



An EPIC guide to:

**Keeping your home free from damp,
mould and condensation**

Please note: You must request EPIC's permission in writing before making any alterations to your home, including installing a vent for your tumble dryer.

You will find lots of information in this leaflet about the different types of dampness that may affect your home.

Condensation is the biggest cause of damp in homes so we have included a lot of information and advice to help you identify and reduce this problem. We have included advice on treating the mould that often grows where there is a condensation problem.

Contents

Types of dampness	1
Condensation and mould growth	3
Six steps to reducing condensation and black mould growth	4
Common household moisture producing activities.....	8
Warmth and ventilation.....	8
Contacts - Energy Efficiency Grants and Advice . Error! Bookmark not defined.	
Useful Contacts	9

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 a problem if one arises.

1. Rising Damp

A damp proof course is horizontal layer of waterproof material put into the walls of a building just above ground level. It stops moisture rising through the walls by capillary action. If water gets through or round a broken damp proof course or passes through the natural brickwork if the property was built without a damp proof course it causes rising damp.



Rising damp only affects basements and ground floor rooms. It normally rises no more than 24 inches (600mm) above ground level. It usually leaves a 'tide mark' low down on the wall. You may also notice soft white salts on the affected areas.

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 is rarely be seen where there is rising damp and then only in the early stages. This is because rising damp carries ground salts which prevent the growth of black mould.

2. Penetrating Dampness

This type of dampness is only found on external walls or in the case of roof leaks, on ceilings. It only appears when there is a defect on the outside of the home, such as missing pointing to the brickwork, cracked rendering or missing roof tiles. These defects allow water into the home and this can cause penetrating damp.

Penetrating dampness is far more noticeable following a period of rainfall and normally appears 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 the water passed through the wall. These salts prevent the growth of black mould.

3. Defective Plumbing

Leaks from water and waste pipes especially in the bathroom and kitchen are relatively common. They can affect external and internal walls and ceilings. The affected area looks and feels damp to the touch and remains damp whatever the weather conditions. An examination of the water and waste pipes in the kitchen and bathroom and the seals around the bath sinks, plus the external pipework, such as guttering usually identifies 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.



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

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

Note. Black mould is often present where there is this type of dampness.

Condensation and Mould Growth

Most homes will be affected by condensation at some time. Condensation is often caused by the habits and lifestyle of the residents of the property. This means that they can take control of the problem and do something about it.

Cooking, washing, drying clothes indoors, even breathing, all produce water vapour that can only be seen when condensation appears.

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

1. how much water vapour is produced
2. how cold or warm the property is
3. how much air circulation or ventilation there is

All three factors need to be looked at to reduce the problem of condensation. Just turning up the heating will not solve the problem.

The first sign of a problem is when water vapour condenses on windows and other cold surfaces and then takes a long time to disappear. This allows surfaces to become damp.

The second indication is the appearance of patches of black mould growing on the 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 multiply.

For mould to thrive and survive it requires four things:

1. Moisture - from condensation
2. Food - such as wallpaper or emulsion paint
3. Suitable temperature - cool areas
4. Oxygen. - from the atmosphere

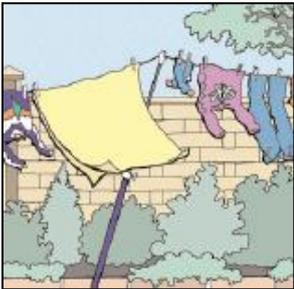
By dealing with the causes of condensation you will automatically deal with the problem of mould.

Six Steps to Reducing Condensation and Black Mould Growth

This six-step plan can help to reduce the amount of condensation and black mould growth in your home.

1. Produce less moisture

Ordinary daily activities produce a lot of moisture. The table on page 8 shows you how much water some activities produce. Try these tips to reduce the amount of moisture in your home:



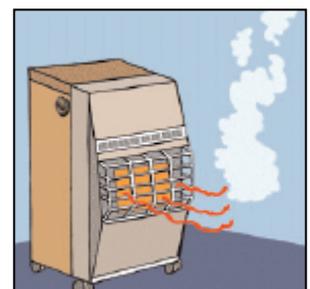
Avoid drying clothes indoors. Dry clothes outdoors if you can. If you have to dry clothes indoors dry them on a clothes airer in the bathroom with the door closed and either the extractor fan on or a window slightly open.

