



#### SPECIFICATIONS

GEO-Inero Flood Barrier H180 (height 1.8m)

H150 barrier with 0.3m extension attached

**Material:** Seawater-resistant 5mm marine-grade aluminium EN-AW-5754 H22

**Dimensions:** 2446 x 755mm. Plus a 45mm lip on one short side and a 115mm lip on one long side.

**Weight:** 27.5kg

#### SUPPORT LEGS

**Material:** 1.5mm Steel Magnelis

**Dimensions:** 1296 x 180 x 40 x 5mm

**Weight:** 5.6kg

#### FOOT BEAM

**Material:** 1.5mm Steel Magnelis

**Dimensions:** 1773 x 320/220mm

**Weight:** 7.4kg

#### CORNER SECTION

Four 22.5° corners make a 90° corner

**Material:** Seawater-resistant 5mm marine-grade aluminium EN-AW-5754 H22

**Dimensions:** 2168 x 710/310 x 5mm

**Weight:** 38.5kg

## GEO-INERO H180 FLOOD BARRIER

**GEO-Inero's patented flood barrier in its highest version, designed to withstand water levels up to 1.8m. A sturdy, durable barrier with quick connectors for easy, time-saving installation.**

GEO-Inero flood barrier sections, support legs and foot beams are made of seawater-resistant marine-grade aluminium. The material has high durability and withstands extremely tough outdoor conditions. The sections are erected using a sturdy aluminium support leg with a conical foot beam. The unique shape of the foot beam, combined with the integrated gripping teeth, guarantees extra stability and an optimal grip on all sorts of substrates. The sections interlock using a patented quick connector to form a continuous, flexible barrier that adapts to the substrate. GEO-Inero flood barriers are suitable for all common substrates, such as concrete, grass, gravel and asphalt. They can also be curved 90° through the use of corner sections – outer and inner corners of 22.5°. The barriers stop and withstand both standing and rushing water and can be assembled directly in the water as long as the water level is no more than 0.3m.

#### ASSEMBLES IN FOUR EASY STEPS

GEO-Inero flood barriers are easy to assemble, even with no previous knowledge. Two people can install 100 metres of complete barrier in two and a half hours.

- 1. Affix the foot beam to the support leg.**
- 2. Connect the barrier sections with the quick connector. It is easiest to do so from left to right.**
- 3. Affix the support legs and the foot beam to the barrier section. The two galvanised screws and pre-mounted nuts fit into keyhole slots on the long side of the barrier. Adjust by hand or using a tool.**
- 4. Roll the specially designed polyethylene membrane over the barrier framework, attach with clips on the top edge, anchor at the bottom with sandbags or heavy chains.**

## LOGISTICS

Lightweight materials and innovative design contribute to low weight and good stackability, which simplifies storage and transport. Two cargo pallets, specially designed in galvanised steel, will hold 25 metres of H180 flood barrier. A cargo container can hold 300 metres. The standard configuration of one pallet of GEO-Inero flood barriers, such as the H180, is as follows: 25 metres of barrier sections, support legs and foot beams for 25 metres, a plastic box of 50 plastic clips and user manual, screws with pre-mounted nuts and one spanner, and polyethylene membrane for 25 metres.

## TESTING

Together with strength calculations and simulations independent third party institutes in Germany\* and the UK\* have tested the GEO-Inero barrier. The tests investigated the barrier's

stability, performance, leakage rate and impact resistance with good results.

The end results showed that the barrier stands stable at full water pressure of one meter and while overtopping, stands stable after the impact of heavy logs, is easy to install and has a leakage rate below 40 l/h/m both after 1 hour and after 18/22 hours.

## ENVIRONMENT

GEO-Inero flood barriers are designed with minimal materials. Their low weight also means reduced carbon emissions from transport. The barriers have an extremely long service life and are 100% recyclable. The polyethylene membrane is single-use only and is suitable for eco-friendly incineration.

\*Wasserbau's institute and Hamburg University of Technology and HR Wallingford

**GEO-Inero flood barriers are also available in 0.5m, 0.8m, 1.0m and 1.5m heights. The size of the quick connector is the same regardless of height, which means that different barriers can be interconnected.**



Photo showing installation of the H180 barrier. Simple to carry and handle, only 27.5kg per section.



The double folded membrane is fixed with the clips. After clipping fold down the edge and fix the membrane to the ground.



Photo shows the barrier H180 from the water side.