

A guide to condensation, damp and mould

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Nottingham
City Council

Introduction to Damp and Mould Growth

This booklet is designed to give some basic information and advice about one of the most common housing issues, dampness and mould growth. Condensation is usually the biggest cause of damp within homes. Here you will find information and advice to help landlords and tenants to identify and reduce condensation as well as treating the mould growth that often comes with it.



Damp can cause mould on walls and furniture and make window frames rot. Damp housing encourages the growth of mould and mites, as mites feed on mould and can increase the risk of respiratory illnesses in some people. Some damp is caused by condensation. This leaflet explains how condensation forms and how you can keep it to a minimum to reduce the risk of damp and mould.

Types of Dampness

There are four main types of dampness that could affect your home. It is important to understand the difference between them so that you can effectively treat the problem.

1. Condensation

This is by far the most common cause of dampness experienced by tenants and householders, resulting in a large number of enquiries or complaints received by the Council.

Condensation is caused by water vapour or moisture from inside the home coming into contact with a colder surface, such as a window or wall. The resultant water drops (condensation) may then soak into the wallpaper or paintwork or even plasterwork. In time, the affected damp areas then attract black mould that grows on its surface.



Condensation mainly occurs during the colder months, whether it is rainy or dry outside. It is usually found in the corners of rooms, north facing walls and on or near windows. It is also found in areas of poor air circulation such as behind wardrobes and beds, especially when they are pushed up

against external walls. Note. Black mould is frequently seen on this type of dampness.

2. Penetrating Dampness

This type of dampness is usually found on external walls or due to roof leaks on ceilings. It only appears because of a defect outside the home, such as missing pointing, cracked rendering, missing roof tiles or defective rainwater goods.

These defects then allow water to pass from the outside to the inner surfaces. Penetrating dampness is far more noticeable following rainfall and will normally appear as a well defined 'damp-patch' which looks and feels damp to the touch.

Note. Black mould is rarely seen on areas of penetrating dampness. This is because the affected area is usually too wet and the dampness contains salts picked up when passing through the wall, which prevent the growth of black mould.



3. Defective Plumbing

Leaks from water and waste pipes, especially in bathrooms and kitchens, are relatively common. The affected area looks and feels damp to the touch and remains damp whatever the weather conditions outside. A quick examination of the water and waste pipes serving the kitchen and bathroom and the seals around the bath, shower and sinks; plus the external pipework, such as guttering will usually find the source of the problem.



Note. Black mould is rarely seen on this type of dampness as the area is usually too wet and the chemicals in a waste waterleak will prevent mould growth.

4. Rising Damp

This is generally caused by water rising from the ground into the home. The water gets through or round a broken damp proof course (DPC) or passes through the natural brickwork if the property has no DPC. A DPC is a horizontal layer of waterproof

material in the walls of a building just above ground level to stop moisture rising through the walls by capillary action.

Rising damp will usually only affect basements and ground floor rooms. It will normally rise no more than 12 to 24 inches above ground level and usually leaves a 'tide mark' low on the wall. You may also notice white salts on the affected areas called efflorescence salts.



Rising damp will be present all year round but is more noticeable in winter. If left untreated it may cause wall plaster to crumble and paper to lift in the affected area.

Note. Black mould will not usually be seen where there is rising damp. This is because rising dampness carries with it ground salts which prevent the growth of black mould. However secondary factors can result in conditions becoming varied.

Condensation and Mould Growth

Most homes will be affected by condensation at some point. However, certain activities can increase the problem. Whether you are an owner-occupier or a rent-paying tenant, condensation and mould growth is often due to lifestyle and is something that can be reduced or remedied without expensive works or treatments.

Cooking, washing, drying clothes indoors, even breathing - all produce water vapour that can only be seen when tiny drops of water (condensation) appear on colder surfaces such as walls, windows, ceilings or mirrors.

The 'amount' of condensation in a home depends upon three factors:

1. how much water vapour is produced by the actions of its residents.
2. how cold or warm the property is.
3. how much air circulation (ventilation) there is.



Simply turning up the heating will not sort out the problem. All three factors may need to be looked at to reduce the problem. The first sign of a problem is water vapour condensing on windows and other cold surfaces, which then takes a long time to disappear, allowing surfaces to become damp. The second indication is black mould patches growing on these damp areas.

Mould will thrive with four key elements; moisture, food such as wallpaper or emulsion paint, the right temperature and oxygen. By dealing with the causes of condensation you will automatically deal with the problem of mould.



Common Household Moisture Producing Activities

Our everyday activities add extra moisture to the air inside our homes. Even our breathing adds some moisture. One person sleeping adds half a pint of water to the air overnight and an active person adds twice that rate during the day. The list below gives you some idea of how much extra water you could be adding to the air in your home in a day:

	2 people at home (16 hours).....	3 pints
	A bath or shower.....	2 pints
	Drying clothes indoors.....	9 pints
	Cooking and use of a kettle.....	6 pints
	Washing dishes.....	2 pints
	Bottled gas heater (8 hours use).....	4 pints

Warmth Versus Ventilation

Striking the right balance between warmth and ventilation is important and can be very effective. By opening windows or ventilating your home it may appear that you are losing some heat, but what you are actually doing is allowing warm moisture-laden air to escape and permitting cool dry air to enter your home.

