

A Guide to Flood Resilient Repairs



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Some five million people live under the threat of flooding – that's one in ten houses in the UK – and 200,000 are very high risk. This means they have a one in 75 chance of suffering a flood each year.

Sadly things are not likely to improve substantially. Climate change and pressure to build more new homes, often on flood plains, will only contribute to the problem of flooding. And it is unlikely that the flood defence measures currently in place will be effective enough to counter the increased risks.

The effect of a flood is devastating for a homeowner. Not only do they have the trauma of seeing their possessions damaged and lost, they may also be unable to return to their home for many months.

Bar moving home, you cannot stop a property at risk of flooding from being deluged. But you can put into place measures that will minimise the damage and speed up the repair time. This guide looks at what is available and gives handy hints on how to reduce the effects of a flood on your home and family.

We take a look at:

- What you can do if the threat of flooding is imminent
- What you can do during a flood
- What you can do to protect your home in the future

What you can do if the threat of flooding is imminent

If you live in an area prone to flooding then you probably already know about it. The Environment Agency runs Floodline on 0845 988 1188 which gives real time flood warnings and advice. It is worth updating yourself regularly if you think you are about to be flooded.

Before water hits your home there are a number of measures you can take to reduce the damage and cut down the drying out period.

In the house:

- turn off gas, electricity and water supplies at the mains.
- unplug all electrical items and where possible store them up high or upstairs. With heavy electrical items such as fridges raise them up on bricks.
- put plugs in all the sinks, weigh them down with something heavy and fit anti back flow valves to all toilets. This is because floodwater can enter a house through drains and toilets.
- make sure all personal items are moved upstairs or out the house, as these cannot be easily replaced. Keep all important documents in a watertight plastic bag in a high safe place. Consider keeping duplicate copies of documents with family or friends that are not at risk of flooding.
- move as much furniture as possible upstairs. If items can't be carried, move them away from the wall as this will speed drying times later.

- roll up rugs, and carpets if you can, and move them upstairs.
 The same goes for curtains or wrap them round a curtain pole up high.
- leave internal doors open or remove them where possible and store upstairs.
- Make up a flood kit including key personal documents, torch, battery, wind up radio, mobile phone, rubber gloves, Wellington boots waterproof clothing, a first aid kit and blankets. Also have your insurer's emergency helpline number, details of the policy and other useful numbers such as the local council and emergency services.
- make sure neighbours, especially elderly or infirm ones, know there is a flood on the way.

Outside the house:

- open doors and windows and smear the frame with silicone sealant, then shut and lock them to provide a watertight joint. For floods deeper than a metre, you should allow water to enter the property to prevent any structural damage that could be caused by a build up of water outside.
- if you can, cover windows, doors and airbricks with plywood, sandbags or metal sheeting. The Environment Agency has a practical guide to doing this at www.environment-agency.gov.uk

- move anything not fixed down such as dustbins and garden furniture to a safer location.
- move your car to higher ground so it is not damaged.
- invest in some sand and sandbags as these make an excellent flood defence. If you have left it too late, fill pillowcases or rubbish bags with soil and use in the same way.

What you can do during a flood

Make sure you stay safe during the flood itself.

- don't try and walk or drive through floodwater – six inches of fast flowing water can knock you off your feet and two feet of water will float your car. Manhole covers may have come off and there may be other hazards you can't see.
- don't walk on sea defences, river banks or cross bridges as they may collapse or you could be swept off by a large wave.
- avoid contact with floodwater as it may be contaminated with sewage.

What you can do to protect your home in the future

Once the shock of being flooded has subsided along with the water, it is time to clear up the mess and get the house habitable. Although not widely known about, there are a whole range of measures that can be taken to reduce the impact of the next flood.

In a recent Norwich Union survey of flood victims, more than two in five did not know that they could make alterations to minimise the damage and less than one in ten had actually asked an expert for advice.

