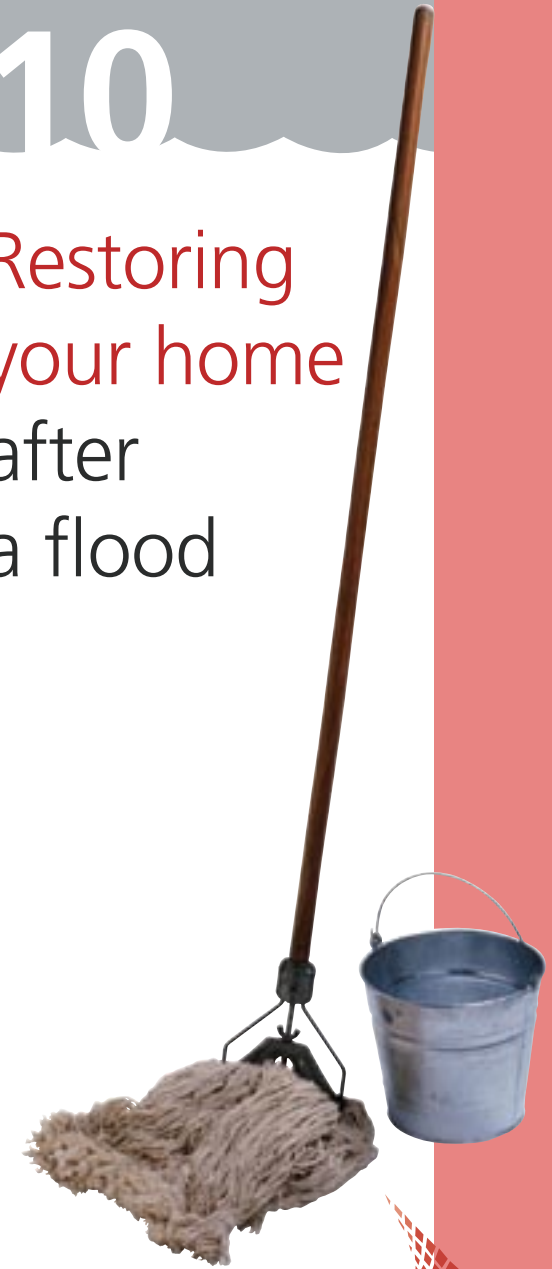


# 10

## Restoring your home after a flood



**Fact:** Because water displaces bodyweight, the deeper a person becomes immersed in floodwater, the less the person weighs, so the more difficult it is for them to remain upright.

# Cleaning



Cleaning up your home after a flood is a big job, but if you follow the guidelines below you will be able to finish the job safely and efficiently.

- ◆ Make sure that the gas, electricity and any fuel taps are turned off.
- ◆ Temporary electricity can be hired, but adequate ventilation is vital, as generators can produce carbon monoxide. Let the engine cool before re-fuelling.
- ◆ Make sure any appliances that use gas are disconnected.
- ◆ Make temporary repairs to the roof if it has been damaged. Tarpaulin makes a good temporary covering.

## Cleaning up

Before you begin to clean up your property make sure you have the equipment you will need. This includes:

- ◆ A camera to record the flood damage.
- ◆ A basic tool kit with a hammer, nails, screwdriver and spanners.
- ◆ Brooms, mops, scrubbing brushes and buckets.
- ◆ Domestic detergent and disinfectant.
- ◆ Rubber boots, gloves and protective clothing.
- ◆ Shovels.
- ◆ Heaters, fans and a dehumidifier if available.
- ◆ Heavy-duty refuse bags.

## Remove standing water

- ◆ The fire service may supply a pump out service, for which there could be a fee, or you could hire a pump from a DIY store. Alternatively you can hire a specialist water damage company to pump the water out for you.
- ◆ Drain water away in stages to avoid problems with the water pressure on the structure of your property.
- ◆ Do not heat your home to more than 4°C until all standing water is removed.

## Removing mud

- ◆ Shovel out as much mud as possible and use a hose to clean out the rest.
- ◆ If there is mud on the inside and outside of your walls, remove in stages so that the loading remains even.
- ◆ A high-pressure hose should not be used to remove mud from your property.

## Cleaning and disinfecting

- ◆ Scrub surfaces with hot soapy water and a heavy-duty detergent.
- ◆ Items such as soft furnishings, clothes and foodstuffs that have come into contact with floodwater should be placed in rubbish sacks (tied securely) and disposed of.
- ◆ You will probably need to hire a skip to deal with all the refuse from your house. If you are making an insurance claim, do not throw anything out until you are told to do so by the insurance company. Alternatively, photograph items before disposal.
- ◆ All food preparation surfaces need to be cleaned thoroughly and disinfected.
- ◆ Allow all cleaned surfaces to dry completely as there are germs that can thrive in wet conditions.

# Drying

Air circulation is the best way to dry out a property and clear the air inside. Be patient and make sure the property is completely dry before you move back in.

