



# **Flood Defender Doors**

User Instructions

## Flood Defender Door

**The Flood Defender Door is a highly engineered flood defence product that should remain flood resistant as required. Visually and functionally, in non-flood conditions, the door performs as a 'standard' door, however, it must be recognised that the door features a number of sophisticated internal components that will need regular service checks.**

The Flood Defender Door suitable for use on residential and smaller commercial properties to protect doorway apertures against water ingress. The Door holds a Kitemark to BS 85118:2019 and is manufactured for use on single, inward and outward opening doors, as well as double outward opening doors.

Occupant/owners must strictly follow the activation instructions for the locking device, to ensure optimum protection. The process for locking and securing the flood defence seals is quick and simple via the lifting of the handle and the turn of the key.

After installation, the occupant/owner will have been given a demonstration on the correct way to activate the door.

It is the occupant/owner's responsibility to ensure they or another designated person is able to operate the locking mechanism.

In the event of operational difficulties, please contact your installer in the first instance who can advise accordingly.



**DURING FLOOD EVENTS M3 FLOOD DEFENDER DOORS MUST REMAIN LOCKED.**

## ■ Warranty & Design Life

# Warranty

### M3 FLOODTEC LTD MANUFACTURERS WARRANTY

The Flood Defender Door range is sold with the benefit of a manufacturer's warranty covering the following items for the following periods:

- UPVC outer frames, door sash/Monocoque Composite door slab/Timber door – 2 years\*
- Door panels/Side Panel – 2 years\*
- Locking mechanism, gaskets, locks – 2 years\* (subject to a service inspection 12 months after installation)
- Glazing – 1 year\*
- Letter plates, knockers, numerals – 1 year\*

**To maintain the 2 year warranty on locking mechanisms and gaskets, the door must be serviced 12 months after installation at the occupants/owner's expense by a qualified and certified installer.**

*\*Warranty specified in line with design life of product*

# Design Life

The lifetime of our doors will vary from property to property and can depend on a range of factors such as upkeep of maintenance. If the door has been maintained in accordance with our Maintenance Guidelines we would expect the components to last up to 10 years. See breakdown below:

- UPVC/Monocoque/Timber outer frames/door sash/door panels – 10 years
- Locking mechanisms / Gaskets / Locks – 10 years
- Glazing – 10 years
- Letter Plates/ Knockers – 10 years

## ■ Deployment Guide

# Deployment Guide (single door)

## ■ LOCKING

1. Push the door gently into the frame until you hear the latch engage.
2. Insert the key into the locking cylinder.
3. Crank the door handle smoothly upwards as far as it will travel.
4. Turn the key anti-clockwise to lock the door.
5. Release the handle.

(After locking, the handle will return to the horizontal position. Test the door by pushing the door handle down. If the handle does not move, the door is locked)

## ■ UNLOCKING

1. Insert the key into the locking cylinder.
2. Turn the key clockwise to unlock the door.
3. Push the handle down.

# Deployment Guide (double door)

## ■ LOCKING

1. Push the slave door (the side of the door that opens last) until the door is tightly in the frame.
2. Insert the slave door key into the locking cylinder.
3. Crank the door handle smoothly upwards as far as it will travel.
4. Turn the key anti-clockwise to lock the door.
5. Push the door master (the side of the door that opens first) gently into the frame until you hear the latch engage.
6. Insert the master door key into the locking cylinder.
7. Crank the door handle smoothly upwards as far as it will travel.
8. Turn the key anti-clockwise to lock the door.
9. Release the handle.

(After locking, the handle will return to the horizontal position. Test the door by pushing the door handle down. If the handle does not move, the door is locked).

## ■ UNLOCKING

1. Insert both keys into their respective locking cylinders.
2. Turn the keys clockwise to unlock the door.
3. Push the handle down.

# Maintenance Instructions

## ■ POST-FLOOD MAINTENANCE INSTRUCTIONS

When flooding has occurred always ensure that rubber gloves are worn and that hands are washed thoroughly after coming into contact with flood water which is generally contaminated.

1. Post-flood and before commencement of cleaning, protect the floor area around the door with absorbent material to soak up any contaminated water that may have been trapped between the outer frame and the door sash.
2. Clean the sealing rubber gaskets and the locking points using warm water and dry with a soft cloth.
3. Grease the clean rubber gaskets with Petroleum jelly.
4. Grease the locking points with Petroleum jelly.

If used and maintained in accordance with the manufacturer's instructions the M3 Flood Defender Door will remain watertight. It is the householder's responsibility to ensure that the flood locking mechanism is fully activated during non-flood conditions.



