

# **FLOOD DIVERT BARRIER**

## **USER GUIDE**



**IMPORTANT INFORMATION ON HOW TO DEPLOY, LOOK  
AFTER YOUR BARRIER/S & WARRANTY**



**KM669002, PAS1188-1:2014**

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## **INTRODUCTION:**

Flood Divert barriers are a reusable manual product and are designed so that, when correctly produced, installed, maintained and used, they help with temporary mitigation of flooding and should be seen as part of a suite of measures to reduce the risk of flood water. Please note that whilst it is impossible to completely prevent flooding using these products in conjunction with pumps you should help mitigate any damage.

The barriers should be used in conjunction with other measures as part of an advanced flood warning system ie, sign up to flood warnings with the Environment Agency [www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency) and make a flood plan, see the National Flood Forum website [www.nationalfloodforum.org.uk](http://www.nationalfloodforum.org.uk) for more information.

**This product has been tested against the standard set of tests as defined in PAS1188-1:2014 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 of 840mm above ground level, waves of up to 0.1m high, and parallel currents up to 1.0m/s. 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 locations. If the user is in any uncertainty as to the suitability of the product they should seek professional guidance.**

PAS 1188-1:2014 tests:

- Standing water tests of 840mm water above threshold level
- Wave testing
- Flow testing
- A standing water test of 840mm above threshold level, maintained for 48 hours.
- The leakage rate is <0.5L/h/m with a high protection against waves



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If the barriers are to continue to meet these standards, it is essential that it is produced, installed and maintained in strict accordance with the highest quality standards.

The barriers have a minimum life expectancy of 10 years, this can be extended with regular maintenance. At the end of their life please contact us to discuss disposal or replacement of the product.

The barriers are suitable for the following types of flooding, ie surface water (pluvial), river (fluvial), groundwater, saline, tidal, runoff water, drainage / sewer. Not suitable for hydrocarbons and solvents.

Please note that there may be other routes by which flood water can enter premises, in particular through other walls, doors, air-bricks etc. These will also need to be effectively protected. In some cases flood water can also come up through the floor. We recommend you have a flood protection risk assessment carried out by a suitably qualified building surveyor, architect, structural engineer, civil engineer or those deemed competent prior to installation of the product to ensure that 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.

**This Document contains important instructions on the use of the Flood Divert Ltd Flood Divert Barriers and your manufacturer's warranty.**

Please read it carefully so that you fully understand what you need to do in the event of a flood warning. Please keep this document safe so you can refer to it if and when required.

1. Deploying, how to make the products flood resilient when required
2. General maintenance to keep them in top condition
3. Storage

Flood Divert Barriers have been independently tested to PAS1188-1:2014 and the British Standards Institute Kitemark has been achieved for any barrier up to 2500mm wide x 840mm depth of water. Designated Maximum Water Depth (DMWD). This means that they have been rigorously tested to a water depth of 840mm over a 48 hour period and are well within the Leakage rates of 0.5 litres per metre run per hour.

Your Flood Divert Barriers are designed for domestic, commercial, public buildings, schools etc for openings such as 'doorways', 'windows', 'French doors', 'garage doors' etc, and the outer frame can be fixed to suitable surfaces such as brick, concrete, timber, render etc. Flood Divert Ltd take no responsibility for any flood water that may enter the property through the adjoining walls/fence/perimeter of the property, drainage or water table rising. We would recommend that you have a qualified structural engineer survey if you require protection above 1m deep as the property may be at risk from structural damage. We would also recommend installing non return valves and a pumping system to control any water that may pass the outer boundary or rise up through the ground.

The barriers are a reactive system, meaning they need to be manually positioned to make them flood resilient. They are suitable to be used by anyone who is 'fit & able' with no 'strength' issues, ie young people or people with arthritis may find the clamping mechanisms difficult.

