Wirral Rent

Condensation Fact Sheet



waking up to streaming 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.

How does condensation form?

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 that 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.

The causes of condensation problems within our homes

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

Through the daily routine of showers, baths, boiling kettles, cooking etc, a family of 4 will contribute approximately 4 pints of water per person 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 and so on. It would be replaced by fresher, colder air or to you and me - a

draught!Today, after the introduction of energy saving measures such as draught proofing, double glazing and cavity wall insulation there is no natural escape route for this stale, humid air, which is now trapped inside the home. As a result, this trapped and stale air only makes the problem worse, causing condensation on windows, walls and poor indoor air quality.

Is it Condensation?

Condensation is not the only form of dampness. There is also penetrating and rising damp. The main causes of penetrating dampness are a defective roof, weathered brickwork, defective rainwater gutters or burst water pipes. Rising damp is caused by a defective or missing damp course to a wall. Both rising and penetrating damp often leave a distinctive "tidemark". These forms of dampness are remedied by undertaking repairs to the house.

Dampness from condensation when it forms on walls and/or ceilings is associated with a distinctive black mould growth. The mould is normally found in the corners of a room, behind furniture and any other place where there is a poor circulation of air. When in a wardrobe there is a "musty" smell and a lighter greyish mould can form in extreme cases on the clothes (mildew).

The warm humid conditions, which cause condensation also, provide the right environment for dust mites to multiply. The presence of these dust mites and the spores from the condensation mould can aggravate the symptoms of people suffering from chronic respiratory ailments. E.g. bronchitis and asthma.

How to prevent the problems of condensation

There are 3 steps you can take to prevent condensation in your home.

- 1. Reduce the moisture produced.
- 2. Ventilate to remove moisture.
- 3. Insulate and heat your home.

1. Reducing the moisture

It has been estimated that the normal household activities i.e. cooking, washing, drying clothes indoors and bathing, by 2 people can produce 22 pints (15 ltrs) of water which evaporates into the air.

To reduce this level

 \Box Close the kitchen door when cooking.

□ Cover pans and do not leave a kettle boiling.

 \Box Dry washing outside or if drying indoors put it on a line in the bathroom with the door closed.

- \Box Vent any tumble dryer to the outside.
- \Box Close the bathroom door when bathing/showering.
- \Box Avoid drying clothes on radiators

2. Ventilation

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Ventilation removes the warm moist air that causes the condensation. It is possible to ventilate without causing draughts by slightly opening a window. Opening windows fully

in cold weather can actually increase the condensation.

Other measures that you can take include

 \Box When using the kitchen or bathroom close the door and open the window wider or use the extractor fan (if fitted). Leave the window open for 20 minutes after using these rooms.

□ Wardrobes and cupboards should be ventilated to reduce the risk of mildew. To do this cut 'breather' holes in doors and the back. Cut a ventilation slot at the back of each shelf. Don't put too many things in them as this stops the circulation of air.

 $\hfill\square$ Leave a space between a wardrobe and any other piece of furniture and the wall.

 \Box Where possible always position wardrobes and cupboards on internal walls.

 \Box Always leave the bedroom window slightly open at night. However, when doing this you should always have regard to your security.

 \Box Cross ventilate your home at least once a day for 30 minutes by slightly opening a window on the ground floor and a bedroom window on the opposite side of the house, leaving all the internal doors open.

3. De Humidifeier

A de humidifier is good solution to remove moist air by A dehumidifier will help your condensation repair process by reducing the levels of humidity in the air in your home. This means that less moisture will gather on your walls and ceilings, windows, and walls - therefore eliminating the condensation problem and risk of damp through condensation.

4. Insulation and Heating

When your home is warm, condensation is less likely. Insulation and draught proofing will help to keep your home warm. It will also help to keep your fuel bills down. This can be done by

□ Making sure that the loft is adequately insulated(.we can get this done for you)

 \Box Double-glazing reduces heat loss.

 $\hfill\square$ During the winter always keep the heating on a low-level even when you are not at home.

You must not

□ Block ventilators or airbricks installed for heating appliances.

□ Draughtproof rooms where condensation is a problem

 \Box Draughtproof a room with a gas cooker or a fire other than an electric fire.

□ Draughtproof bathroom or kitchen windows.

First Steps Against the Mould

Wipe down the affected areas with a fungicidal wash

. It is obtainable from most DIY stores and supermarkets.

Mildew must be removed by dry cleaning clothes and shampooing carpets. **Never** attempt to remove by brushing or vacuuming, as this will disturb the spores, which can lead to respiratory problems.

The only lasting way to avoid the mould is to eliminate the condensation In all cases we are more than happy to help with looking for more permanent solutions to problems with condensation and also to confirm it not penetrating damp