Dry cool air is actually cheaper to heat than warm moist air! Many people who have double-glazing installed experience problems with condensation and mould growth that they did not experience

with their old draughty window frames. However, by using trickle vents or opening windows slightly, then the necessary ventilation can be achieved. Remember - The advice is to ventilate for an appropriate period of time, usually between 30 mins to 1 hour, not to leave the windows open all day.



Six Steps to Reducing Condensation and Mould Growth

1 Produce Less Moisture

Ordinary daily activities produce a lot of moisture. To reduce this:

- Dry clothes outdoors if possible. Avoid drying clothes indoors or if you have to, dry them on a clothes airer in the bathroom with the door closed and either an extractor fan on or a window slightly open.
- Vent tumble driers to the outside (never into the home) or buy a condensing type.
- Cover pans when cooking and do not leave kettles boiling.
- Do not use paraffin or gas bottle heaters. They produce large amounts of water vapour and are very expensive to run!

2 Remove Excess Moisture

Always wipe the windows and window sills of your home every morning to remove condensation. This is especially important in the bedroom, bathroom and kitchen – just opening the window is not enough.

3 Heating

In cold weather, the best way to keep rooms warm and avoid condensation is to keep low background heat on all day rather than short bursts of high heat when you are in the house. Good heating controls on your radiators, an independent room thermostat and a timer will help you control the heating throughout your house and help manage heating costs. Also think about better insulation (roof, cavity – wall or external wall insulation), draught-proofing windows and doors, and installing double or secondary glazing.

Six Steps to Reducing Condensation and Mould Growth

4 Ventilation

It is important to remove condensation and excess moisture by ventilating rooms. You can ventilate a room without making draughts or causing it to become cold.

To do this, you may only need to open the window slightly or use the trickle vent that can often be found on new windows. This allows warm moisture laden air to escape to the outside and let cool dry air into the property.



Here are some tips to help with ventilation:

1. Always ventilate or open a window when using the kitchen or the bathroom and close the doors to prevent moisture in the air from spreading to other parts of the house. Continue to ventilate these rooms for a short time after a shower, bath or cooking and keep the door closed!
2. Open bedroom windows for up to one hour as soon as you get up.
3. Clear window sills of clutter that will restrict opening the window and prevent surfaces from being wiped.
4. Leave space between the back of furniture and cold walls for air to circulate.
5. Ventilate cupboards and wardrobes, and avoid overfilling them as this prevents air circulating.
6. Do not completely block chimneys and flues – fit with an air vent and make sure you meet ventilation requirements for any gas appliances in a room.

Six Steps to Reducing Condensation and Mould Growth

5 Insulation

Insulating and draught-proofing will help keep your home warm and save money on your heating bills.

- a) Insulate the loft to a depth of 300mm.
- b) Consider secondary or double glazing.
- c) Consider cavity wall insulation or internal dry lining.
- d) Draught-proof windows and external doors. When draught-proofing, do not block permanent ventilators or rooms requiring ventilation.

Find out if you are eligible for a grant for insulating your home, this may help to reduce your bills.

6 Dealing with Mould

Mould can grow on walls, ceilings, furnishings and even on clothes and toys, which can be depressing and expensive.

To kill and remove the mould:

- Carefully remove excess mould with a damp cloth and throw away afterwards. Or if possible use a vacuum cleaner and empty afterwards. Do not brush mould as this releases spores into the air.
- Wipe down affected areas using a fungicidal wash or diluted bleach – remember always use rubber gloves and wear safety glasses.
- After treatment redecorate using a fungicidal paint – do not paint over using an ordinary paint as mould is likely to grow back.
- Dry clean affected clothes and shampoo carpets where necessary

Remember...

Dealing with condensation and mould growth is not easy. Only carrying out one or two of the steps may not solve your problem, you need to do as much as possible every day. Once a balance has been achieved your situation should improve over time.

Tenants Should:

- Carefully remove excess mould with a damp cloth and dispose. Do not brush mould as this releases spores into the air.
- We recommend that you regularly check under divan bed drawers, behind wardrobes, bedside cabinets, bedheads and clothing stored in cupboards, you will then need to wipe down or wash clothing immediately.
- Wipe down affected areas using a good quality mould and mildew spray.

Landlords should:

- Work with the tenants to determine the cause of the problem.
- Carry out repairs to make good any defects identified at the property.
- After treatment arrange for redecorate using a specialist bathroom or kitchen paint, and if wallpapering the area make sure to use a good quality paste with an anti-fungicidal additive.
- Where possible do not use wallpaper in bathrooms and kitchens and provide mechanical ventilation with a humidity sensor.

Useful links

[DASH Services – condensation](#)

[UNIPOL – troubleshoot damp and mould](#)

[SHELTER – damp and mould in rented homes](#)

[Nottingham City Council – Report a problem](#)

[Nottingham City Council's Safer Housing website](#)

