



# A GUIDE TO DAMP, MOULD & CONDENSATION

This document is available in other languages or formats.





## **Introduction to Damp, Condensation & Mould Growth**

This booklet is designed to give some basic information and advice about dampness, condensation and mould growth. Condensation is usually the biggest cause of damp within homes. This booklet provides information and advice to help tenants identify and reduce condensation, as well as treating 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, this can increase the risk of respiratory illnesses in some people. Some damp is caused by condensation. This booklet 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 the problem can be effectively treated.

#### **Condensation**

This is by far the most common cause of dampness experienced by householders.

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



Condensation mainly occurs during the colder months, whether its raining or dry outside. It is usually found in the corner 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.

Black mould is frequently seen on this type of dampness. This looks and smells bad and can cause health problems as well as damage to decoration, furniture and clothes.



## Penetrating Dampness

This type of dampness is usually found on external walls or on ceilings due to roof leaks. It only appears because of a defect outside the home, such as missing pointing, cracked rendering, missing roof tiles or defective rainwater goods (gutters and downpipes). Badly fitted windows and doors as well as covered air bricks can also cause penetrating dampness.

Typical signs of penetrating damp are:

- Growing area of damp on walls or ceilings.
- Blotch patches on walls.
- Wet and crumbly plaster.
- Signs of spores and mildew.
- Drips and puddles.



## Defective Plumbing

Leaks from water and waste pipes, especially in bathrooms and kitchens, are relatively common. The effected area looks and feels damp to the touch and remains damp whatever the weather conditions.



A quick examination of the water and waste pipes serving the kitchen and bathroom, the seals around the bath, shower and sinks plus an examination of external pipework such as guttering and downpipes will usually find the source of the problem.

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



## Rising Dampness

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' on the wall. White salts called efflorescence salts may appear on the affected area.



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 wallpaper to lift in the affected area.

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**

Condensation can cause mould to form in your home, leading to staining / damaging wallpaper, wall surfaces, window frames, furniture and clothing. The mould and its spores carry the musty smell that is often associated with a damp house. Black mould cannot grow where salt deposits are present (as with rising damp) and is therefore a sign of condensation.

Water vapour is generated in the home in many ways but the main causes are:

- Steam from cooking and boiling the kettle.
- Baths and showers.
- Drying clothes inside.
- Unsuitable venting of tumble dryers.



The tiny water droplets produced appear as condensation on colder surfaces including walls, windows, ceilings and mirrors.

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

- How much water vapour is produced by the actions of residents.
- How warm or cold a property is.
- How much air circulation (ventilation) there is.

Simply turning up the heating in a property will not fix the problem of condensation. All three factors may need to be considered to reduce the problem.

The first sign of a problem is water vapour condensing on windows and other cold surfaces. This 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 the following key elements:

- Moisture.
- A source of food such as wallpaper and emulsion paint.
- The right temperature.
- Oxygen.



## Areas Prone to Condensation






The following areas are particularly prone to condensation:

- Cold surfaces such as mirrors, windows and window frames.
- Kitchens and bathrooms where a lot of steam is created.
- External walls, walls of unheated rooms and cold corners of rooms.
- Wardrobes / cupboards and behind furniture against an external wall and where there is a lack of ventilation.

## Common Household Moisture Producing Activities

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 demonstrates how much water household activities can add to the air in your home in a day:

	Two people at home (16 hours)	3 pints
	A bath or shower	2 pints
	Drying clothes indoors	9 pints
	Cooking and use of kettle	6 pints
	Washing dishes	2 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. However, you are actually 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!  
By using trickle vents or opening windows slightly, the necessary ventilation can be achieved.





## Reducing Condensation

By taking the following steps you can help reduce condensation and mould growth in your property.

### Heating

Condensation is most likely to be a problem in homes that are underheated. The best way to keep rooms warm and avoid condensation is keep the temperature in all rooms to above 15°C as this will reduce condensation form on external walls.

### Ventilation

It is important to remove condensation and excess moisture by ventilating rooms. You can ventilate a room without making it draughty or causing it to come 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 air into the property.

Here are some tips to help with ventilation:

- Always ventilate or open a window when using the kitchen or the bathroom. You should also make sure that you 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 cooking or taking a bath or shower.
- Open bedroom windows for up to one hour as soon as you get up.
- Leave space between the back of furniture and cold walls for air to circulate.
- Ventilate cupboards and wardrobes, and avoid overfilling them as this prevents air circulating.
- Make sure that vents and airbricks are not covered.
- Use extractor fans when cooking or taking a bath or shower.





## Remove Excess Moisture

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

## Dealing with Mould

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

To kill and remove mould:

- Carefully remove excess mould with a damp cloth and throw away afterwards. If possible, use a vacuum cleaner and empty afterwards. Do not brush mould as it releases spores into the air.
- Wipe down affected areas using a fungicidal wash or diluted bleach – remember to 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.

## Produce Less Moisture

Condensation in the home occurs when there is too much moisture in the air. You can take steps to reduce the amount of moisture in the air by following the tips below:

- Dry washing outside whenever possible.
- Do not dry clothes on radiator. This will cause your boiler to work harder to heat your house whilst creating a lot of condensation.
- If you have to dry clothing indoors, place clothes on a drying rack in a room with the door closed and either the extractor fan on or a window slightly open.
- Cover pans when cooking and do not leave kettles boiling.







## Tips for Reducing Condensation

The following tips can help you reduce condensation and lower the risk of mould.

### Living Room



- Open trickle vents during the day or when going out, or open windows for at least 10 minutes every day.
- Lay thick carpet with a good thermal underlay.
- Hang thick, heavy lines curtains during the winter to help keep the room warm.

### Kitchen



- Close internal doors whilst cooking and open a window.
- Use an extractor fan if you have one.
- Keep lids on pans (this also reduces boiling times and also save money).
- Only boil as much water as you need in a kettle to reduce steam and save money.

### Bedroom



- Wipe down windows each morning.
- Open trickle vents during the day or when going out, or open windows for at least 10 minutes every day.
- Don't put furniture, including beds, against any external wall and try to leave a gap between the wall and furniture to allow airflow.
- Lay thick carpet with a good thermal underlay.

### Bathroom



- Open windows whilst bathing / washing and leave them open for about 20 minutes after.
- Use an extractor fan if you have one.
- Take shorter and cooler showers.
- When running a bath put the cold water in first – **this significantly reduces condensation.**
- Wipe down windows / mirrors / tiles and shower doors after use.
- Don't leave wet towels lying around.