Health & Air Quality at Home

3 – Condensation & Mould

What is condensation?

Condensation and the mould that appears with it are usually the home occupier's responsibility to address. This leaflet has some handy tips on how to deal with them.

Condensation occurs when warm, moist air hits a cooler surface. Warm air can hold a lot of moisture from cooking, bathing, sleeping and drying washing indoors and must be ventilated via an open window, vent or extractor fan. If not, it will condense onto any surface that is cooler than the air temperature, in a similar way to the condensation you can see on an iced drink on a hot day or that might occur on the inside of your windows in winter.

Warm air cools as it moves over a colder surface. As it cools, tiny droplets of water condense out of the moist air. This is often unnoticeable, but sometimes it leaves surfaces damp to the touch or actually looking wet. If a surface gets damp or wet regularly then mould will eventually form.

Condensation is more common in cold weather. It can be seen on cold surfaces, like the inside of windows, on metal frames and in poorly ventilated kitchens and bathrooms. It can also form in any room where there is poor air movement.

Condensation is not the only cause of damp. Dampness can also be caused by:

- Leaks – from water pipes or overflows, where water soaks the building structure
- A poorly maintained building – where rain seeps from outside

- Rising damp – due to a failed or absent damp course. This type of damp only occurs on the ground floor or in basement rooms of buildings

How to avoid condensation

Heat your home

If you have central heating, leave the heating on at a low setting (16^{o} C). It takes less fuel, and is cheaper, to leave the heating on at 16^{o} C all the time rather than let the building go cold and then have to heat it up again. You can set the heating timer to turn the heating on in the morning and again in the evening for a total of around 7 hours a day. The thermostat will turn the heating on and off when required and stop it getting so cold condensation forms. Storage heaters and other manually operated heaters should be left on a moderate or low setting for similar lengths of time.

Avoid having cold areas in your home. Make sure all your property is moderately heated. If you leave some rooms closed up with their radiators off they will get colder than the rest of the home and get still air and be more likely to develop condensation and mould in colder weather.

Reduce moisture in the air

To limit the production of steam and water vapour:

- Put lids on pots and pans when cooking
- Don't leave kettles boiling on the hob
- Dry washing outdoors or on a drying frame in a room with the window ajar or a ventilator fan on. Avoid drying large amounts of washing on radiators as it releases a lot of water vapour and reduces the radiator's ability to heat the room
- Modern tumble dryers may have a built in condenser, if not, they must be vented to the outside. Check how your model should be vented. If you are a tenant, do not install a vent directly through the structure of the building without permission from your landlord
- Wipe condensation off the inside of windows to stop it puddling on windowsills

- Run cold water into the bath before adding hot, this reduces the amount of steam
- If you have a combination boiler, set the warm water to the eco-setting
- Don't use paraffin and portable bottled gas heaters indoors. The water content is higher than for natural gas and so releases lots of water vapour. They can also be a fire hazard and dangerous to children and pets

Ventilate

- Keep windows ajar or trickle ventilators open
- Use extractor fans in kitchens and bathrooms if you have them
- Ventilate kitchens and bathrooms after use, if you don't have a fan leave doors shut and the window ajar for 15 to 20 mins after use
- Never block air vents and airbricks. They are put in to allow air to circulate around the building to prevent damp, condensation and mould. On breezy days ventilate your whole living space well to minimise cold spots and move any still air
- Place furniture carefully. Where possible, put wardrobes and heavy furniture against internal walls. If they must go against an outside wall leave at least a 3cm gap behind them so air can circulate. Avoid putting heavy furniture or thick curtains in front of radiators
- Don't draught proof rooms with a gas appliance or if there are already signs of condensation or mould

If you already have mould – Take action

- Adequately heating and ventilating your home is the only effective way to prevent condensation and mould
- Remove any mould growth by spraying and wiping down affected areas with a fungicidal spray available from most supermarkets and ironmongers

- After treatment, if you need to redecorate use fungicidal paints and finishes. These will not stay effective if overlaid with ordinary finishes

- Throw away, dry clean or wash mildewed fabric on the hottest wash it can take. Wet-clean affected carpets and ventilate the space until they are fully dry

- Don't dry brush or vacuum mould. The action involved throws mould spores into the air, increasing their spread in the home. Breathing in mould spores can cause an asthma attack or breathlessness