

FLOOD DEFENCE

# BoxBarrier

Effective, temporary flood barrier system



**BoxBarrier is a cost-effective, temporary flood defence system which has the huge advantage of quick and easy installation and removal.**

The modular flood defence consists of boxes, lids and joints. The boxes are filled with water to create a highly effective flood barrier. When empty, BoxBarrier is lightweight and compact making it easy to transport and install, especially when compared to heavy sandbags.



Apart from a simple pump, no additional equipment is required for installation. BoxBarrier does not require a permanent foundation and can be deployed quickly. The UV-stabilised polyethylene construction means it can be used multiple times, can be stored outside and is 100% recyclable.

## Quick and easy installation

BoxBarrier consists of 3 different parts, a box, a lid and a connecting element. Apart from a simple pump, no additional equipment or foundation is required for installation.

BoxBarrier can be installed on variety of surfaces and water can be pumped into BoxBarrier by using a simple pump. 100 metres of BoxBarrier can be filled in one hour by a standard 30m<sup>3</sup> per hour pump.



Removal from site is even faster. The boxes can be emptied by the pump or a bucket, removed by hand and stacked with the joints stored in the top box. There is no debris to clear up, which is often the case with weathered and ruptured sandbags.



## Efficient storage

The compact shape and stackability means both easy transportation and efficient storage. BoxBarrier can stack up to 20 units high, is weather-resistant and durable can be stored outside though dry storage is more preferable.

## Easy transportation

The compact shape and stackability of BoxBarrier makes transportation easy.

10 to 20 BoxBarrier units can be moved in an average car trailer. Larger quantities can be transported by truck or container. 250 BoxBarrier units can be stored in one conventional 20ft container.



Due the low weight of the system, BoxBarrier is also ideal for air freight for international disaster relief.

For more information:  
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✉ [help@andel.co.uk](mailto:help@andel.co.uk)  
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Making water sustainable for  
a cleaner and safer environment.

## Corner and wall pieces

With corner pieces it is possible to place BoxBarriers in sharp angles up to 90 degrees.

Wall pieces make it possible to create a watertight join between a wall or other fixed structure and BoxBarrier.



## Deployment in flooded areas

BoxBarrier can even be installed in water when an area is already flooded. It can be transported on the water by floating or by boat and deployed at the required location. After filling with water, the system is ready and floodwater from the flooded area can be pumped away.

## Temporary bridge

More than just a flood barrier, because BoxBarrier can be walked on, it can also be used as temporary bridge in a flooded area, especially in an urban floods.

### Benefits at a glance:

- Low-cost, temporary flood barrier
- Lightweight when empty
- Easy to transport
- Quick and easy to install and remove
- Ideal as both first and second line of defence
- Efficient, compact storage
- Can be stored outside
- Can be used multiple times as and when needed
- Can be installed on multiple ground surfaces
- Less intrusive than traditional large sandbags
- Multifunctional
- Constructed from UV-stabilised polyethylene making it lightweight, robust and durable
- 100% recyclable
- Zero maintenance
- Vandal-proof

## TECHNICAL INFORMATION

### DIMENSIONS:

- L 90cm x H 60cm x W 60cm

### WEIGHT:

- Empty: 8.3kg, lid: 3.4kg, joint element: 1.5kg
- Filled with water  $\pm$  273kg

### MAXIMUM WATER RETAINING HEIGHT:

- 50cm with BoxBarrier completely filled with water.
- The water retaining height is dependent on the type and inclination of the subsoil.

### JOINT ELEMENTS AND SUPPORTING BOXES:

- When required, support boxes or joint elements can be added at the rear of the barrier.
- The use of support boxes is also advised in the case of wave action, strong currents and possible impact of floating debris.

### SUITABLE SURFACES FOR INSTALLATION:

- Grass on peat, grass on clay, clay, asphalt pavement and concrete pavement.
- In the case of concrete pavement blocks, the joints between the blocks should be sealed to avoid excessive leakage through the pavement, an additional membrane can also be applied.

### FILLING:

- BoxBarrier can be filled by hand or by a water pump. Normal pumping rates are 30-60m<sup>3</sup>/hour.

### INSTALLATION RATE:

- A distance of 100m/hour can be achieved with a team of 3 people with BoxBarriers supplied at the location of installation.

### LEAKAGE:

- BoxBarrier is TUV certified under certificate number 2400-B-154.
- The leakage of the BoxBarrier is <0.25 m<sup>3</sup>/hour/m on a level asphalt surface.
- A leakage rate of 10-15m<sup>3</sup>/hour/100m has been determined from a test by Waterboard Waternet in the Netherlands on a peat subsoil.

### MATERIAL SPECIFICATIONS:

- BoxBarrier is constructed from UV-stabilised polyethylene.
- BoxBarrier is 100% recyclable.
- A neoprene rubber seal is applied at the underside.

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