

## **SCFB FAQ's**

The following are a list of the usual FAQ's.

### ***Is it possible for the barrier to raise only 6 inches and create a trip hazard?***

When there is a flood the barrier will always raise completely, normally within a few minutes.

### ***Do you have a standard warning system for when the barrier rises?***

There is an option to add a flashing light on the end of each unit that will activate when the water reaches a set height in the inspection pit, just prior to the barrier rising.

### ***Is it possible for the barrier to become "stuck down"?***

It is very unlikely. There have been independent tests carried out in the past, by Robert Bird and Partners in 2003, to verify the impact of obstructions causing the barrier to fail to rise. The floating wall is designed to be buoyant and therefore creates a significant upward force. The report concludes that the buoyancy force will be sufficient to lift the end of a small car. In normal usage it is therefore unlikely that the barrier can be held down.

### ***Is the barrier susceptible to warping due to heat/sun?***

No; the barrier will not warp by heat sun. The tolerances of steel cap plate to the barrier aligned to take into account the linear expansion expected for the temperature range of its location~ The barrier length may be limited by the amount of expected expansion.

### ***Is the barrier designed to take a vehicle impact?***

The barrier has not been specifically tested for vehicle impact, but it has designed for a maximum side-ways pressure of 10 times the maximum water pressure. The material is flexible and reinforced with Kevlar. Nevertheless the barrier must be protected from any kind of traffic during a flood by closing the road. The barrier can also have yellow and black chevrons applied' as a visual warning, with a flashing beacon if necessary.

### ***What happens if the inlet structure blocks and prevents water from entering the system?***

There is a grate that is larger than the inlet pipe, and this prevents the internal structure from blockage. The inlet structure is designed to operate even if the inlet is blocked.

### ***What testing has the SCFB undergone?***

From 1995 to 1997 the SCFB™ underwent in excess of 70 tests; these tests included static load, dynamic load, buoyancy force, sand and gravel tests, duration tests (35 days) extreme cold temperature tests, and obstruction tests. These tests concluded that the barrier never stayed stuck and rose up in all tests. The SCFB™ remained watertight in all tests.

***What's the residual life of the barrier?***

The system is made of very durable materials designed to last for 50 to 100 years and remains virtually maintenance free of many years.

***What would be the availability of spares be? (Lead times, guaranteed availability in the future)***

It is not strictly necessary to keep spare parts. All the parts can be delivered within a matter of a couple of weeks.

***How do you get debris out of the unit if it enters?***

In the unlikely event that debris enters the basin, it can hold about 5 cm of debris before it will impact the barrier. The debris can be washed out with water.

***What if debris enters the main unit as the barrier rises and prevents the barrier fully rising, would a waterproof seal still be created?***

When the wall raises a rubber seal on both sides of the barrier closes the space between the barrier wall and the basin. So no debris can enter the barrier when it is coming up. The space is in total 35 - 40 mm, so the barrier comes up unimpeded and has never blocked.

***How do you get two units to butt up against each other? Do you need a permanent post/column between each unit?***

Between the units (recommended / maximum length 50 m) there is a permanent post/column.

***Can heavy rain fill the service pit and falsely trigger the barrier?***

The drain pipe in the pit will always drain the system if it is not surcharged as it would be in a flood situation. In most case a pump is installed with a floating switch which drains rainwater from the service pit..

***Is the product yet kitemarked or ABI approved?***

The SCFB™ is fabricated under: TCVN ISO 9001 :2000/ ISO 9001 :2000 and is approved by many institutes, universities and engineering companies. In 2003 the report “Principles and operations of the Self Closing Waterdam” was made by Robert Bird + Partners in Australia and in 2012 a “Scrutiny primary report of the Self Closing Flood Barrier” was done by Arcadis in the Netherlands. Please ask us for both reports. To date it has not been possible to obtain the Kitemark as the review of PAS1188 has on~ just been completed.

***How does the product deal with silt infiltrating the system?***

The silt will stay in the pit and is unlikely to enter the basin. The system needs an annual check according to a maintenance schedule. If there is silt, it has to be removed.

***What is the life expectancy of the seals?***

The seals have a life expectancy of over 50 years. They are protected underground and therefore are not subject to UV degradation.

***How are the seals replaced if they perish?***

The wall has to be taken out completely. The support block has to be removed to facilitate this, but is generally a quick operation and would not leave the area protected at risk for long.

***If the seals fail while the barrier is in operation what is the effect?***

This is all but impossible but if it did, then the barrier would leak a little.

***What are the annual maintenance procedures/costs likely to be?***

It is essential to have a Maintenance Plan of any SCFB™ system. The recommended frequency for maintenance is once or twice a year. For a fifty metre length of SCFB™ the maintenance time required is between 2 and 4 hours.