

Condensation Control in New Homes

Important information
for owners and
occupiers

glideVALE

CONDENSATION CONTROL IN NEW HOMES

A newly-built home contains more moisture than one which has been lived in for a time. This means that in a new home there is more risk of condensation, especially from late autumn to early spring when the weather is colder.

This is usually a very minor effect, but you should be aware of the possibility.

This leaflet explains what you can do to avoid any ill effects from condensation.

The background

The average new home contains some 1500 gallons (5700 litres) of water when first built (from plaster, brickwork, concrete etc). This can take a long time to dry out and reach normal moisture levels.

Because of this, condensation may form in a new home, which can be disconcerting to you as the owner or occupier. Left unattended, this condensation can lead to mould growth, and damage to decor and to the building fabric.

During the drying out period, your new home may need extra heating and ventilation, and condensation mopping up, especially during the first winter.





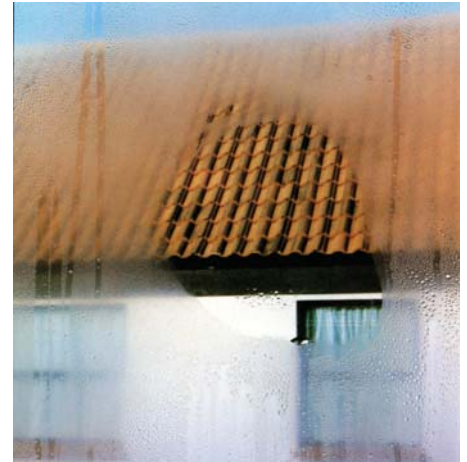
What causes condensation?

Air can hold water vapour as an invisible gas. The warmer the air the more water vapour it can hold. At a certain temperature (the dewpoint), air is completely saturated and can hold no more water vapour.

Condensation occurs when the air meets cold surfaces such as walls, ceilings and windows which have fallen below the dewpoint temperature.

What can be done about it?

If condensation occurs in your new home, the precautions described in this leaflet will help you to avoid problems.



CONDENSATION WITHIN ROOMS

Heating and ventilation

- Keep all rooms warm and well ventilated.
- Keep the heating on at a low level for long periods, especially in cold weather. Constant heat on a low setting is better than bursts of heat at high settings, which can cause more condensation as the air and surfaces cool down.
- Keep window ventilators (tricklevents) or other room ventilators fully open.
- Never block ventilators in rooms with combustion appliances installed.

Note: some homes may have PSV (passive stack ventilation); this does not use fans and adjusts automatically according to need.

Cooking

- Keep the kitchen door closed and the cooker hood or kitchen extractor operating when cooking. If windows show signs of misting, open them slightly. Leave the extractor running after cooking until misting has cleared.



Washing and bathing

- Keep the bathroom or en-suite door closed and extractor operating when bathing or showering. If windows show signs of misting, open them slightly. Leave the extractor running after using the bathroom/en-suite until misting has cleared.

Drying clothes

- Where possible, do not dry clothes indoors. If this is unavoidable, only use a room with an extractor fan or system.
- Never dry clothes in unventilated rooms, especially those kept at low temperatures.
- Tumble driers must be vented to the outside or be of the condensing type.

Curtains and blinds

- Curtains or blinds further reduce the surface temperature of windows and increase the risk of condensation on the glass. Keep window vents (tricklevents) open to reduce this problem.

Furniture

- Do not place wardrobes, fitted cupboards or other large items of furniture directly against external walls, as the resulting pockets of trapped air can lead to serious surface condensation and mould growth on the wall, the furniture and its contents.
- Leave a gap for air to circulate behind such furniture to avoid this problem.



CONDENSATION IN THE LOFT SPACE

The loft space

Most new houses have an unheated loft space with an insulated ceiling below it. The loft space will therefore always be colder in winter periods than the rooms below.

Any warm moist air from inside the house that may enter the loft space could condense on surfaces, where it might not be noticed until it has become serious.

There will also be an underlay below the roof tiles or slates, on which condensation can sometimes form.

To minimise condensation risks, the house will have been built so that:

- The ceiling is "well-sealed" to prevent air leakage from the house into the loft space.
- The loft space itself is ventilated to flush out any water vapour that might find its way in.

