



SPECIFICATIONS

GEO-Inero Flood Barrier H100 (height 1.0m)

Material: Seawater-resistant 4mm marine-grade aluminium EN-AW-5754 H22

Dimensions: 1340 x 880mm. Plus a 90mm lip on one short side and a 110mm lip on one long side.

Weight: 14.6kg

SUPPORT LEGS

Material: Aluminium profile

Dimensions: 873 x 120 x 30mm

Weight: 2.1kg

FOOT BEAM

Material: 4mm marine-grade aluminium

Dimensions: 1125 x 250/150mm

Weight: 2.6kg

CORNER SECTION

Three 30° corners make a 90° corner

Material: Seawater-resistant 4mm marine-grade aluminium EN-AW-5754 H22

Dimensions: 1321 x 845/450 x 4mm OUTER, 1321 x 803/450 x 4mm INNER

Weight: 8,9 kg OUTER, 8,8 kg INNER

GEO-INERO H100 FLOOD BARRIER

GEO-Inero's patented flood barrier is designed to withstand water levels up to 1.0m. 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 30°. 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 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 or two specially designed pallets in galvanised steel will hold 100 metres of H100 barrier. A 20 foot cargo container can hold 350 metres.

The standard configuration of one pallet of GEO-Inero flood barriers, such as the H100, is as follows: 50 metres of barrier sections, support legs and foot beams for 50 metres, a plastic box of 100 plastic clips and user manual, screws with pre-mounted nuts and one spanner, and polyethylene membrane for 50 metres. Total weight for one steel pallet with 50 metres of barrier: 1300kg.

The steel pallet is specially designed to allow ergonomic and user-friendly installation of the barrier with the barrier plates standing on end and the material accessible from both sides.

After use, simply clean the barrier and reload the sections onto the pallets for reuse.

TESTING

Together with strength calculations and simulations independent third party institutes in Germany* and the UK* have tested the GEO-Inero flood 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.

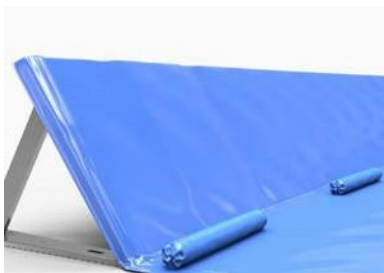
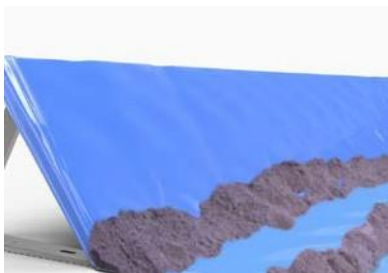
ENVIRONMENT

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, 1.5m and 1.8m height. The size of the quick connector is the same regardless of height, which means that different barriers can be interconnected.

One pallet:
50m
complete
barrier



The photos above show the GEO-Inero transport and storage system, the installation principle and different ways of anchoring the membrane (sand, sandbags and heavy chains).