## Some do's and don'ts

- ✓ Do open your doors and windows to ventilate your home.
- ✓ Do ensure your house is secure.
- ✓ Do unblock airbricks and vents.
- ✓ Do wash your hands with disinfectant if you came into direct contact with water.
- ✓ Do check external walls and the roof for structural damage before entering a property.
- ✗ Don't attempt to turn on any services until they have been checked by an expert.
- ✗ Don't eat any food that has come into contact with floodwater.
- ✗ Don't attempt to move any heavy or unstable objects by yourself – get help.



## Dry the property

- ◆ You can allow your property to dry naturally, but that can take months. Forcing the drying process can speed it up so that it only takes a number of weeks. Whatever way you choose to dry your property, make sure that the moisture trapped within the structure of the property is removed. Sometimes the walls may feel dry on the outside, but they are still damp internally. If in doubt get a professional in to ensure that your property is completely dry.
- ◆ In all cases, the earlier the drying process is started, the greater the chance of success will be – the first 48 hours after a flood are the most critical.
- ◆ If your heating has been tested by a professional and is certified safe to use, it can be turned on to help dry the house. Keep the temperature at around 20 to 22°C. Excessive temperatures should be avoided as rapid heating may lead to cracking of plasterwork, etc.
- ◆ Be aware that temperature alone will not dry your property. Air circulation and humidity are critical factors to consider.
- ◆ Good ventilation is essential so keep windows and doors open during good weather and ajar during wet weather.
- ◆ If you are using a dehumidifier leave external windows and doors closed, especially during wet weather.

## Don't forget security

There have been instances of looting during the aftermath of a flood and while it is important to ventilate your house, it also pays to be security conscious. Remember that burglar alarms may have been affected by the water and might not work.

Do not leave external windows and doors open when the property is unoccupied, and make sure that it is properly locked when you leave. If necessary cover any open or broken windows with security mesh.

# Repairs

## Brickwork

- ◆ Even after your property has dried out your brickwork may still contain moisture. The best way to dry this is through natural evaporation. Open all the air vents to speed the process up.
- ◆ Keep an eye out for cracks in the walls as bricks can shrink or crack as they dry.
- ◆ Do not repaint brickwork until it is completely dry.
- ◆ You may notice a white salty growth on the walls. This will stop when the wall is fully dry and can be removed with a brush.
- ◆ If brickwork fails to dry have an expert check your property for rising damp.
- ◆ Covers on airbricks should be removed once the floodwater has receded.
- ◆ Do not light fires for at least two weeks after flooding in a brick fireplace. Steam will be created if the bricks are not dry and this can damage the chimney.

## Floors

- ◆ Remove floor coverings such as vinyl, carpet or tiles. Insulation materials that have become wet should also be removed, disposed of and replaced.
- ◆ Chipboard floors will be seriously damaged by floodwater and should be removed and replaced. If this is not possible, they must be strengthened with wooden struts from below.
- ◆ The spaces beneath concrete floors should dry out naturally and the floor will not be affected. If you think additional ventilation is needed you should contact a builder.
- ◆ If your property has suspended wooden floors, some boards should be lifted so that any water present can be removed. This can be achieved by draining through air bricks, using a pump or, if necessary, cutting holes in the perimeter walls of your property. Do not attempt to cut holes without professional advice.

- ◆ If floor joists show signs of rot have them replaced and treat the surrounding area to prevent spread.
- ◆ Floors that are heaved or cracked should be replaced if they do not return to their original level. If they are at their original level, you can build another floor on top of them. If this is the case a vapour barrier should be installed between them.
- ◆ The best way to test a floor for moisture is to use a meter. The safe moisture level for softwoods is 18%.

## Glass and windows

- ◆ Clean all windows and oil locks and hinges to prevent corrosion.
- ◆ Single glazing is unlikely to be affected by floodwater, but check the condition of the putty, window locks, etc. to ensure that the window is secure.
- ◆ Double-glazed units should be inspected to ensure that floodwater has not eroded the edge seal. Check for mud and water trapped in the hollow windows and door frames. If there is moisture inside the glass drill holes at the top and bottom of the frame to drain it out. If there is

condensation between the frames the unit will have to be replaced.

- ◆ Sash windows may distort and swell following a flood. Do not force them open as this can cause further damage. The swelling should reduce during the drying period. If it does not return to its normal size when the wood is completely dry, then it can be planed to fit the frame.
- ◆ If sash windows have to be opened to assist with drying the property then remove the beading and the opening sash. Temporary beading can be screwed into position for added security when the property is unoccupied.

## Insulation

- ◆ Insulation that has become wet must be removed and replaced as it loses its insulating qualities and inhibits the drying process.
- ◆ Fibreglass insulation is an irritant. If removing it, wear protective clothing.
- ◆ If you think that wall-cavity insulation has been damaged by flooding, seek expert advice before trying to remove it.

## Interior decoration

- ◆ Low-permeability wall coverings like vinyl wallpapers, gloss paint and tiling will hamper the drying process. Remove the wall coverings from at least one side of the internal walls to help speed up the drying process.
- ◆ Timber stud partitions may rot if not dried properly.
- ◆ Do not redecorate for at least 3 months after the walls have dried and any repairs have been done. Painting or wall papering too soon can result in blistering, mould or peeling.
- ◆ Staining may occur when re-painting with emulsion. This can be avoided by using an oil-based or stain-block paint before applying emulsion.
- ◆ If your kitchen units are made of chipboard they will be severely damaged by flooding. Chipboard may expand, distort and lose its strength. It's also impossible to disinfect properly and should therefore be discarded. Consider replacing it with solid wood or plastic, especially if there is a risk of future floods.

