

Mildew and condensation - the winter problem

Winter is usually the time when mildew and condensation can become a problem. Apart from the obvious effects of causing dampness and rot in houses, the warm, moist air is conducive to the spread of diseases and often hinders recovery. Dampness in a dwelling or other building is defined as a nuisance pursuant to health legislation and it is illegal to allow conditions that promote dampness to continue unabated. The Marlborough District Council enforces this legislation and can request occupants or owners to remedy the problem. This pamphlet is to assist in understanding how it is caused and how it can be prevented.

What causes mildew?

Mildew is a primitive form of plant growth. It grows from spores that abound everywhere and will grow in any home or premises where the humidity remains high. Mildew can occur in any type of construction and is common in both mild and severe climates. It's often found on shoes and clothing in wardrobes, on wallpaper, curtains and ceilings.

What causes condensation?

All air contains water vapour, but it can only hold a limited amount without becoming saturated. The higher the temperature, the more it can hold. If there is too much moisture in the air for the temperature, some will condense on the cold surfaces of the house - windows and uninsulated walls.



Condensation is widespread but seems to be worse in colder climates. It occurs on windows, especially metal framed ones, on walls and ceiling linings. It can leave water stains, help rot to set in and cause mildew growth.

How to deal with a mildew attack

If mildew grows on wallpaper or ceilings, clean it down with a damp cloth and household bleach solution (one part bleach and five parts water), being sure to wear rubber gloves and eye protection. Just washing the mildew with soap and water will only spread the fungus. Try a small area to make sure that the bleach does not take the colour out of the wallpaper. After drying, wipe off the solution with a clean damp cloth.

If the colour is affected, try a fungicide solution available from hardware shops.

If stains cannot be removed by either method, it may be necessary to repair the wall which will involve removing the wallpaper. Paint the wall beneath with a fungicide solution, then when properly dry, re-wallpaper using a synthetic paste (not flour) containing a fungicide.

Gloss painted surfaces can be wiped down with a household bleach solution while matt paints can be wiped with a fungicide solution to avoid removing the colour.



Water based paints can support mildew so after any treatment use an oil-based sealer first. Never paint directly over untreated mildew.

Slight mildew on curtains and clothing can usually be washed out, but if left may cause permanent staining.

When repairs are completed, make sure you avoid any recurrence of mildew by keeping your house moderately ventilated and warm, and avoid creating too much moisture.

How to prevent mildew

- Make sure there is some ventilation in all rooms at all times. This is important in bedrooms as we exhale a lot of moisture as we breathe.
- Keep the house warm, not too hot, but try to keep the indoor temperature at least 5°C warmer than the outside temperature at all times.
- A little heating kept on continuously does more good than a lot of heating during the evening only.
- Avoid pots or pans boiling longer or harder than necessary.
- Refrain from drying clothes indoors. Make sure that clothes-dryers are ventilated to the outside.
- Prevent steam from showers spreading through the house by keeping bathroom doors closed, windows slightly open, and installing extraction fans.
- Avoid the use of LPG, kerosene and unflued gas heaters without proper ventilation.
- Provide permanent ventilation to wardrobes by leaving the doors ajar to provide ventilation at the top and bottom of the door. Dehumidifiers or permanent ventilation systems may be effective.
- Insulate the ceilings, walls and floors of new dwellings (a legal building requirement) and where possible the ceiling and walls of existing homes. Any alterations or additions need to be fully insulated.
- Use windows as a guide. If they start collecting too much condensation, open them a little wider.



How and when to ventilate

Ventilate little and often. Many windows open slightly are better than one fully open. If windows start steaming up, then open them wider. There are now a number of ventilation systems on the market that provide continual ventilation of the house.

Short bursts of vigorous ventilation are of little value except when flushing out moist air. This should be done after a bath or shower. Remember to keep the bathroom door closed to prevent the spread of steam to other areas of the house.

Try to expel steam from cooking areas and showers directly to the outside. An extraction fan over the stove or shower will help get rid of odours and moisture. Any discharge must go right to the outside air and not just into the ceiling space.



Avoid long periods of steamy cooking without adequate ventilation and remember that LPG and unflued gas heaters give almost a litre of moisture for every litre of fuel used.

Keep the humidity down

There are two ways to keep the humidity down-ventilation and heating. Ventilation takes away the moisture released from cooking, showers, clothes dryers and breathing, while heating will raise the temperature and allow the air to hold more moisture.

Ventilation is the most fundamental need. Until there is enough ventilation, nothing else can help, although too much may increase the problem by preventing the house or premises from warming up. Both insulation and heating throughout the home will assist, but not prevent, mildew and condensation.

For further information or assistance contact your Environmental Health Officer, Marlborough District Council, PO Box 443, Blenheim 7240