FLOOD DEFENCE

Andel FloodWall

Environmentally friendly, cost-effective, modular perimeter flood defence



Environmentally friendly, modular perimeter flood defence

Andel FloodWall is designed for easy transport and installation, and is constructed primarily from 100% recycled post-industrial plastic waste.

Panels and posts are manufactured from nonporous, durable recycled plastic, with steel pipe reinforcement through each post for added strength. Horizontal ridge supports prevent panel deflection under floodwater pressure, while a wood-effect finish ensures a sympathetic appearance in any environment.

Water resilient installation

FloodWall can be installed on soft ground or suitable hard surfaces. Panels are secured to reinforced posts using self-tapping fixings, compressing integrated waterproof gaskets to create a tight seal. Panels are set into the ground to enhance water resistance.

Built to resist the force of floodwater

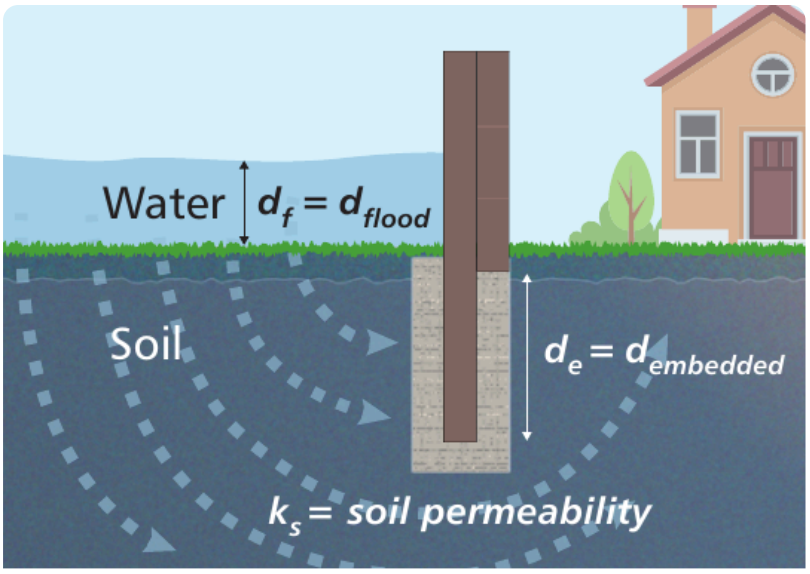
Posts are installed deep into concrete foundations, providing the strength required to withstand floodwater loads. FloodWall is designed and tested in accordance with BS 851188-1:2019 for flood resistance products.

Soil analysis and hydrological modelling

Through collaboration with University of Leeds and Knowledge Transfer Partnerships, Andel assesses site-specific soil conditions to optimise system design.

Benefits at a glance

- Cost-effective compared to traditional systems
- Modular design for easy transportation and speedy on-site assembly
- Suitable for new build and retrofit installations, residential and commercial
- Panels and posts primarily constructed from nonporous, durable, 100% post-consumer recycled plastic waste
- Steel-reinforced posts for added strength
- Environmentally friendly, reducing carbon footprint compared to all-concrete defence
- Site soil analysis and modelling used to optimise installation
- Aesthetically sympathetic wood-effect finish



Hydrological model: flood depth, post embedment depth and soil permeability inform the optimum FloodWall design.

Panel size and height of defence

System height is determined by flood risk assessment. Panels are available in two sizes: 600mm × 1920mm and 800mm × 1920mm, with widths adjustable on site. Panels can be stacked to provide protection up to 1.2 metres above ground level.

TECHNICAL INFORMATION

PANELS

Panel sizes: 600mm × 1920mm and 800mm × 1920mm

Widths: Adjustable to fit on site

Maximum stacked height: Up to 1.2 metres above ground

CONSTRUCTION

Panels & posts: 100% post-consumer recycled plastic waste, nonporous and durable

Reinforcement: Steel pipe through each post

Finish: Wood-effect

STANDARDS

Tested to: BS 851188-1:2019 for Flood Resistance products

Standards & certifications

- BS 851188-1:2019