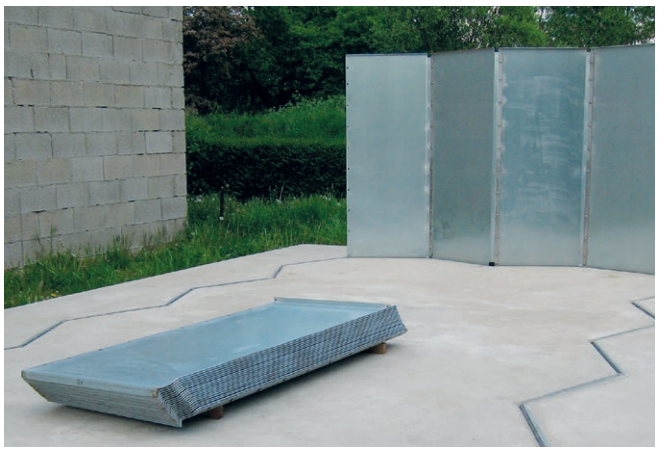
The profiles and the foundations are the only permanent parts of the system. There are no raised elements so that in normal dry conditions there is no visible impact or trip hazards. For the most part the system is unobtrusive during dry periods.

The steel sheets making up the barrier are slotted into the pre-formed profile. The receiving groove, into which the anchor profiles and therefore the steel sheets, are inserted, must face away from the water. As the water level rises, the water pressure pushes the barrier sheets tighter against the seal in the slotting groove, thus increasing the seal's effectiveness. The barrier remains watertight against the rising floodwater. A bolting strip is used to fix the sheets together in a zigzag path giving the protection barrier substantial stability and making extra supporting structures unnecessary.



The patented mobile flood barrier protection system has undergone rigorous testing. Finite element analysis for various critical load cases has been applied; this includes the case of a car colliding from the landward side or increased pressure from floating debris on the water side.

Professor Dr.-Ing. M. Feldmann from the Technical University in Aachen concludes that, *"The mobile flood protection barrier system fulfils all relevant requirements of boundary conditions to provide ample security. Its strong feature is flexibility of design which allows extreme versatility of application. The system is simple and quick to erect which makes it a very promising solution for portable floodwater protection."*



Sandbag substitution

HydroSwizz Emergency Flood Barrier with ground sealing provides a flexible, quickly-mounted alternative to the laborious filling and stacking of countless sandbags.

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