Damp, mould and condensation

Your guide to keeping your home free from damp, mould and condensation
This booklet gives some basic information about the different types of dampness that may affect your home.

Condensation is probably the biggest cause of dampness in homes, therefore a lot of information and advice is included in this booklet to help you identify and reduce condensation as well as treating the mould growth often associated with it.

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 know what to do about the problem.

1. Rising damp

This is 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 your home was built without a DPC. A DPC is a horizontal layer of waterproof material put in walls or a building just above ground level to stop water rising through the walls by capillary action.

Rising damp will be present all year round but is more noticeable in the winter. If left untreated it may cause wall plaster to crumble and paper to lift in the affected area. Rising damp will only affect ground floor rooms. It will not normally rise any higher than 12 to 24 inches above ground level (300mm to 600mm) and usually leaves a ‘tide mark’ low down on the wall. You might also notice white salts on the affected areas.

Note: Black mould will rarely be seen where there is rising damp (and then only in the early stages). This is because dampness carries with it ground salts which prevent the growth of black mould.
2. Penetrating dampness

This type of dampness will only be found on external walls or in the case of roof leaks, on ceilings. It only appears because of a defect outside the home, such as missing pointing to the brickwork, cracked render or missing roof tiles. These faults then allow water to pass from outside to inner surfaces.

Penetrating dampness is far more noticeable following a period of rainfall and will normally appear as a well-defined ‘damp patch’ that looks and feels damp to 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. They can affect both external and internal walls and ceilings.

The affected area looks and feels damp to touch and remains damp whatever the weather conditions are outside. A quick check of the water and waste pipes serving the kitchen and bathroom and the seals around the bath, shower and sinks, plus external pipework, such as guttering will usually identify the source of the problem.

**Note:** Black mould will rarely be seen on this type of dampness because the area is usually too wet and the chemicals in a waste water leak will prevent mould growth.
4. Condensation

This is by far the most common cause of dampness experienced by tenants, resulting in a large number of enquiries or reports to Bernicia.

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 water drops (condensation) which form, may then soak into 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 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 little air circulation such as behind wardrobes and beds, especially where they are pushed up against external walls.

Note: Black mould is frequently seen on this type of dampness.

What to do if you think your home is suffering from any of these...

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Probably</th>
<th>Next Steps</th>
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<tbody>
<tr>
<td>Tide mark on walls approximately 12 to 24 inches above the ground, possibly showing of white salts.</td>
<td>Rising damp</td>
<td>Report it to Bernicia</td>
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<tr>
<td>Damp patch on external wall or ceiling, worsening or reappearing during wet weather.</td>
<td>Penetrating damp</td>
<td>Report it to Bernicia</td>
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<tr>
<td>Damp patch on internal or external wall or ceiling, that remains damp whatever the weather conditions are.</td>
<td>Defective plumbing</td>
<td>Report it to Bernicia</td>
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<tr>
<td>Black mould appearing in corners of rooms, around windows or behind wardrobes or beds.</td>
<td>Condensation</td>
<td>Read on...</td>
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</table>
**Condensation and mould growth**

Most homes will be affected by condensation at some point. However, certain activities can increase the problem.

In both private and rented homes condensation and mould growth is often due to habits and lifestyle and is something that can be reduced or remedied by the occupant.

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:**

- How much water vapour is produced by the actions by you and your family
- How cold or warm your home is
- How much air circulation (ventilation) there is in your home.

Simply turning up the heating will not sort out the problem, this may only temporarily reduce condensation. 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.
Black mould

Mould spores are invisible to the human eye and are always present in the atmosphere both inside and outside dwellings. They only become noticeable when they land on a surface upon which they can grow and then multiply. For mould to thrive and survive it requires four elements:

**Moisture:** Obtained from condensation

**Food:** Wallpaper, paint or plaster

**Suitable temperature:** Courtesy of you

**Oxygen:** Courtesy of mother nature
**Five steps to reducing condensation and black mould growth**

A five step plan can help to reduce the amount of condensation and thus black mould growth in your home.

