# Keeping your home free from damp, condensation and mould



# Introduction AND CONTENTS

This booklet gives some basic information about the different types of dampness that may affect your home. Condensation is probably the biggest cause of damp in homes. A lot of information and advice is included in this booklet to help tenants identify and reduce condensation as well treating the mould growth often associated with it.



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# Types of Dampness

### PRESENT IN THE HOME

#### 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 High Peak Borough Council.

Condensation is caused by water vapour or moisture from inside the dwelling 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 plaster work. 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 little 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.

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

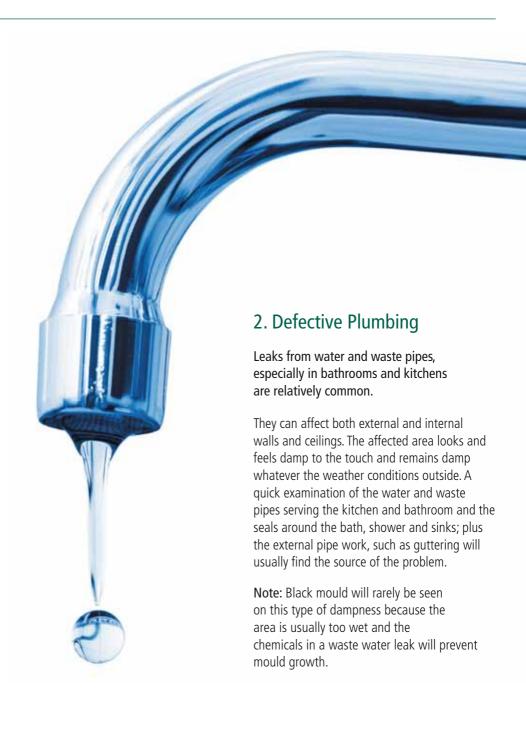
### THE AMOUNT OF CONDENSATION IN A HOME DEPENDS UPON THREE FACTORS:

- 1. How much water vapour is produced by the actions of its residents.
- 2. How cold or warm a property is.
- 3. How much air circulation (ventilation) there is. 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 this damp area.







### 3. Penetrating Damp

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 rendering or missing roof tiles. These defects then allow water to pass from the outside to the inner surfaces.

Penetrating dampness is far more noticeable following a period of 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.

### 4. 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 the property was built without a DPC. A DPC is a horizontal layer of waterproof material put in the walls of a building just about ground

level. It stops moisture rising through the walls by capillary action.

Rising damp will only affect basements and ground floor rooms. It will normally rise no more than 12 to 24 inches above ground level (300mm to 600mm) and usually leaves a 'tide mark' low down on the wall. You may also notice 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 will rarely be seen where there is rising damp (and then only in the early stages). This is because rising dampness carries with it ground salts which prevent the growth of black



# Five steps to reducing condensation and mould growth

#### 1. Produce less moisture

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

- A. Dry clothes outdoors. Avoid drying clothes indoors or if you have to, dry them on a clothes airier 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) or buy a 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.







# A trickle vent



#### 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. Ventilate to remove moisture

It is important to remove condensation and excess moisture by ventilate 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 UPVC windows. This allows warm (but moist) air to escape to the outside and let in cool (but dry) air.

 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 me after a shower, a bath or cooking, and keep the door closed.

- Open bedroom windows for up to one hour as soon as you arise and throw back the sheets or duvets to air the bed and bedding.
- Clear window sills of clutter that will restrict opening the window make sure blinds and nets are out of the way so that air can circulate freely.
- Leave space between the back of furniture and cold walls
- Ventilate cupboards and wardrobes, also try not to over fill them as this prevents air circulating.

4. 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 perming cool dry air to enter your home. Dry cool air is actually cheaper to heat than moist warm 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 or opening windows slightly, then the necessary ventilation can be achieved.

Remember... The advice is to ventilate for an appropriate period of me to remove moisture - not to leave the windows open all day.

### 5. 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.

You can achieve this by turning down valves on the radiators and reducing the temperature setting on the thermostat as shown below. This will also prevent pipes from freezing and bursting in the winter.

## Dealing with 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:

- 1. Moisture obtained from condensation
- 2. Food such as wallpaper or emulsion paint
- 3. Suitable temperature courtesy of the householder
- 4. Oxygen courtesy of Mother nature

Black mould can grow on walls, ceilings, furnishings and even on clothes and toys. To kill and remove the mould:

- A. Carefully remove excess mould with a damp cloth and throw away after. Or if possible use a vacuum cleaner and empty after. Do not brush mould as this releases spores into the air.
- B. Wipe down affected areas using a fungicidal wash or diluted bleach remember to always use rubber gloves and wear safety glasses.
- C. Tea Tree oil is a natural antiseptic and disinfectant but it is 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 on to 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 wall paper paste do not paint over using an ordinary paint.
- E. Dry clean mildewed clothes and shampoo carpets. By dealing with the causes of condensation you will automatically deal with the problem of mould.

  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 habits 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:

ACTIVITY	PINTS OF WATER ADDED
2 people at home for 16 hours	êëë
A bath or a shower	ëë
Drying clothes indoors	00000000
Cooking and using a kettle	000000
Washing dishes	êë
Bottled gas heater (3 hours use)	êëëë