Approx panel weights in KG		wide							
		800mm	900mm	1000mm	1200mm	1500mm	1800mm	2100mm	2500mm
high	1000mm	14	15	17	19	22	26	29	34
	900mm	13	14	15	18	21	24	27	32
	800mm	12	13	14	16	19	22	25	29
	700mm	11	12	13	15	18	21	23	27
	600mm	10	11	12	14	16	19	21	24
	500mm	9	10	11	12	15	17	19	22
	400mm	8	9	10	11	13	15	17	20

### Deploying, how to make the products flood resilient.

The barrier must be carried to the location it is required for as per the label on the barrier. Check that there are no stones or debris on the bottom rail, in the corners or the side rails where the seal touches the frame. Apply a thin layer of silicone grease to the side seals and the bottom seal, this will aid installation and removal. Drop the barrier into position ensuring that all 4 locating bolts are behind the side location bars. Insert the clamps into the location rails at the top then throw the lever down to compress the seals. Note there should be no visible gaps. This procedure should only take less than a minute to complete.



### Storage

The barriers should be stored in out of sunlight in a dry environment, ideally the barriers should be hung from their handles so that the seals are not compressed, if this is not possible store them upside down (handles to the floor). Ensure the seals are protected from potential rodent damage.

### Making sure your barrier go on working:

1, The barrier will only be effective if it is installed properly and the clamping mechanisms are put into position, this is done by sliding the lever downwards towards the barrier so that it clamps the seals tight.

2, You need to check the seals regularly (every 3 months) to make sure that they are not split, cracked or damaged in any way. If they are damaged they will need replacing, Flood Divert Ltd can do this for you if required (please note that we will charge for this service)

3, Each time the seals are checked, you can apply silicone grease to them to make sure that they do not dry out and fail.

4, You must make sure that no stones, grit or other material build up between the barrier and the frame; this could damage the seals or cause the seals not to close correctly, you will also need to check each clamp to ensure it moves and clamps the barrier into position.

5, If a flood warning is in force or you believe that a flood may be imminent, it is advisable to fit the barrier as per above instructions and the instructions on the barrier.

6, After a flood the barrier and seals should be cleaned down with soapy water to remove all silt etc, and then re-apply grease to the seals.

7, Flood Divert Ltd offer a 2 year warranty on all aspects of the barrier, this is subject to a service inspection after 12 months (to be charged separately). For ongoing use we can offer a contract maintenance service for the barrier to make sure that they are kept in good working condition. Please contact us for further information on this service.

### **Troubleshooting:**

**The clamps will not lock** – apply grease or oil until free to move

**The barrier will not close up tight** – ensure there are no stones or debris in the frame.

If problems persist or you need help with this please call Flood Divert on 01904 607681.

### **Note:**

If we are called out to the barrier and it is a fault not covered by the warranty or by misuse of the barrier we reserve the right to charge accordingly for the call out and any associated works carried out.

## **Safety and Faults**

The Environment Agency [www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency) agree that it is not possible to completely prevent flooding, there are lots of things you can do to mitigate the damage caused by flood water.

Always consider the safety risk when deploying the flood barrier, do not put others or yourself in danger if the flood water is already around. The barrier should be deployed when a flood warning is issued not in mid flood. Always consider safe access/egress of the building whilst the barrier is in use. Do not put others or yourself in danger by entering flood water.

Make a flood risk plan and use it, for guidance on this please see the EA website as above.

With the use of Flood Divert Barriers you can mitigate the potential damage that flooding can cause. Giving you longer to protect your valuable possessions. Please note that it is totally impossible for us to guarantee that you will not get any water in the property as it is one of Nature's strongest powers and may enter through other routes. It is essential that the occupiers familiarise themselves with the flood mitigation products and how to deploy them.

If at any time you identify a potential issue, such as damaged seal, then you must inform Flood Divert Ltd to arrange for it to be repaired.

## **Maintenance**

Check seals every 3 months to check there is no damage to the seal, if they are you must report this to Flood Divert, we will be able to change the seals (there will be a charge for this).

Check the clamping mechanism to ensure smooth operation, if required apply some silicone grease.

The fixed framework as standard has been supplied untreated, if it has been powder coated (extra) then this may need a visual inspection, It is the occupiers responsibility to carry out this maintenance, Flood Divert can take no responsibility for paint failure. Do a 'dry run' by positioning all clamps (and removable post for pairs) every 6 months to ensure everything is clamping up correctly and in full working order, this is also good practise ready for when it will required in a real flood situation.

### **Handling and storage of the barrier**

Always refer to the Health & Safety Executive for advice on manual handling [www.hse.gov.uk](http://www.hse.gov.uk)

The barrier should always be stored in a dry area. Carry with care, keep as close to the body as possible and take regular breaks when carrying.

