

# Anti-Flood Airbrick Fitting Instructions



The M3 Floodtec Anti-Flood Airbrick is a purpose designed product to prevent the passage of flood water into a property. Once installed it is a permanent fixture which is designed to operate automatically in the event of a flood such that the airbrick location is fully submerged. When the flood valve is engaged no water will pass into the building, as the flood water recedes the flap reverts to its resting position and the antiflood airbrick operates as any other normal masonry airbrick would.

As part of your complete flood protection scheme, a property must have all points of water ingress protected. For further information visit [www.m3floodtec.com](http://www.m3floodtec.com)

The Antiflood Airbrick is designed to be a permanent fixture of the building fabric, if installing in a new build this should be installed by a suitably qualified bricklayer. If being installed as part of a retro fit the installation instructions need to be followed and preference would be to engage a builder to undertake the works. Once installed the Airbrick remains a permanent fixture.

## PREPARATION

### BEFORE INSTALLATION CHECK THE AIRBRICK

Before installation, please remove front cover of Anti-Flood Airbrick to ensure that the gate valve has not detached in transit. If it has become detached, clip firmly back into place with the black silicone pads facing inside the brick and replace front cover. Put back together again before installing.

**Tools & materials required:** screwdriver, slotted screwdriver, power drill with 6mm masonry bit, grinder or lump hammer and chisel, sand, cement and PVA.

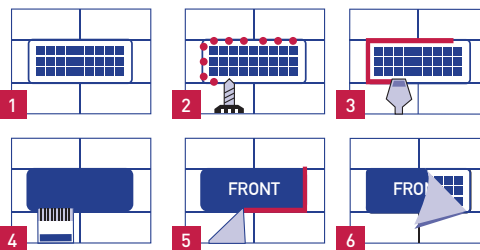
## INSTALLATION GUIDE

*Note: When installing as a retro fit product the installation time should be complete within 30 minutes per unit.*

1. Locate airbrick to be replaced.
2. Starting at a corner, drill through the mortar with the power drill, drill the holes along the mortar surrounding the airbrick.
3. Grind out the mortar around the airbrick or break out with hammer and chisel.
4. Once the airbrick is loose, remove from the wall and ensure that there is no mortar obstructing the corners. Clean aperture with brush.
5. Ascertain the front of the brick (marked Front) and ensure it's the correct way up (marked with an arrow up). This should be facing to the front, the spacers are situated on the bottom. Mix a mortar of sand, cement and PVA, wet the aperture with water, insert the Anti-Flood Airbrick and point around ensuring that the full bed of mortar is achieved across the depth of the brick (use the lip on the rear edge of the brick to ensure mortar is installed to the correct depth) paying attention to the type of mortar and the style of pointing. The face of the brick should sit flush with the wall.

**NOTE:** It is absolutely imperative that the airbrick is installed with the utmost care, ensuring that all pointing is faultless. Remember, if water can get in, it will.

6. Remove film sticker to complete the installation.  
**NOTE:** Ensure that the mortar is completely dry before the screw front face of the airbrick is removed for maintenance inspection, allow minimum seven days to fully cure.  
**NOTE:** Double (or triple) airbricks can be replaced with two (or three) airbrick replacements placed one on top of the other and aligned with the mortar joints of the two (or three) courses of bricks.
7. The 8mm lip on the bottom rear edge of the brick can be removed using a hack saw to ensure the top brick sits comfortably above the lower brick.



The M3 Floodtec Airbrick 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.

The product is designed such that once installed prior to a flood event it remains in location and will work time after time. Attempting to fix the airbrick during a flood event is not recommended.

If deployed correctly the product will protect against a prolonged flood however if it is to be located in a permanent submerged condition this not recommended. If this condition is a potential, expert advice should be sought to consider taking the airbrick out of potential risk.

The Airbrick is designed for raw water and sea water flooding events.

The Airbrick is designed to be part of the building fabric for installation in walls.

## MAINTENANCE INSTRUCTIONS

### POST-FLOOD MAINTENANCE INSTRUCTIONS



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.

