

# Resilient Building Toolkit Adaptation Measures Factsheet

## Name and description of measure: Non-return valves

Sewage backflow can cause a great deal of damage resulting in long term consequences and high clean up expenses. Non-return valves can be fitted to drainage systems to allow waste water and solids to flow freely and unrestricted during normal circumstances, however once water surges back through the drainage system during a flood event, a gate within the valve is automatically shut through the hydraulic pressure of the flood water.

## Cost of measure (high, medium or low):

Medium : £50 - £500 not including installation

## Pros and Cons:

### Pros

Prevents damage and contamination from foul water and sewerage.  
Prevents rodents entering the building through pipes.

### Cons

May increase risks to neighbouring buildings if they are not fitted with similar measures.

## Effectiveness of measure (high, medium or low):

High.

## Photos:



## Additional information:

Building Regulations 2000, Approved Document H, recommends the installation of non-return valves on drains from basements in low risk areas and on all drains in areas with a high risk of flooding or sewer surcharge.

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

Where there is a risk of flooding to a depth of more than 0.9m, keeping water out may sometimes do more harm than good as the pressure of water against your property may cause structural damage to the building itself.