



Condensation and Mould – important information from Housing ACT

Condensation and Mould

Canberra winters are cold and severe, resulting in problems of condensation and mould growth in houses and flats. Condensation and mould can occur in any type of construction including weatherboard, brick veneer, solid brick, and masonry veneer and monocrete dwellings.

Condensation

Atmosphere heavily laden with water vapour is referred to as being of a high humidity. When highly humidified air comes in contact with any cold surface such as a wall or ceiling, it cools down, water vapour is extracted from the air and remains in the form of condensation on the cold surface.

This process can easily be seen if a bottle of cold milk or any other liquid is taken from the refrigerator, wiped dry and left to stand anywhere in the house where there is condensation. In 15 minutes or so, drops of condensation will form on the bottle.

High humidity has a cumulative effect in absorbent materials, such as clothing hanging in cupboards or bedclothes, making them damp. If these items are not dried, mould will develop.

Condensation will cause rust on cold metal surfaces such as a spring wire mattress.

How to prevent condensation

Condensation would not occur if humid, moist air could be removed and replaced by drier air. Scientific investigation and practical experiments have shown that this can be achieved, usually very simply, by better ventilation of dwellings.

Some ways of improving ventilation are:

- Open windows and doors wherever possible



- At night, the outside air may be very cold and induce the householder to close all windows and doors. If this occurs the house should be well ventilated during the day by opening doors and windows.

If all members of the household are out all day and the dwelling is closed up, windows and inside doors should be open at night, particularly if space heaters are operating. Room ventilators should be kept clear. Normal house fluff can block or partly block wall or ceiling ventilators and thus impede proper ventilation.

Problems are caused by warm, moist air created by such things as kerosene room heaters, steam from cooking, washing dishes or clothes, steam from bathrooms, drying damp clothes inside the home.

Mould

Mould is a form of fungus growth and its spread is primarily by air spores that develop and grow on almost any surface provided the following conditions are present:

- A relevant indoor humidity of 80% or higher
- Moisture, usually from condensation. Mould can grow without actual condensation on the walls, but the condensation promotes it
- A nutrient for the mould to feed on. Research has shown that certain ingredients in most types of paint and house fluff impregnated with cooking fumes provide excellent foods for mould.

Two types of mould are common in Canberra. Sooty mould leaves surfaces with a brown or black stain and is usually found on the walls and ceilings of bedrooms and in cupboards. If left untreated it will spread to other rooms of the house. The other common type is a green, furry mould, which grows on shoes and clothes.

How to prevent mould

Mould cannot grow if dry air is circulating. It follows that proper ventilation prevents mould.

To prevent green, furry mould every care should be taken to ensure that footwear and clothes are not put away in wardrobes or in dark confined spaces in a damp condition.

How to eradicate mould

The Commonwealth Scientific and Industrial Research Organisation have recommended the following treatment for mould infestation:



- Walls and ceilings heavily infested with mould should be washed with water to remove as much of the mould as possible
- All affected surfaces should then be washed with a solution of one part of a household bleach containing sodium hypochlorite to three parts of clean water
- Change cloths frequently because dirty cloths spread the infestation rather than remove it
- It may be necessary to repeat the bleach treatment to arrest any recurring infestation.
- Condensation should be dried from walls and windows whenever it appears
- Mould spores are airborne and it is advisable to wash curtains as well as furniture. Where possible, dry the curtains in sunlight.

This treatment has already been proved to be successful in Canberra homes.

If the mould proves persistent it may be that there is some other cause – for example, dampness caused through broken drainage pipes flooding under-floor areas. Dampness from such causes would not occur frequently.

Tenants should seek advice from Housing ACT if it is found that mould persists despite the recommended treatment.

Further Information

For more information, contact your Housing Manager or telephone the Community Services Directorate on 133427.

For more assistance on Housing ACT matters, please telephone 133 427.

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