Never vent your tumble drier into your home. Buy a proper venting kit and vent to the outside or buy a condensing type of dryer.



Cover pans when cooking and do not leave kettles boiling. This reduces the amount of moisture in the air and saves on fuel bills.

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



2. Remove Excess Moisture

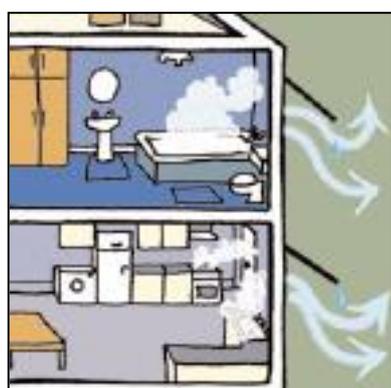
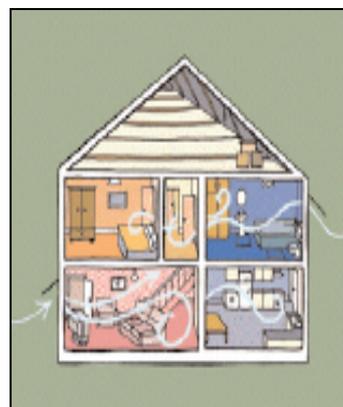


If you see condensation on your windows, or on the walls in the bathroom, wipe up the water with a cloth and wring it cloth out into the sink. This is especially important in the bedroom, bathroom and kitchen - just opening the window is not enough.

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 vents on your UPVC windows. This allows warm moist air to escape to the outside and lets in cool dry air.



Use your kitchen extractor fan or open a window when you are using the kitchen or the bathroom. Keep the doors closed to prevent moisture in the air from spreading to other parts of your home. Continue to ventilate these rooms for a short time after taking a shower, a bath or cooking, and keep the door closed.

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

Clear window sills of clutter that will prevent you from opening the window.

Leave space between the back of furniture and cold walls so that air can circulate.



Ventilate cupboards, wardrobes and do not overfill them as this prevents air circulating.

Your chimney should have a vent in it. If you have a gas fire you will already have a chimney vent fitted.

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 using short bursts of high heat when you are in the house.

Good heating controls on your radiators, room thermostats and a timer will help control the heating throughout your house and help you manage costs.

5. Insulate and Draught-proof

This will help keep your home warm and save money on your heating bills.

You should have:

Insulation in the loft, preferably to a depth of 10 inches (250mm).



Cavity wall insulation.

UPVC windows with effective draught proofing built in.

Note: Do not block air bricks or permanent vents. These are needed to ensure that your home is properly ventilated.

6. Dealing with black mould

Black mould can grow on walls, ceilings, furnishings and even on clothes and toys.

To kill and remove the mould:

Carefully remove excess mould with a damp cloth or paper towel. Throw the cloth or towel away when you have finished with it. Do not brush the mould as this 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.

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

After treatment redecorate using a fungicidal paint or wall paper paste. Do not re-paint using ordinary emulsion paint or the mould may come back.

Dry clean mildewed clothes and shampoo carpets.

Dealing with condensation is not easy.

If you carry out one or two of the above steps you may be lucky and solve your problem. It is much more likely, however, that you will need to carry out most, and possibly all of the recommendations every day to get rid of the problem. Soon it will become part of your routine and lifestyle.

Common household moisture producing activities

Our everyday activities add moisture to the air inside our homes. Even our breathing adds some moisture. One person asleep adds half litre of water to the air overnight and an active person can add twice that amount during the day.

The chart 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 for 16 hours	1.5 litres
A bath or shower	1 litre
Drying clothes indoors	5 litres
Cooking and using a kettle	3 litres
Washing dishes	1 litre
Using an LPG heater (8 hours use)	2 litres

Warmth versus Ventilation

Striking the right balance between warmth and ventilation is important and can be very effective.

You may think that by opening windows or ventilating your home that you are losing some heat. 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 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 removed. You can achieve the necessary level of ventilation by using trickle vents or opening windows slightly.

Useful Contacts

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