

## NOAQ Boxwall Q&A

### Dimensions?

Each boxwall unit ("box") has the following dimensions:

Length (along wall):	705 mm
Width:	680 mm
Height:	528 mm

### Damming ability?

50 cm, to the upper edge of the wall, as indicated by the model name "BW50".

### How many boxes do I need for a certain wall length?

Count on 705 mm for the first box and add 625 mm for each of the following ones.

### What's the weight?

3.4 kg per box, which means 5.5 kg per running metre.

### How is a boxwall built up?

You work from left to right, adding one box at a time to the wall by snapping it to the last one. After having adjusted the position and direction of the wall the boxes are fixed to each other by using a spring clamp. Finally you may put some weight on the "toe" of each box, a sandbag or brick or the like, to secure it somewhat against kicking spectators or hard wind gusts, and at the same time improve the sealing against the subsurface.

### Is it possible to make curves?

Yes, two boxes can be attached at an angle of  $\pm 3^\circ$ . This means that 120 boxes will be needed to create a circle. It also means that the minimum radius of a curve will be 12 metre.

### Is it possible to make angles?

Not yet. In the future we are planning for certain angle elements.

### On what surfaces does it work?

The boxwall is designed for urban environment, for hard and even surfaces like asphalt streets and concrete floors.

### What about uneven surfaces?

If the hard surface undulates to a certain extent the boxwall is flexible enough to follow. However, "short wave" irregularities like potholes and curbs are too abrupt.

### Why does the surface need to be hard?

The drop in water pressure, from the flood side to the empty space under the box, takes place in a very short distance. If the subsurface is erosive the steep gradient may lead to erosion, which may in turn lead to the failure of the ground on which the boxwall is standing.

### Will the boxwall replace the tubewall?

No, the NOAQ Tubewall is still the allround barrier working as well on asphalt and concrete as on gravel roads and bumpy meadows. You may regard the NOAQ Boxwall as a special product for the special conditions in urban areas. It is also easier to use for non-professionals.

**What is the boxwall made of?**

ABS 6 mm plastic, vacuumformed to its final shape.

**Is it reuseable?**

Yes, damaged boxes can be shredded and used for new boxes.

**Is it vandal proof?**

Yes, to a very high degree.

**How come it does not slide?**

Attached to the underside there are two soles of para rubber which gives a very high friction.

**What about leakage?**

Water will always leak through and under freestanding barriers, and you will always need a pump to get rid of it. What matters is the leakage rate. Each box has a strip of cell foam underneath to reduce seepage to a manageable rate.

**Is it possible to connect a boxwall to a tubewall?**

Yes, by letting them overlap, and using the tubewall's joint cover.

**Is it possible to connect a boxwall to a vertical concrete or brick wall?**

Yes, as long as the permanent wall is supporting the end of the boxwall. When the permanent wall is running in the same, or nearly the same, direction as the boxwall, there is no problem. If the boxwall is to be attached perpendicular to a permanent wall some kind of supporting post or bar must first be attached to the permanent wall. You also need to seal the gap between the boxwall and the permanent wall. A couple of cell foam strips are therefore enclosed with every order.

**What about storage and transport?**

The boxes are stackable. Each new box adds not more than 15 mm (vertical and horizontal) to the pile. This means the product requires very little storage and is easy to transport.