**Flood water is usually contaminated. Appropriate personal protective equipment (PPE) must be worn at installation and during post flood maintenance. It is also advisable that PPE is worn when handling any flood contaminated area.**

## ■ REGULAR MAINTENANCE INSTRUCTIONS

In addition to post-flood maintenance instructions, it is recommended that monthly and annual maintenance takes place.

### ■ MONTHLY

1. Clean the sealing rubber gaskets and the locking points using warm water and dry with a soft cloth.
2. Grease the clean rubber gaskets with Petroleum jelly.
3. Grease the clean rubber gaskets with Petroleum jelly.
4. Grease the locking points with Petroleum jelly.

### ■ ANNUALLY

The doors must be maintained annually by qualified and certified fitters to qualify for the warranty.

## ■ REPLACEMENT PARTS

In the event that any part of the door needs to be replaced, parts are available directly from M3 Floodtec. *Please see 'Warranty' detail for design life of products/parts.*

## ■ USAGE

**M3 Flood Defender Doors are functional flood protection products, which should not be slammed shut, kicked or forced open.**

## ■ Troubleshooting

# Troubleshooting

## ■ UNABLE TO CLOSE/LOCK DOOR

1. Open the door and check for any obstructions between the door and frame, remove obstruction, if any, and resume normal procedure for locking/unlocking the door.
2. Open the door and check to see if any of the screws on the lock housing are loose or missing (this can occur if the door has been slammed shut, forced or kicked.) In the event that screws are loose or missing call your installer for advice or to arrange an inspection.\*
3. Open the door and check to see if the sealing gasket between the door and the frame has been pulled out of its housing. If so, call your installer to arrange a home visit to rectify the fault.\*

## ■ MAINTENANCE

The threshold contains a rubber seal which is an important part of the flood protection components of the door. Riding heavy loads over the threshold can damage the door and/or the sealing gasket, rendering the door inoperable.

1. It is important to carry out the maintenance according to the manufacturer's instructions and report any defects immediately.
2. The door should not be misused, as this may lead to compromised effectiveness.

(\*Call out charges may apply).



## ■ Risk Assessment

### ■ POSSIBLE FAILURE MECHANISMS AND ADVICE ON SAFETY PRECAUTIONS

If the door has been maintained in accordance with our Maintenance Guidelines, it is highly unlikely to fail during a flood event, however as with anything that has a mechanical element there is a potential for mechanical failure.

The door contains locking mechanisms handles and hinges. If maintained correctly these should last many years, however in the event of a component failure do not attempt to try to remove these components as permanent damage may be caused to the door. Please contact [sales@m3floodtec.com](mailto:sales@m3floodtec.com) to report the condition and a service engineer will attend the site within 24 hours.

If a problem occurs when the door is closed during a flood condition please leave the door closed and do not attempt to open - as flooding will inundate your property, please contact [sales@m3floodtec.com](mailto:sales@m3floodtec.com) for a service engineer.

## Risk Assessment

The use and deployment of any flood defence product should be considered in the context of the building relative to the risk of possible flooding. Single products alone may not give adequate protection to the whole building. It is therefore recommended that a full flood risk survey is undertaken to assess where flooding may ingress into the building and as such what measures should be deployed. Product compliance to BS 851188-1:2019 + A1:2021 does not mean that it is suitable for all installations and locations.

Flood risk surveys should be undertaken by an appropriately competent and qualified professional for example a corporate member of the Chartered Institution of Water and Environmental Management, the Institution of Civil Engineers, or the Royal Institution of Chartered Surveyors or similar professional body. For details of approved Companies visit the Environment Agency web site [www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency).

## ■ BSI Standards

# BSI Standards

The M3 Floodtec Flood Defender Door is Kitemark certified to BS 851188-1:2019 + A1:2021 (Certificate Number KM 713574).

BSI Standards - Designated Maximum Water Depth (DMWD)

- Defender Single Outward Opening Door  
(910mm x 2080mm): 0.6m
- Flood Defender Single Inward Opening Door  
(920mm x 2080mm): 0.6m
- Flood Defender Outward Opening Door  
(1800mm x 2080mm): 0.6m
- Flood Defender Single Inward Opening Monocoque Doorset  
(925mm x 2060mm): 0.6m
- Flood Defender Single Outward Opening Monocoque Doorset  
(885mm x 2075mm): 0.6m
- Flood Defender Single Outward Opening Timber Doorset  
(885mm x 2075mm): 0.6m
- Defender Single Outward Opening Door with Low Threshold  
(900mm x 2100mm): 0.6m
- Flood Defender Single Inward Opening Monocoque Doorset  
with Low Threshold (970mm x 2050mm): 0.6m
- Flood Defender Single Outward Opening Monocoque Doorset  
with Low Threshold (900mm x 2030mm): 0.6m

Acceptable leakage will not be greater than 500ml/h/m per hour in accordance with BS 851188-1:2019 + A1:2021.

