



The Dutch Float Dike (DFD) is a proven, self-activating flood barrier that combines water safety with an open view and free passage. Using the buoyant force of water, the barrier automatically rises during high water and retracts when levels fall—without manual or mechanical operation.

Designed to be modular and fully integrated into its surroundings, the DFD can protect up to 4.5 meters in height and any required length. When inactive, it remains flush with the surface, allowing pedestrians, vehicles, and even urban life to continue seamlessly.

Durable, low-maintenance, and already realized in projects such as Steyl Maashoek, the DFD offers a reliable solution for both cities and critical infrastructure.



The Dutch Float Dike (DFD) is a self-activating flood barrier that uses the force of incoming water to provide reliable protection. The concept is simple yet powerful: as water rises, the barrier floats up into position, automatically securing the area against flooding. When the water recedes, the system drains and the barrier resets itself—ready for the next event.

How It Works

- **Concrete Basin & Deck:** Each installation is custom-built with a poured-in-place concrete basin containing the flotation unit. A steel deck covers the unit, designed to handle pedestrian and vehicle traffic.
- **Self-Activation:** Rising water fills the reservoir beneath the deck, lifting the float and pushing the steel plate upwards to form the barrier.
- **Automatic Reset:** Once water levels drop, the drainage system empties the reservoir, allowing the deck to lower back into its flat position.
- **Proven Principle:** The DFD uses the same imbalance principle successfully applied in other self-activating barriers worldwide.





Key Benefits

- Unobstructed Views & Access – At low water levels, the barrier is invisible, preserving views and allowing full access.
- Automatic & Reliable – No manual or mechanical operation required; always ready when needed.
- High Protection Capacity – Up to 4.5 meters in height, with unlimited length possible.
 - Durability – Corrosion-resistant materials, designed for heavy traffic loads.
 - Low Maintenance – Annual test closures can be carried out quickly and efficiently.
- Proven in Practice – Successfully realized in projects such as Steyl Maashoek and the Balcony by the Maas.



Applications

The Dutch Float Dike is especially suited for:

- Urban environments and waterfronts
- Heritage areas and protected village views
- Critical infrastructure, ports, and access gates
- Locations requiring permanent unobstructed views combined with guaranteed flood safety



Design & Implementation

- Design Principles Provided – Clear technical framework for local adaptation.
 - Concrete Basin On-Site – Produced at location for precise integration.
 - Float & Valves – Manufactured locally or supplied directly.
- Scalable – Modular construction allows customization for any length or configuration.

The system has already transitioned from award-winning idea to working prototype and realized installations. The projects in Steyl Maashoek demonstrate its effectiveness, aesthetic integration, and long-term durability.