

# TOP TIPS TO PREVENT CONDENSATION WITHIN YOUR HOME



## INTRODUCTION

Have you ever noticed the droplets of water that form on the outside of a canned drink when you take it out of the fridge? This is condensation and the reason why it happens is all to do with temperature, air and water vapour.

The temperature on the surface of the can is reduced as air passes over it. As the air gets cooler its relative humidity rises and the water vapour turns into moisture. The air passing over the can is unable to hold onto the moisture which ends up as droplets running down the side of the can's cold surface.

This is what happens in thousands of households across the nation when the temperature drops inside the home, especially at night time when the heating is turned off. Just like the canned drink, the air reaches the point where it can no longer hold onto to all the moisture we create in our homes and it migrates to the coldest surfaces - the windows and walls - where it appears as condensation or the more familiar sight of 'streaming' windows.



## How to spot condensation?

- Streaming windows and walls
- Damp areas on walls
- Peeling wallpaper
- Mould growing on window frames, walls and ceilings
- Soft furnishings and fabrics become prone to mould and mildew
- A musty damp smell in the home

Condensation is arguably the most common form of 'dampness' and can eventually lead to the growth of mould. This forms on internal surfaces when the temperature drops sufficiently below the temperature of moist air inside the property. You should watch out for it because if left to develop, condensation can lead to an unsightly, musty property. More importantly, it can also aggravate or trigger health problems such as asthma and wider complaints.

Waking up to condensation on windows is a familiar sight for many people, especially in winter and this is usually the first sign of a condensation problem. If condensation occurs over a prolonged period of time, other signs will start to appear such as damp patches on walls, peeling wallpaper and ultimately black mould growth. These effects can lead to musty smells, damage the fabric of our homes and can even affect our health.

## The causes of condensation within our homes



Let's take a closer look at what causes condensation in our homes.

### Bathrooms

The act of keeping clean is a major source of condensation. When somebody has a bath or a shower there will be moisture in the air that needs to be removed. Opening a window or using an extractor fan will remove the moisture from the room. Don't forget to keep the bathroom door shut to prevent moisture escaping to other parts of the house.



## Kitchens

Cooking & boiling kettles is another major source of moisture. If possible keep the kitchen door closed and always use an extractor hood or fan to remove excess moisture from pots and pans when cooking. Always keep the extraction running for a while when you have finished as there will be moisture in the room for some time afterwards. If need be, open a window as well to remove moisture from the room.



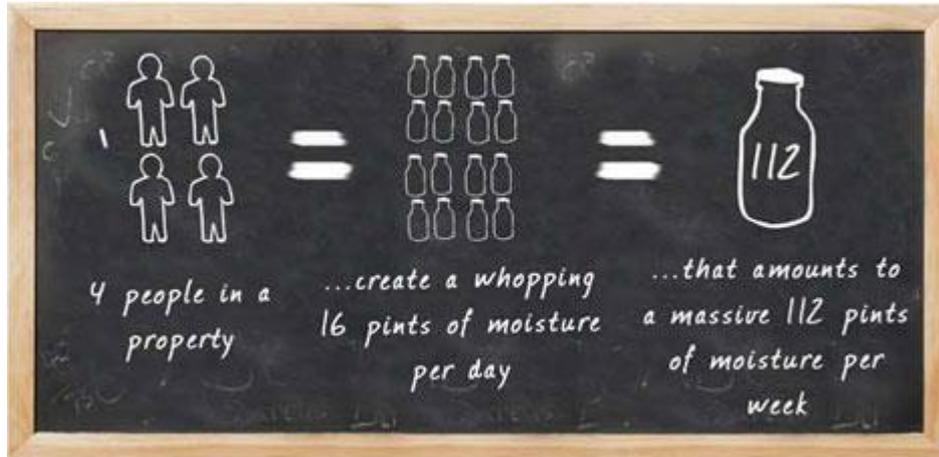
When cooking, try to keep the lids on pots and pans to prevent moisture escaping in to the room.



## Occupiers

One adult will generate approximately four pints of water a day, equal to over 100 pints of water vapour a week, which has to end up somewhere.

Before the days of double glazing, wall and loft insulation, this humid, stale air would find its escape route through ill-fitting windows and doors, lofts, chimneys and so on. It would be replaced by fresher, colder air; or to you and me - a draught!



## Heating

The temperature in the house plays a key part in keeping condensation away. The dwelling should be kept at a constant temperature during the cooler months to prevent the formation of condensation through cold air meeting warm air. While the temperature remains constant, this limits the chance of condensation forming.