Flood defences fall into two categories – flood resilience and flood resistance. Making a house flood resilient will reduce the amount of damage caused by any water that gets into the house. Flood resistance meanwhile is concerned with stopping the water getting into the property in the first place.

Making flood resistant alterations to your home will cost more than just restoring it to its previous state, but it is money worth spending. If installed in future floods these measures will speed up the drying out time and get you back in guicker, it will also reduce the cost of future repairs.

You can install these measures at any time, but if you are implementing them as part of the restoration costs following a flood you will probably find that you will be expected to pay the extra cost of the alterations while your insurer pays the cost of the like-for-like restoration.

But the extra cost should be defrayed by lower future claims and thus premiums.

Making changes

Before you start making changes get advice from a specialist flood surveyor. Contact the Royal Institute of Chartered Surveyors (RICS) or the Flood Protection Association – details at the end of this guide – for a surveyor in the area. They can carry out a comprehensive flood assessment and make recommendations for the most appropriate flood defences for your particular property.

If you are installing them as part of a restoration following a flood not all of the measures will be much more expensive than returning the house to its previous state. For example fitting plug sockets, boilers and service meters higher on walls - above previous flood levels – should cost little more than restoring them where they were before.

Others will cost more but will often pay for themselves after a single flood.

Consider:

- timber floors above solid concrete.
 Wood and tile floors with rugs that can be moved will suffer less damage in a flood than carpet.
- replace chipboard kitchens and bathroom units with plastic, steel or solid wood. If not, raise cupboards up on stilts so that water can flow beneath them.
- fit water resistant door and window frames.

- install non-return valves in drainage pipes to prevent sewage backing up into the house.
- replace usual plaster with a more water resistant version such as lime plaster or cement render.
- always use waterproof sealant on external walls and water resistant paint on internal walls.
- buy airbricks with removable covers – put them on during the flood but remember to remove afterwards to help the drying out process.

Although the actual cost of fitting resilient materials will vary depending on the size and type of property you live in, Norwich Union has put together some guideline figures based on the cost of repairing a house that has resilient measures fitted versus one without.

For example you would have to wait three days before you could replace skirting boards in a standard house at a cost of £750. But the waiting time for a resilient home is just half a day and would cost £100 to repair them. Doors could also be repaired more quickly – within half a day at the cost of £50 as opposed to £200.

The savings are even more dramatic if the flooding is more severe – up to a metre in depth. Stairs could be repaired within half a day in a resilient home at the cost of just £150 compared to £1,500 in a standard home and you could spend £2,000 or more replacing kitchen units or just wipe them clean and start again with ones designed to withstand flooding. Sockets and wiring could cost £1,000 to repair in a standard home and take two days whereas a house with the resilient measures would need no new rewiring and be usable immediately.

Flood defence

You can also buy a number of ready-made flood defences to minimise damage. Only buy those with a Kitemark – supported by the Environment Agency – as these have been tested and found fit for the job. Many of these flood products such as window and door boards are attached only when there is a risk of flooding. The Environment Agency or Floodline will be able to give further information about these products as will the National Flood Forum (www.floodforum.org.uk).

According to the Association of British Insurers (ABI) the typical cost of protecting a home from flash floods with these products is between £2,000-£6,000 and protecting a larger home from more prolonged flooding is estimated to cost £20,000-£40,000. But the cost of flood damage to properties with these products could be reduced by as much as 80%.

Do remember though, if there is a risk of severe flooding – defined as when the floodwater is more than a metre high – then you may cause more harm than good keeping the water out as the force may cause structural damage to the building itself.

It also depends on why your home is flooded and the type of soil it is built on. For example if it is on porous soil such as chalk then the water will rise up from the ground into the ground floor so flood defences may be worthless. Contact your local authority or Floodline for information about the type of flooding the property has experienced, such as the water height, cause of flooding and frequency. Once these factors are known you can decide on which are the best types of flood defences to invest in.

