The installation will have taken account of what material the product is affixed to and be appropriately configured. Using the barrier as a template, mark the drill positions in the centres of the elongated slots and drill out to accommodate the anchors and resin so 10mm more than the length of the anchor, and ensuring the drill is kept straight. Clean the hole by air and apply resin inside the clean hole, clearing any excess observing all safety precautions provided by the resin manufacturer. Ensure that the anchor sleeve edge is flush with the face of the wall.

Once the resin has cured, the barrier can be deployed or removed by threading the screws using the star-handled screw in the following sequence.

**DEPLOYMENT TIME**

Each panel should take between 2 and 5 minutes to fully deploy.

**INSTALLATION**

The installation will have taken account of what material the product is affixed to and be appropriately configured. Using the barrier as a template, mark the drill positions in the centres of the elongated slots and drill out to accommodate the anchors and resin so 10mm more than the length of the anchor, and ensuring the drill is kept straight. Clean the hole by air and apply resin inside the clean hole, clearing any excess observing all safety precautions provided by the resin manufacturer. Ensure that the anchor sleeve edge is flush with the face of the wall.

Once the resin has cured, the barrier can be deployed or removed by threading the screws using the star-handled screw in the following sequence.

**DEPLOYMENT**

1. Using a screwdriver, remove the protective screws from the threads.
2. Put the barrier into position close to the aperture and verify it is the correct unit.
3. Insert but do not tighten the black star-handled screws into each forward-facing socket. This should secure the barrier but allow for its up and down adjustment.
4. Once all screws are in place tighten gradually ensuring approximately equal pressure is maintained throughout the barrier but starting with the bottom screws.

**TESTING**

The Floodguard Clip-in Barrier products that you have purchased have undergone stringent and comprehensive testing to ensure that they provide effective, safe and reliable protection against flooding for the doorway, airbrick or service entry point that it is protecting.

**USE OF THE PRODUCT**

This product is a reusable, manually-operated product designed for the temporary mitigation of flood risk and should be seen as part of a suite of measures to reduce the risk of flood water entering a property and has been tested according to PAS1188-1:2014 according to the designation of Building Aperture protection to ensure that they provide effective, safe and reliable protection against flooding. It may also be used on perimeter defences such as a wall provided that it is again understood to be just one component of an overall system.

It is designed for flooding from a variety of sources including river and surface water flooding. For groundwater flooding the floodwater will may outflank the barrier and seep through the floor. For coastal flooding it may be exposed to damaging waves or the corrosive effects of salt water. In other areas it may be exposed to pollutants and hydrocarbons. In all cases the barriers should be inspected and thoroughly cleaned after use.

This product has been tested against the standard set of tests as defined in PAS 1188-1:2014
which represent typical conditions that might be experienced during a flood in the UK. This includes testing the product for leakage under static water levels [840mm] above aperture threshold level, waves up to 0.1 m high, and parallel currents up to 1.0 m/s. The allowable leakage rate is a maximum of 0.5 litres per metre width per hour. The testing undertaken under this PAS excludes all other components of the flood protection system.

Conformance of the product to PAS 1188-1:2014 does not mean it is suitable for all buildings or locations. The products should in all cases be fixed to structural elements of the building and consideration should be made of the structural integrity of all parts of the building which will be exposed to a differential hydrostatic/hydrodynamic loading such as masonry or glazing. If the user has any uncertainty about the suitability of a product they should seek professional guidance.

All buildings where these products are used should have suitable means of access/egress for the normal occupants of the building whether residents in a residential building or staff, customers and contractors in a commercial building. Safe access/egress should be a consideration before installation or deployment of these products and may inform the sequence in which the products are deployed. Safe access/egress should be a consideration before installation or deployment of these products and may inform the sequence in which the products are deployed. Safe access/egress routes should be available at all stages of a flood including when a building is surrounded by floodwater.

Please consider carefully before deploying this product. It may not be suitable for all people for a number of reasons including the weight or size.

Any flood protection has the potential to fail and to fail suddenly. If installed and deployed correctly on to the outer face of a wall failure is highly unlikely.

The product itself will not prevent floodwater ingress via other routes and therefore you should obtain a flood protection risk assessment to be carried out by a suitably qualified (e.g. Chartered) building surveyor, architect, structural engineer, civil engineer or those deemed competent prior to installation of the product to ensure the relevant routes for water entry have been identified and that the structural integrity of the building is not compromised by the flood protection product.

The product is not designed for saving lives and for your own safety a response plan outlining actions such as handling of valuables and documents, means of escape and evacuation route should be prepared in advance. Registration to flood warning services is recommended. Details of the official providers of flood warnings are provided in this manual.

**MAINTENANCE**

Periodically the products should be re-attached to the back-frames to ensure that an efficient seal is still attainable. After use ensure that the products are cleaned before storing and re-using. It is recommended that a professional inspection and service is carried out an annual basis to ensure the product remain in optimum condition.

**Cleaning**

For general maintenance purposes such as the removal of dirt, dust and debris, soapy water can be used, however after a flood event the guards should be decontaminated using a good disinfectant.

**Storage**

Floodguard Screw-in Barriers are made from hard-wearing glass reinforced polyester and whilst they should not suffer any adverse effects from being stored should not suffer any adverse effects from being stored in the open; ideally, they should be stored in a dry and secure location away from direct sunlight, after wipe down with a damp cloth and warm soapy water. This will help prevent the rubber seals from becoming damaged or deteriorating.

**Rubber Seals**

The rubber seals should be checked from time to time in order to ensure that the seal is still present and has not been damaged, hardened or lost their memory over the time that they are inactive. Replacement seals can be provided by the manufacturer.

Safe access/egress should be a consideration before installation or deployment of these products and may inform the sequence in which the products are deployed.

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When the flood and the risk of flooding have subsided, remove the panels by unscrewing the star-handled screws leaving the top screws loosened but in place until last. Then with the barrier push into the wall remove the top screws and finally remove the barrier from the wall.

The back-frame should only be removed by a competent person such as a manufacturer-approved approved installer. Removal includes mechanical removal of the resin anchor thread such as drilling out, or removal and replacement of the brick into which it is installed.

**Working Life**

The ABS-plastic barriers are designed for a working life of 15-25 years. GRP barriers for 25 years plus. For both the anticipated life of the gaskets is from 2-5 years if stored and used according to the User Manual. Products can be returned to the manufacturer at the end of their useful life for re-use or recycling.
PRODUCT KEY DATA

<table>
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<tr>
<th>Product Reference</th>
<th>Internal Width</th>
<th>External Width</th>
<th>Back-Frame Cover Height</th>
<th>Cover Only Height</th>
<th>DWMD</th>
<th>Material</th>
<th>Weight</th>
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TROUBLE SHOOTING GUIDE

Rainwater builds up behind the barrier - Use a sheet of plastic or other non-permeable material taped to the top of the barrier and taped to the door/window to deflect rain away from the inside of the barrier.

Rubber gasket has come loose from the barrier - Re-secure the gasket to the barrier using only the approved glue Bostick 5638. Other non-approved glues may corrode the barrier or gasket and render the guarantee invalid.

Flood Warnings and other information available from: