

Resilient Building Toolkit Adaptation Measures Factsheet

Description of measure: Anti-flood airbricks & covers

Air brick covers. Air Brick Covers are designed to prevent water from entering a building via airbricks, which allow air to circulate through the building. Air brick covers seal the airbrick, therefore stopping the ingress of flood water. They should be fitted before a flood event, and removed afterwards, to prevent damp occurring.

Automatic air bricks. Ordinary clay or plastic air bricks can be replaced with an automatic, self sealing air brick. Designed to replace a standard airbrick it allows air to freely pass through the building, but as the flood waters rise and penetrate, a hinged door within the air brick closes and seals off the apertures. When the flood water recedes, the hinged door returns to its original position allowing air to circulate once again. Many models include a removable integral mesh to prevent the ingress of insects and debris which may otherwise impinge on the moving part.

Periscope airbricks are also an option. These Z shaped bricks reduce the ingress of flood water whilst maintaining airflow around the building.

Cost of measure (high, medium or low):

Low, although costs to install may vary.

Pros and Cons:

Air Brick Covers

Pros

Low cost.

Does not need a builder or specialist to install.

Cons

Must be installed before a flood event takes place and removed afterwards to prevent damp occurring.

Automatic Air Bricks

Pros

Automatic, so do not need to be fitted before/during flood event.

Suitable for use in listed buildings.

Can be retrofitted or used in new build construction.

Cons

Good workmanship essential when being fitted.

Limited maintenance is required to keep the anti-flood airbrick clean and freely operational.

Effectiveness of both measures (high, medium or low):

Medium, suitable for protection against river floods and flash flooding up to 300m. Effectiveness also depends on other measures such as flood resistant external doors covers or anti flood valves on outlets and pipes being fitted.

Photos:



Air brick covers



Automatic Airbrick

Link to case study:

Case study for a range of flood defence measures in a domestic property:

<http://itchtentides.org.uk/property-level-protection-example/>

Additional information:

More information on a range of measures is available here:

<http://archive.defra.gov.uk/environment/flooding/documents/manage/frrs-scope.pdf>

When searching for flood protection products, look for the British Standards Institute Kitemark symbol.