

Condensation and Mould

Condensation

There is always some moisture in the air, even if you cannot see it. If air gets cold, it cannot hold all the moisture produced by everyday activities and some of this moisture appears as tiny droplets of water, most noticeable on windows on a cold morning. This is condensation. It can also be seen on mirrors when you have a bath or shower, and on cold surfaces such as tiles or cold walls. Condensation occurs in cold weather, even when the weather is dry. It doesn't always leave a 'tidemark' round its edges on walls. If there is a 'tidemark', this dampness might have another cause, such as water leaking into your home from a plumbing fault, loose roof tiles or rising damp. Look for condensation in your home. It can appear on or near windows, in corners and, in or behind wardrobes and cupboards. Condensation forms on cold surfaces and places where there is little movement of air.

Condensation problems

Dampness caused by excessive condensation can lead to mould growth on walls and furniture, mildew on clothes and other fabrics and the rotting of wooden window frames. Also, damp humid conditions provide an environment in which house dust mites can easily multiply.

Reducing condensation

You will need to take proper steps to deal with condensation, but meanwhile there are some simple things you should do straight away.

Dry your windows and windowsills every morning, as well as surfaces in the kitchen or bathroom that have become wet. Wring out the cloth rather than drying it on a radiator.

Causes of condensation:

There are four main factors that cause condensation:

- Too much moisture produced in the home
- Lack of ventilation
- Cold surfaces
- Insufficient temperature control

All of these factors need to be considered to tackle a condensation problem

Our everyday activities add extra moisture to the air inside our homes. Even our breathing adds some moisture (remember breathing on cold windows and mirrors to fog them up?). One person asleep adds half a pint of water to the air overnight and at twice that rate when active during the day. To give you some idea as to how much extra water this could be in a day, here are a few illustrations:-

2 people at home can produce = 3 pints
A bath or shower = 2 pints
Drying clothes indoors = 9 pints

Washing dishes = 2 pints
Bottled gas heater (8 hours use) = 4 pints
Cooking and use of a kettle = 6 pints

Total moisture added in one day = 26 pints or 14.8 litres

Help reduce condensation by:

- Hanging your washing outside to dry if at all possible, or hang it in the bathroom with the door closed and a window slightly open or extractor fan on. Don't be tempted to put it on radiators or in front of a radiant heater.
- Always cook with pan lids on, and turn the heat down once the water has boiled. Only use the minimum amount of water for cooking vegetables.
- When filling your bath, run the cold water first then add the hot - it will reduce the steam by 90% which leads to condensation.
- If you use a tumble drier, make sure it is vented to the outside or that it is of the new condensing type.
- Don't use your gas cooker to heat your kitchen as it produces moisture when burning gas. (You might notice your windows misting over).
- Try to avoid use of bottled gas heaters; they produce about 8 pints of moisture from an average-sized gas cylinder. (Tenancy Agreements may not allow the use of this type of heater).
- using a dehumidifier can reduce moisture levels

Increase levels of ventilation by:

- Open windows when ever possible and ensure any vents are open to allow air to circulate around your home.
- Ventilate your kitchen when cooking, washing up or washing by hand. A window slightly open is as good as one open. If you have one, use your cooker extractor hood or extractor fan.
- Ventilate your kitchen and bathroom for about 20 minutes after use by opening a small top window. Use an extractor fan if possible - they are cheap to run and very effective.
- Ventilate your bedroom by leaving a window slightly open at night, or use trickle ventilators if fitted. (But remember your security).
- Keep kitchen and bathroom doors closed to prevent moisture escaping into the rest of the house.
- To reduce the risk of mildew on clothes and other stored items, allow air to circulate round them. Keep a small gap between large pieces of furniture and the walls, and where possible place wardrobes and furniture against internal walls. Pull shelves away from the backs of wardrobes and cupboards. Never overfill wardrobes and cupboards, as it restricts air circulation.

Cold surfaces:

Condensation forms more easily on cold surfaces in the home, for example walls and ceilings. In many cases, those surfaces can be made warmer by improving the insulation and draught proofing.

Insulation and draught proofing will also help keep the whole house warmer and will cut your fuel bills. When the whole house is warmer, condensation becomes less likely. Loft and cavity wall insulation are the most effective forms of insulation.

Note: Grants may be available to help with heating and insulating your home and referrals can be made by the Housing & Public Health Unit.



Temperature control:

Warm air holds more moisture than cooler air which is more likely to deposit droplets of condensation round your home. Air is like a sponge; the warmer it is, the more moisture it will hold. Heating one room to a high level and leaving other rooms cold makes condensation worse in the unheated rooms. That means that it is better to have a medium-to-low level of heat throughout the house.

Key points to remember to help reduce condensation:

- Reduce the amount of moisture you produce
- Improve ventilation in your house
- Reduce the number of cold surfaces by adding insulation
- Maintain an adequate temperature in the house

Further help and advice

If you require any further help or advice in relation to damp issues please contact the Housing & Public Health team on 01204 336500 or e mail: housingandpublichealth@bolton.gov.uk.