## ■ Product Testing

# Product Testing

This product has been tested under laboratory conditions against the standard set of tests as defined in BS 851188-1:2019 + A1:2021. This includes testing the product through 5000 opening and closing cycles, leakage under static water levels (600mm DMWD) above aperture threshold level, impact load testing (30kg weight), waves up to 0.1 m high; dynamic impact and parallel currents up to 1.0 m/s. The testing undertaken by the British Standards Institute excludes all other components of the flood resistance system.

Conformance of the product to BS 851188-1:2019 + A1:2021 does not mean it is suitable for all buildings or locations. If the user has any uncertainty about the suitability of a product they should seek professional guidance.

## ■ Other Information

# Other Information

The Flood Defender Door will provide ongoing protection against rising flood water and debris. It can be installed into brickwork, concrete, stone, steel, render or hardwood structures across both domestic and commercial properties.

The M3 Floodtec Defender Door is designed as a permanent installation and becomes part of the general building's fabric.

This product is designed for the temporary mitigation of flood risk and should be seen as part of a suite of measures to reduce the risk of water entering a property.

They are designed to mitigate against all types of flooding up to a maximum height of 600mm (Flood waters deeper than this may cause structural damage).

There are a number of different sources of flooding including:

**Surface water (pluvial):** Flooding from surface water happens when the local drainage system & surrounding terrain cannot cope with the rainfall. It is extremely difficult to predict precisely where surface water flooding will happen as it is dependent on ground water levels, intensity and duration of rainfall, and the local drainage network.

**River (fluvial):** River flooding occurs when there is too much water for the ground to absorb, and the surface runoff overflows the normal river channel.

**Groundwater:** Groundwater flooding occurs when water levels in the ground rise above surface levels. It is most likely to occur in areas underlain by permeable rocks, called aquifers. These areas can be extensive, regional aquifers such as chalk or sandstone, or they may be more local sand or river gravels in valley bottoms underlain by less permeable rocks.

**Tidal:** Coastal flooding that results from a combination of high tides and stormy conditions. If low atmospheric pressure coincides with a high tide, a tidal surge may happen which can cause serious flooding.

**Runoff water:** Surface runoff is the water flow that occurs when soil is infiltrated to full capacity and excess water from rain, melt water, or other sources flows over the land.

**Sewer flooding:** Sewer flooding occurs when sewers are overwhelmed by heavy rainfall or when they become blocked. The likelihood of flooding depends on the capacity of the local sewerage system. As a result, land and property can be flooded with water contaminated with raw sewage and rivers can become polluted by sewer overflows.

The Defender Door is designed to replace any residential doorway.

The Defender Door is manufactured from plastic. Disposal of the product at end of life is non-hazardous and recommendation is for recycling at a local Council disposal site.

The Defender Door is designed for deployment in flood conditions, this by definition will have a degree of polluted water and this will not affect the performance of the product under normal conditions. The product is designed for general flood and sea water flooding conditions. If the product is being proposed for installation in locations where high levels of aggressive chemicals are present expert advice from your Flood risk surveyor should be sought prior to deployment.

**The M3 FLOODTEC Defender Door Installation Instructions is a combined document incorporating the requirements of the deployment guide and user manual.**

## ■ Health & Safety

# Health & Safety

It is highly recommended the correct PPE (Personal Protective Equipment) is worn at all times during installation. This includes but not limited to high viz vests, safety gloves, safety glasses, safety steel toe cap boots.

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

Remove obstructions from the route, for a long lift, plan to rest the load midway on a table or bench to change grip. Keep the load close to the waist. The load should be kept close to the body for as long as possible while lifting. Keep the heaviest side of the load next to the body. Adopt a stable position and make sure your feet are apart, with one leg slightly forward to maintain balance.

It is imperative the Installation Guide is followed step by step – if any installations cannot be installed in such a way the installers are to contact M3 Floodtec Ltd.

Homeowners are advised to sign up to the Environment Agency flood alerts for their local area. Flood alerts give you notice time to deploy your flood resilience products and vacate in the event of a flood emergency. If you feel necessary contact the emergency services.

Access back into properties should be undertaken once flood waters recede.

## ■ Sources of Advice

# Sources of Advice

Advance Warning of Flood - The Environment Agency operates a 24hr telephone Floodline where you can obtain up to the minute information on the flooding situation in your area.

Floodline – **0345 988 1188** - You can also register for the Environment Agency's Floodline Warnings Direct Service

Environment Agency Floodline: **0345 988 1188**

National Flood Forum: **01299 403 055**

Scottish Flood Forum: **01698 839021**

During a flood event please refer to the Environment Agency's Practical advice guide: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/403213/LIT\\_5216.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/403213/LIT_5216.pdf)



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