

## kitchens & bathrooms

Prevent water vapour finding its way into the other rooms of your house by closing the adjoining doors and leaving a window open after cooking or showering to allow a change of air. Extractor fans and cooker hoods work well for this purpose.

If you find dark mould spots forming, treat the affected areas immediately with a solution of household bleach or Milton fluid. This will kill the mould spores and prevent them from spreading to other areas. All new houses with improved insulation and replacement windows are likely to trap moisture build-up. This can be identified and dealt with, as long as all the rooms are heated throughout the house, and the air is changed on regular basis.

## conclusion

Condensation is the result of a build up of moisture caused by normal lifestyle and the continual improvement and modernisation of our homes.

Replacement windows cannot produce condensation. Double-glazing will act as insulator if there is sufficient heat within the house in the beginning. Therefore it is wise to attempt to control the amount of water vapour displaced within the household and to provide controlled ventilation to dispel the moisture before a problem arises.

**remember it is far easier  
to treat the cause  
than the effect!**

## PVC-U WINDOWS, DOORS & CONSERVATORIES



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**condensation**  
the  
**answers**

## what is condensation?

Condensation is a relatively new phenomenon resulting mainly from changes in lifestyle and our desire to keep heating costs as low as possible.

Condensation is related to the way we heat, ventilate and insulate our homes. In days gone by, most homes had one or two chimneys; allowing up to four air changes per hour. Doors and windows were generally less well fitting than they are today. This natural ventilation was the very process which prevented condensation.

To cope with increased fuel costs came the trend to insulate. This resulted in loft insulation, cavity wall insulation and double glazing.

However, it is also a fact that energy-efficient homes are more likely to suffer from condensation - because anything that keeps warm air in will also keep fresh air out, creating the ideal conditions for condensation to form.

Before we tackle the problem, we have to understand exactly what condensation is, then find the best way to deal with it.

Condensation is merely the air's natural moisture content settling on cool surfaces. The amount of moisture in the air is called relative humidity. If the humidity level rises above 70%, mould and mildew will be encouraged to grow.

Astonishingly, the average family creates up to 20 pints of moisture every day, simply by washing, cooking and breathing. This moisture must go somewhere and be dealt with to avoid condensation.

## what is condensation?

Condensation is water vapour suspended in air.

## where does most water vapour come from?

The most common sources of water vapour are cooking, drying clothes on radiators, washing up, in house plants, moisture in newly built properties and extensions and from the breath we exhale.

## where can condensation occur?

Due to the thermal currents within a house, condensation can occur in a number of places, usually at cold spots i.e. An unheated room or a conservatory without any form of adequate heating.

Condensation forming on the room side surface of a sealed unit indicates a high water vapour content present and that the temperature of the room side glass surface is inadequate.

Condensation within the airspace of the sealed unit indicates the unit has broken down.

## double glazing cannot cause condensation

***I did not have condensation before my new windows were installed. There must be something wrong with them.***

This is a common assumption but, unfortunately, it is also incorrect. Windows cannot and will not produce any water. This 'water' is produced by our normal living activities. Therefore we, the householder have created the problem.

## how do I know if I have condensation?

Condensation will take many forms, the most common being steamed up windows and puddles of water on the window sills. In extreme cases, dark spots of mould will appear around the windows, wall coverings and mastic seals throughout the house.

If you have a non-condensing tumble dryer, make sure it is properly vented to the outside of your home. Remember, tumble dryers can create 16 pints of water vapour during one cycle.

## how can double glazing help?

Sealed unit replacement windows act as an insulator which will reduce heat loss which under normal circumstances, would be conducted from the inside of the room to the outside. Please remember that sealed units act as an insulator and are not a source of heat, therefore all rooms should be adequately heated - especially conservatories. The likelihood of condensation forming on a warm surface is therefore reduced.

## how do I reduce condensation?

Condensation can be controlled by providing natural ventilation to change air on a regular basis and by maintaining an even temperature. This is achieved through ventilating units which are controlled by humidistats, an airbrick, or by opening a window. Please remember that the airbrick must be open to achieve good results. An effective way of controlling condensation would be to install a dehumidifier. This cost could be avoided if the problem is one of ventilation, by installing an airbrick thereby creating ventilation or controlling those causes of moisture, that result in a build up of moisture in the air.

## breathing

Two sleeping adults exude two pints of moisture in 8 hours, which is absorbed as water vapour into the atmosphere.

## new property

The bricks, timber, concrete and other materials in an average 3 bedroom house absorb 1500 gallons of water. The same principle will apply to a conservatory base and the construction materials used. As with any new building work, please allow a period of drying out to ensure problems are not encountered in the future.