## Plaster and dry linings

- ◆ Gypsum-based plaster absorbs large amounts of water and will distort in a flood. Damaged plasterwork needs to be replaced, but wait until you are sure that crack movement and salt deposition have ceased.
- ◆ When you are re-plastering consider using tanking instead, as this is more resilient to floodwater.
- ◆ Where there is plasterboard, remove skirting boards. Then cut or drill holes through the plasterboards or dry linings to drain trapped water and aid ventilation.
- ◆ It is vital to ensure that the walls are thoroughly dry internally before beginning any redecoration.

## Structural damage

Structural damage may not necessarily be evident for some time after the flood.

Make regular checks on your property and check for these tell-tale signs:

- ◆ Changes in the line or appearance of a roof ridge (best observed from a distance).

- ◆ Buckling of walls, identified by horizontal cracking or areas that appear to have moved out of vertical alignment.
- ◆ Vertical or diagonal cracks which indicate that walls or footings have settled.
- ◆ Bulging or dislodged sections of property.
- ◆ Deep scouring which has led to exposed foundations.
- ◆ Any new cracks bigger than 5mm above windows or doors.

If you notice any of these signs, contact your insurance company immediately and get the advice of a structural engineer or building surveyor.

Building Control Officers in each Local Authority can provide advice and guidance on ensuring that any works planned to be carried out will comply with the building regulations.

## Walls

- ◆ Traditional brick or concrete walls will generally dry out well. Ensure bricks are clear for ventilation.
- ◆ Hose down and scrub external walls.

- ◆ You may notice a white salty growth on the walls. This will stop when the wall is fully dry and can be removed with a brush.
- ◆ If you wish to speed up the drying process, consult a professional builder about locating vents at about one metre intervals all around the property at damp-proof course level and also at the top of cavities behind masonry cladding.
- ◆ Seek professional advice if the walls of your property have had moisture sealants applied to them as this could hamper the drying process.
- ◆ Remove any substantial sediment or debris piled against the walls as this will exert a force upon the walls and should therefore be removed in careful stages. If the loading is both on the inside and outside of a wall, seek to maintain levels evenly as you remove them.
- ◆ Have wall cavities inspected by an expert to ensure that the walls are secure. If wall ties are corroded get an expert to replace them.

## Wood

- ◆ If wood can be dried within a few weeks then decay is unlikely.
- ◆ Wood-framed walls need to be fully exposed unless the flooding only lasted a few hours. In order to do this, plasterboard, vapour-control membranes and insulation should be removed up to the highest level of the flood water.
- ◆ Wooden window frames may swell and jam when wet. Have an expert check whether rot is present. Wet timber can be treated with preservative plugs. Once dry, the frames can be redecorated.
- ◆ Wooden staircases may have become unstable and weak. Check the support of the staircase and, if required, strengthen it with extra struts. Stabilise loose threads once the staircase has dried out.
- ◆ Fire doors are often constructed with layers of fire resistant compound packed in their cores. Floodwater can permanently damage these, so they should always be replaced.
- ◆ Wooden trim and door framing attached to the wall may deteriorate during prolonged drying periods.
- ◆ If there is more than 18% moisture present in softwood, fungal growth can begin.

## Restoring services

You must have an expert check your property's services before you turn them back on. The damage caused by the flood may not be obvious and switching on a service could be very dangerous.

### Electricity

An electrician will check the junction boxes, socket outlets, light switches and ceiling connections to ensure that there is no water trapped inside them. Modern wiring can withstand a short period of flooding, but if your property was flooded for more than a couple of hours then you might need to replace the wiring in your house. Consider re-routing cables to drop down from above.

### Gas

Water and mud may enter gas systems during a flood. A registered contractor can check all your appliances, as these may be dangerous, even if they appear to be working normally.

### Water

Mains supply water should not be affected by flooding, but wash the taps and then run them for a short time to ensure that silt has not entered the system.



If you suspect that your mains supply has been contaminated contact your local authority and boil tap water for at least 20 minutes before use.

Check the pipe work in your house to ensure that it has not been damaged and check any insulation around the pipes and replace as necessary.

Water supplies that are not on the mains system, such as cisterns or wells, may be contaminated and should not be used until they have been tested over a period of time. Consult a specialist for advice.

### Sewers

Drains and sewers are rarely damaged by floods, but they may block and back up. Check this by flushing toilets and running taps. Report any blockages to your local authority as soon as possible.

If sewer repairs need to be made, consider installing anti-backflow devices.

If you have a private sewage system, make sure that there is no damage that could result in a health hazard. Saturated soils may interfere with its proper function. Do not use the system until the floodwater level has subsided.

Service damaged tanks, etc. and have them inspected as soon as possible by a professional.