A simple maintenance check is recommended when flood waters have receded to ensure no silt has entered the airbrick.

- Remove the screw front face with a suitable screwdriver. Insert a slotted screwdriver into one of the square holes on the front face and gently pull the face out taking care not to damage or dislodge the insect and debris mesh.
- If there is any sign of debris or silt inside the M3 Floodtec Anti-flood Airbrick, wash this out gently with cool soapy water.
- Move the flood gate up and down to check that nothing has obstructed the mechanism, making sure that the flood gate has not been detached from the holding lugs. If it has, clip the flood gate gently back into the holding lugs.
- The grey silicone pads must face upwards so that the gate rests at a 45° angle.
- Secure the screw front face with a suitable screwdriver.

### REGULAR MAINTENANCE INSTRUCTIONS

In addition to post-flood maintenance instructions, it is recommended that regular maintenance takes place quarterly, as per the post flood maintenance instructions.

## 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 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

The M3 Floodtec Anti-Flood Airbrick is Kitemark™ Certified to BS 851188-1:2019 (Certificate Number KM 713574).

### BSI Standards - Designated Maximum Water Depth (DMWD)

M3 Floodtec Airbrick (Anti-Flood) System  
(62mm x 210mm): 900mm.

## PRODUCT TESTING

This product has been tested under laboratory conditions against the standard set of tests as defined in BS 851188-1:2019. This includes testing the product for leakage under static water levels (900mm DMWD) above aperture threshold level; waves up to 0.1 m high; and parallel currents up to 1.0 m/s. The testing undertaken under this British Standard excludes all other components of the flood resistance system.

Conformance of the product to BS 851188-1:2019 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.

## LEAKAGE RATES

Acceptable leakage will not be greater than 50ml per single airbrick per hour in accordance with BS 851188-1:2019  
500ml/h/m.

## OTHER INFORMATION

It is recommended that remedial works such as pointing and sealing are carried out in conjunction with other flood mitigation measures.

The M3 Floodtec Anti-flood Airbrick has been designed to protect properties from the ingress of flood water and in normal conditions to allow free airflow of 2400mm<sup>2</sup>. It is not intended for any other purpose. The manufacturer will not accept responsibility in the event of misapplication. If the unit is not installed and maintained in accordance with the guidelines set out within this document then the manufacturer assumes no responsibility for any resulting loss or damage.

**Possible failure mechanisms; failure of the airbrick or to effectively perform its primary function as an airbrick or to effectively keep out flood water is covered under POST-FLOOD MAINTENANCE INSTRUCTIONS where post flood checks are required to ensure its ongoing effective performance.**

The M3Floodtec Airbrick has a design life of 50 years. It is recommended that regular maintenance is undertaken on a yearly basis or after any flood event, this would be a visual inspection for any debris that may have made entry into the airbrick as a result of the flood.

The Airbrick (once installed) will operate automatically in the event of a flood, no manual intervention is required.

Once installed there is no requirement for testing.

The M3 Floodtec Airbrick is suitable for installation to any building that has solid external wall construction that requires venting into a cavity of sub floor surface, it can be installed in brick, block, concrete, stone or masonry structures as well as into cladding and timber substrates. The product is suitable for domestic, commercial and Industrial structures.

The Airbrick 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 Airbrick 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 Anti-Flood Airbrick Fitting Instructions is a combined document incorporating the requirements of the deployment guide and user manual.**

## SOURCES OF ADVICE

Environment Agency Floodline: **0345 988 1188** or web [www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency).

## M3 FLOODTEC LTD MANUFACTURERS WARRANTY REGISTRATION FORM

The M3 Floodtec range of products has a 24 month manufacturer's warranty against manufacturing defects as outlined in this document.

### PRODUCT GUARANTEE:

#### M3 FLOODTEC ANTI-FLOOD AIRBRICK

#### RESPONSIBILITY OF PURCHASER & INSTALLER

- It is imperative that the installation, care and maintenance instructions are referred to both before and after installation.
- The 24 month warranty applies to the first owner and initial installation only and is not transferable.