### 1. Produce less moisture

Ordinarily daily activities produce a lot of moisture – see page 11. To reduce this:

**A.** Dry clothes outdoors. 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.

**B.** Vent tumble driers to the outside (never into the home), unless it is the self-condensing type.

**C.** Cover pans when cooking and do not leave kettles boiling.

**D.** Do not use paraffin or liquid petroleum (bottled) gas heaters. They produce large amounts of water vapour and are very expensive to run!

**E.** Always keep tropical fish tanks covered. Water evaporation from tanks can be severe.

**F.** Try not to let pets sleep in your bedroom.

**G.** If possible take a shower rather than a bath, this produces less moisture and saves money.

### 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.
Damp, mould and condensation

3. Ventilate to remove moisture

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 which will often be found on UPVC windows. This allows warm (but moist) air to escape to the outside and let in cool (but dry) air.

A. 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 your home. Continue to ventilate these rooms for a short time after a shower, a bath or cooking and keep the door closed!

B. If you have extractor fans fitted allow them to do their job by leaving them on at all times and using the boost control when you are cooking or bathing. The fans are extremely cheap to run and are really effective in extracting moisture.

C. Open bedroom windows for up to one hour as soon as you get up and throw back the sheets or duvets to air the bed and bedding

D. Clear window sills of clutter that will restrict opening the window

E. Leave space between the back of furniture and cold walls

F. Ventilate cupboards, wardrobes and avoid overfilling them as this prevents air circulating

G. Do not block air vents and make sure you meet ventilation requirements for any heating appliances in a room.
4. Heat your home a little more

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.

Heating controls on your radiators, room thermostats and the timer will help control the heating throughout your home and manage costs.
5. Dealing with black mould

Black mould can grow on walls, ceilings, furnishings and even on clothes and toys, which can be expensive to replace.

To kill and remove the mould:

A. Carefully remove excess mould with a damp cloth and throw away after. Do not brush mould or use a vacuum cleaner as this releases spores into the air.

B. Wipe down affected areas using a fungicidal wash that carries a Health and Safety Executive (HSE) approval number or diluted bleach which can be bought at most supermarkets – remember always use rubber gloves and wear safety glasses. A simple saline solution, that can be made by pouring salt into boiling water until it no longer dissolves, also does the same job.

C. Tea Tree oil is a natural antiseptic and disinfectant but it’s also great for cleaning, especially on mould or mildew. Try a dilute of three to four drops of Tea Tree oil in two litres of water (hot or cold). Soak mildewed items in the solution or spray onto trouble spots using a plant mister. Wipe, then rinse off. Always ensure you carry out a test on a small area of the fabric/material/surface beforehand.

D. After treatment redecorate using a fungicidal paint or wallpaper paste – do not paint over using an ordinary paint.

E. Dry clean mildewed clothes and shampoo carpets.

Remember...

Dealing with condensation is not easy. Only carrying out one or two of the above steps may not solve your problem. You need to do as many as possible every day, so that it becomes part of your routine and lifestyle.
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 asleep adds half a pint of water to the air overnight and an active person adds twice that rate during the day. The illustration below gives you some idea of how much extra water you could be adding to the air in your home in a day:

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<td>Cooking and use of a kettle</td>
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<td>Drying clothes indoors</td>
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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 never had with their old draughty window frames. This is because all the natural draughts around the poorly fitted windows have been sealed. However, by using trickle vents, opening windows slightly or allowing your extractor fan to do its job then the necessary ventilation can be achieved.

Please note...

The advice is to ventilate for an appropriate period of time, not to leave windows open all day.

Be careful not to ‘over ventilate' your home when it is cold, as it will cause the temperature inside to drop and make condensation more likely. It will also increase your heating costs.
Remember the five essential steps:

1. Produce less moisture
2. Remove excess moisture
3. Ventilate to remove moisture
4. Heat your home a little bit more
5. Deal with black mould growth
Useful organisations

Cold weather and fuel payments
Direct Gov

Online: www.gov.uk

Advice on energy savings
Energy helpline

Phone: free on 0800 074 0745
Online: www.energyhelpline.com
How to contact us

Online: www.bernicia.com

Email: info@bernicia.com

Phone: 0344 800 3800

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