Do not strain when tightening the clamps, if struggling use an extension bar.

Flood Divert cannot be liable/responsible for any damage or personal injury whilst handling the barrier.

### **Moving property – change of ownership**

The products fitted have been manufactured specifically for this property. If you vacate the property please leave this Guide along with your flood mitigation products in place. Neither the manufacturer nor the installer can be held responsible should the previous property occupant fail to leave flood defence products in full working order or, if the new occupant fails to ensure they are fully trained on correct deployment/maintenance of flood defence products for their property. (All product warranties are void unless the new occupant/owner undertakes deployment and maintenance training – contact your installer for details).

### **Product durability**

Your Flood Divert barriers have been purchased with the benefit of a 2 years manufacturer's warranty.

A service package can be purchased on the barriers for up to 10 years of age.

### **Cleaning up after a flood**

Flood water is generally contaminated so use appropriate PPE (personal protective equipment). We recommend using a soapy water to clean the barrier and seals. Do not use solvent, bleach based or abrasive cleaning products as this may damage them. Replace the barrier in a dry area and apply silicone grease to the seal.

### **Contact us**

Should you require any further technical support with deploying or maintaining your barrier, require any parts or have any questions then please do not hesitate to contact us. Any property visits, spares/replacement parts will be chargeable.

Email [info@flooddivert.co.uk](mailto:info@flooddivert.co.uk)

Website [www.flooddivert.co.uk](http://www.flooddivert.co.uk)

tel. 01904 607681

## **Independent Helpful advice**

Environment Agency advance warning, this is a 24 hour service giving you information in your area, please call **Flood Line – 0345 988 1188**,  
National Flood Forum – 01299 403 055  
Scottish Flood Forum – 01698 839 021

## **Manufacturer’s Warranty**

### **Flood Divert Ltd**

Your Flood Divert Barrier has been purchased with the benefit of a 2 year manufacturer’s warranty. The details are set out below. The term ‘Customer’ means the person who purchased the Flood Divert Barrier product new, from us via one of our approved installers or authorised distributors.

For more information please visit us at [www.flooddivert.co.uk](http://www.flooddivert.co.uk)

1 The terms and conditions, warranties and other provisions contained within this warranty document shall only apply if:

1.1 the products which accompanied this warranty (“Products”) were purchased from Flood Divert Ltd (“Manufacturer”) directly or one of their approved installers (“Installer”) or one of their authorised distributors (“Distributor”); and 1.2 the registration form accompanying this document has been completed in full and returned to the Manufacturer as directed on the registration form.

2 Subject to the following provisions, the Manufacturer warrants to the Customer that the Products will correspond with their specification at the time of delivery and will be free from defects in material and workmanship for a period of 24 months (unless otherwise specified) from the date of purchase of the Products.

3 The above warranty is given by the Manufacturer subject to the following conditions:

3.1 the Manufacturer shall have no liability (whether to the Customer or any third party) in respect of any defect arising from fair wear and tear, wilful damage, negligence, abnormal working conditions, failure to follow the Manufacturer’s instructions (whether oral or in writing), misuse or alteration or repair of the Products without the Manufacturer’s approval, failure to store the Products properly, failure to deploy and/ or incorrect deployment of the Products;

3.2 the Manufacturer shall have no liability under the above warranty (or any other warranty, condition or guarantee) if and for so long as the total price for the Products has not been paid in full;

3.3 the above warranty does not extend to parts, materials or equipment not produced by the Manufacturer. The Customer shall only be entitled to the benefit of any such warranty or guarantee if and to the extent that it has been given by the manufacturer of the said part, material or equipment to the Manufacturer and is capable of being assigned by the Manufacturer to the Customer.

4 Subject as expressly provided in this warranty, and except where the Products are sold to a person dealing as a consumer (within the meaning of the Unfair Contract Terms Act 1977), all warranties, conditions or other terms implied by statute or common law are excluded to the fullest extent permitted by law. Where the Products are sold to a



person dealing as a consumer, his or her legal rights are not affected by the provisions of this document.