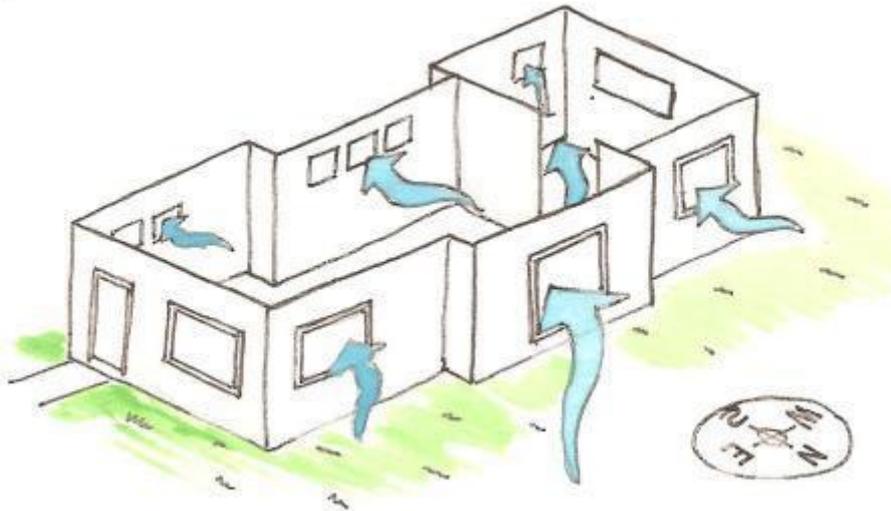
## Furniture

Any furniture placed against outside walls should have a slight gap between it and the wall – this allows a current of air to circulate freely and not become trapped. If air becomes trapped it will condense on the walls and may form black condensation mould.



## Ventilation

A constant movement of air within the property is vital to prevent condensation – make sure air bricks and chimneys are clear to allow air to flow in and out of the property. Open the windows for short periods of ventilation.



## General

Avoid drying clothes indoors whenever possible; if unavoidable, try drying them on a drying rack in the bathroom with the door closed and the window slightly open. Whenever possible, dry clothes outside, or if using a tumble dryer make sure this is properly vented to the outside of the property.



## Three important factors that cause condensation:

- The level of moisture in the air
- The temperature of the air in your home
- The surface temperature of the windows and walls

The more moisture there is in the air, the more likely to cause condensation.

Today, with the introduction of energy saving measures such as draught proofing, double glazing and cavity wall insulation, there is no natural escape route for stale, humid air, which may become trapped inside the home. This can make the problem worse, condensation forming on windows and walls and poor indoor air quality.



With careful planning, it is possible to prevent condensation building up in the home. These measures will help to ensure that your home remains damp and mould free and save you the time and trouble of having to continuously remove condensation.

## Summary of tips to reduce condensation:

- Keep the bathroom door closed and ventilate the room well
- Do not overfill kettles and use lids on saucepans
- Close kitchen doors and ventilate whilst cooking and washing up
- Try to ensure there is a gap between the outer walls and items of furniture
- Try to keep the inside temperature reasonably constant
- Avoid drying clothes indoors and do not dry them over radiators
- Ensure tumble driers are properly vented or the condensate is regularly emptied
- Do not disable extractor fans, block up vents or air bricks.
- Ventilate the home on a daily basis

Many people choose only to open a window to remove condensation, but reducing the amount of moisture we create, coupled with ventilating the home and correct heating methods can greatly reduce the amount of condensation produced.

## Will a dehumidifier prevent condensation?

Electric dehumidifiers have been seen as a solution to moisture problems but the drawback is that they are only effective in the room where they are placed, must be emptied on a daily basis and they can consume anywhere between 50 to 800 watts of power. Average use has been calculated at between £1.20 and £1.75 per 24hrs.

To prevent condensation in the home, you need be aware of the factors that cause it and adopt the recommendations in this pamphlet. Good ventilation of kitchens when washing or drying clothes or cooking is essential along with a source of ventilation in the bathroom to remove moisture caused by taking a shower or bath.

While condensation in the home can also vary with the weather conditions, the recommendations set out in this leaflet will do much to bring it to a manageable level.

## Areas to control condensation in the home:

- Kitchen
- Bathroom
- En-suite
- WC
- Utility room

If you are facing a severe problem, especially in the rooms listed above and the surrounding areas, it may be that the existing extractor fans or other forms of extraction are not robust enough to handle the volume of moisture and may need to be reviewed.

The good news is that thousands of households across the nation have already successfully taken steps to control condensation within the home.

These days, condensation related dampness is no longer associated with poor housing but has become a growing problem in homes which have been refurbished with energy saving materials such as double glazing and cavity wall insulation. Becoming energy efficient means we need to ensure that we ventilate correctly so that the property can 'breathe'.

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

You may be concerned that opening windows or ventilating your home may cause a loss of heat, but what you are actually doing is allowing warm moisture-laden air to escape and cool dry air to enter your home. Cool dry air is cheaper to heat than warm moist air.

Many people with newly installed double-glazing, face problems with condensation and mould growth they never found with their draughty old window frames. This is because the natural draughts around the poorly fitted windows have been sealed. Using trickle vents or opening windows slightly can help to ventilate your home properly.

Remember to ventilate your home for an appropriate period of time, rather than leaving the windows open all day.