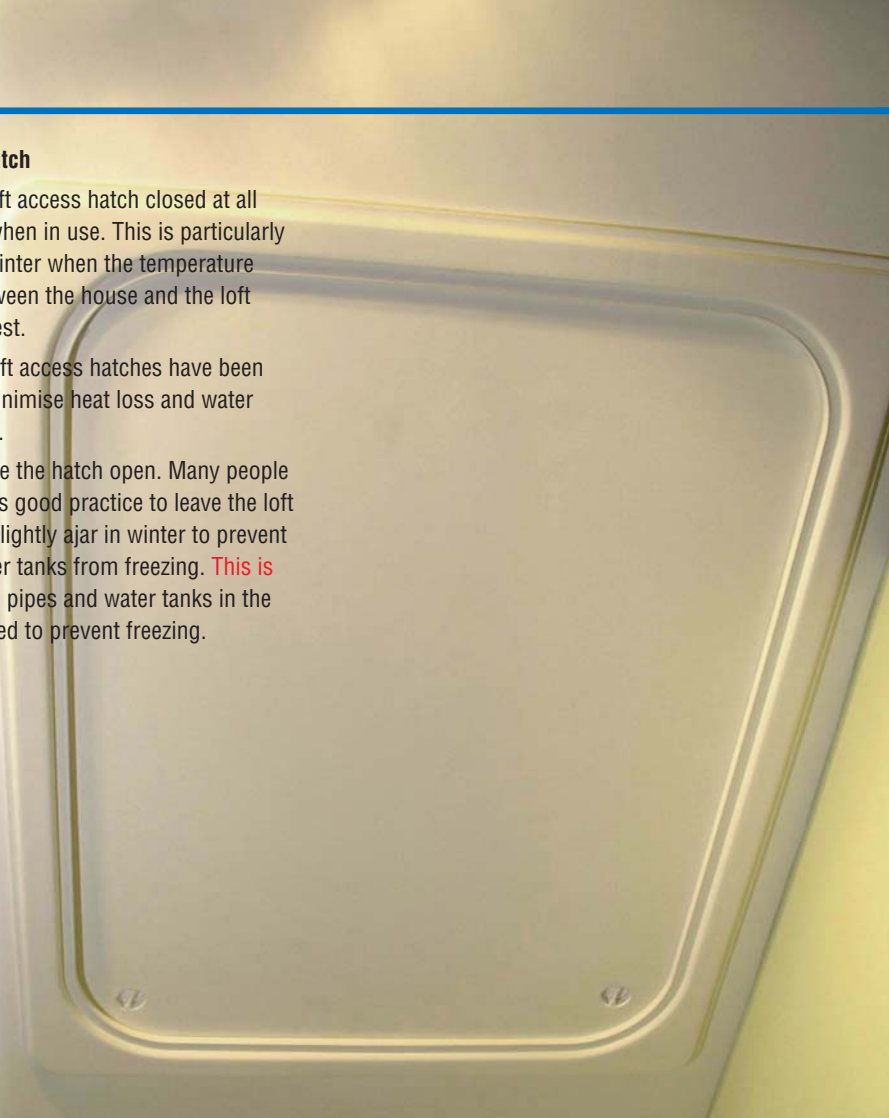
In the unlikely event of condensation occurring on the roof underlay or roof timbers, observe the following precautions to avoid problems.

Loft access hatch

- Keep the loft access hatch closed at all times except when in use. This is particularly important in winter when the temperature difference between the house and the loft space is greatest.

All Glidevale loft access hatches have been designed to minimise heat loss and water vapour escape.

- Do not leave the hatch open. Many people believe that it is good practice to leave the loft access hatch slightly ajar in winter to prevent pipes and water tanks from freezing. **This is not correct.** All pipes and water tanks in the loft are insulated to prevent freezing.



Ceiling cracks

- Cracks or gaps may appear in the ceiling as the house dries out. Seal any that are found using a long life silicone sealant.

Alterations to ceilings

- If you make alterations which involve penetrating the ceiling, (eg with wires or pipes), these penetrations must be sealed with a long life silicone sealant.
- If you fit recessed ceiling lights such as downlighters, the lights themselves must be of the sealed type, or have a hood or box fitted over them to maintain the sealed ceiling.



Roof ventilation

The roof will have ventilation openings, usually at the eaves or through special tiles at low level, and sometimes at the ridge or high level. Ribbed plastic trays may have been installed at eaves to provide a clear air path over insulation.

- Ensure that roof ventilation is not obstructed by loft insulation, by goods stored in the loft, or by boarding to make a floor.

Roof underlay

- If drops of condensation are seen on the underlay or rafters, mop this off as soon as possible.

In winter there will be little real heat input from the sun, and it is not practical to provide heat to promote evaporation of the condensation.



Photograph shows how condensation can form on the underside of an underlay during the drying out period

Condensation forming on the underside of underlays will only become a problem if it is allowed to drip onto roof timbers and insulation. It is essential to mop it off before this occurs.

Some roof underlays (including Glidevale Protect A1, Wunderlay and VP400) have a fleeced underside designed to absorb some condensation and re-evaporate it when conditions are more favourable.



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