5 A claim by the Customer which is based on any defect in the quality or condition of the Products or their failure to correspond with specification shall (whether or not delivery is refused by the Customer), in the case of defects that were apparent or should reasonably have been apparent at the time of delivery, be notified to the Manufacturer via the Installer or Distributor (as the case may be) within seven days from the date of delivery and in the case of latent defects, within a reasonable time of discovery of the defect (but always within the warranty period described in clause 1.2 above). Following such notification the Customer shall, at its own expense, return such Products to the Manufacturer for examination. If, upon examination, the Products shall be defective or shall fail to correspond with their specification then the Manufacturer shall (in addition to the other provisions of this warranty) refund the reasonable costs of such carriage to the Customer. If the Customer does not notify the Installer or Distributor (as the case may be) accordingly, the Customer shall not be entitled to reject the Products and the Manufacturer shall have no liability for such defect or failure.

6 Where a valid claim in respect of any of the Products which is based on a defect in the quality or condition of the Products or their failure to meet specification is notified to the Manufacturer via the Installer or Distributor (as the case may be) in accordance with paragraph 5 above, the Manufacturer may, at its sole discretion, replace the Products (or the part in question) free of charge or refund to the Customer the price of the Products (or a proportionate part of the price) via the Installer or Distributor (as the case may be), in which case the Manufacturer shall have no further liability to the Customer.

7 The Manufacturer shall have no liability to the Customer, whether under the warranties set out in paragraph 2 above or otherwise for any loss, damage, costs, expenses or other claims for compensation arising from any instructions supplied by the Customer which are incomplete, incorrect, inaccurate, illegible, out of sequence or in the wrong form, or arising from their late arrival or non-arrival, or any other fault of the Customer.

8 It shall be the responsibility of the Customer at all times to ensure that the Products shall be properly used, maintained and repaired at all times in such a way that the use by the Customer of the Products shall not cause any damage or loss to the property or premises at which the Products are installed. The Manufacturer shall be under no liability to the Customer for any loss or consequential loss arising from the Customer's failure to comply with this provision.

9 It shall be the responsibility of the Customer to ensure that when a property is vacated all Products are left in full working order along with all deployment and maintenance instructions. The Manufacturer shall not be liable if Customer fails to leave Products in full working order or if the new property occupant fails to undertake appropriate deployment/maintenance training as specified by the Manufacturer.

10 Except in respect of death or personal injury caused by the Manufacturer's negligence, or liability for defective products under the Consumer Protection Act 1987, or except as otherwise set out in these Terms, the Supplier shall not be liable to the

Customer by reason of any representation (unless fraudulent), or any implied warranty, condition or other term, or any duty at common law, or under the express terms of the Contract, or (in particular but without limiting the severability of this clause) in respect of any damage or loss caused by overwhelming / overtopping flooding, impact damage, third party intervention (e.g. vandalism), for loss of profit or for any indirect, special or consequential loss or damage, costs, expenses or other claims for compensation whatsoever (whether caused by the negligence of the Manufacturer, its employees or agents or otherwise) which arise out of or in connection with the supply of the Products (including any delay in supplying or any failure to supply the Products in accordance with the Contract or at all) or their use by the Customer, and the entire liability of the Manufacturer under or in connection with the Contract shall not exceed the price of the Products.

11 The Manufacturer shall not be liable to the Customer or be deemed to be in breach of the Contract by reason of any delay in performing, or any failure to perform, any of the Manufacturer's obligations in relation to the Products, if the delay or failure was due to any cause beyond the Manufacturer's reasonable control. Without limiting the foregoing, the following shall be regarded as causes beyond the Manufacturer's reasonable control:

11.1 Act of God, explosion, tempest, fire or accident;

11.2 war or threat of war, sabotage, insurrection, civil disturbance or requisition; 11.3 acts, restrictions, regulations, bye-laws, prohibitions or measures of any kind on the part of any governmental, parliamentary or local authority;

11.4 import or export regulations or embargoes;

11.5 strikes, lock-outs or other industrial actions or trade disputes (whether involving employees of the Manufacturer or of a third party);

11.6 difficulties in obtaining raw materials, labour, fuel, parts or machinery;

11.7 power failure or breakdown in machinery.

12 The terms of this warranty are governed by the laws of England and Wales and the courts of England and Wales shall have exclusive jurisdiction in the event of any dispute.

### Inspection and Maintenance log

Date	Inspected by	Products inspected	Comments and action taken	Signed off by

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A copy of the User Guide is available to download via:

[www.flooddivert.co.uk](http://www.flooddivert.co.uk)