

Mould and Condensation

Dampness and mould

A damp house is an ideal environment for mould and mildew to grow. Mould can have a significant impact on your health, especially for those who have a respiratory condition. Look out for mould on walls, carpets, ceilings, and in cupboards. Trust your nose – if the house smells musty it is possibly been under-heated and under-ventilated, or there could be an underlying problem with dampness.



1. Mould on window sill in bathroom



2. Mould on window in bedroom

There are lots of things you can do to minimise dampness and condensation in your house.

Four key actions:

- **Reduce the amount of moisture entering the home**
- **Provide ventilation, particularly in moisture-prone areas**
- **Increase heating to raise the temperature of the air and the cold surfaces**
- **Insulate the ceiling and the floor space to keep heat in**

Reduce dampness

- Open windows to allow humid air to ventilate out of the house. It is better to open a few windows a little throughout the whole house. This helps the air to move through the house. One window open wide in one room may not be as effective. Try to do this as often as possible. Ventilating every day is ideal, but aim for at least 3-4 times a week.
- Keep lids on your pots and pans when you cook – simmer rather than boil hard.
- Keep the doors to the bathroom and kitchen closed when you are bathing or cooking.
- Use thermal or lined curtains, keeping them open in the day and closed before dusk. This will capture the free heat from the sun and help to lift indoor temperatures.

- Wipe excess moisture from windows – if you don't the moisture will collect on the frame which may start to rot. It may also re-evaporate during the day, raising humidity levels and making condensation worse when the room cools down.
- Limit the number of pot plants in your house.
- Install temporary plastic window insulation kits on your windows for the cooler months of the year (you can order these online at <http://www.sustaintrust.org.nz/shop>).
- Keep furniture away from outside walls to allow air circulation. Cool areas behind furniture will be high humidity areas conducive to mould growth.
- Wherever possible, dry your clothes outside.
- If you use a clothes dryer, make sure that it is vented outside.
- If you must dry your clothes on a clothes rack inside, do this in a room with windows open and doors closed to the rest of the house.

Heating

- On cold days try to keep indoor temperatures at least 18°C during the day, and 15°C at night in bedrooms. Especially watch that the temperature in children's bedroom does not go below 12°C.

Do not use a portable gas heater with a gas bottle! They release harmful gases into the air, create high levels of humidity and are expensive to run.



- Cold temperatures are related to an increase in blood pressure, and asthma and respiratory illnesses. Using some heating on winter evenings and on really cold mornings. An oil column heater or a small fan heater used for an hour or two per day would add about \$30 to your monthly power bill.
- Where possible install efficient heating, suitable for each of the rooms being heated.
- Install a heater in your bathroom.
- Dehumidifiers extract moisture from the air and can help reduce humidity. However they do not tend to solve underlying problems of moisture getting into your house, excess moisture production in the home, and lack of ventilation and heating.



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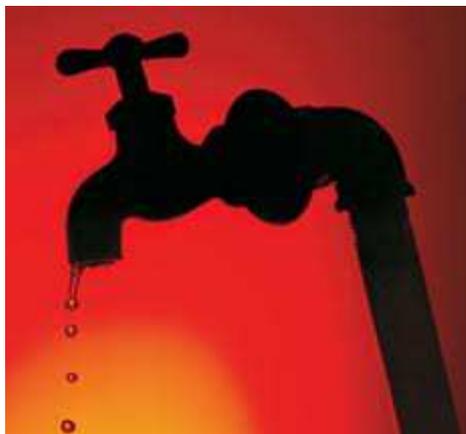
Maintain your house and garden – no or low cost options

- Clean areas of dust or mould with a weak solution of vinegar (60%) with warm water (40%). The acidity in the solution will kill the mould – do not use bleach! Bleach will discolour the mould but it will still be there. Spray or wipe the solution over the surface areas, leave for a minute and then wipe off. Rinse the cloth you are using regularly in water and use gloves. For especially bad areas, use a mask, safety glasses and gloves to avoid inhaling mould spores or getting in your eyes. Additionally, you can use a spray bottle to regularly spray vinegar on mouldy areas to stop germination.
- Also wash mouldy curtains with detergent and vinegar.
- Keep gutters and down pipes clear so that storm water drains away.*
- Trees or shrubs which shade your house will reduce the amount of free heat you receive from the sun! Cut vegetation back from windows and walls.*
- If your house is on suspended timber foundations, keep the air vents free of vegetation to make sure the air flows easily under the house.*

Maintain your house – handyman tasks

- Fit extractor fans in the bathroom and kitchen, or install a range hood over the stove top in the kitchen.
- Repair leaking plumbing.*
- Check for and repair all leaks in the roof and house cladding.*
- Make sure that your insulation is up to Building Code standard.*
- If the ground is damp underneath your house, install polythene underneath your house to prevent moist air circulating through the floor-boards.*
- Energy Efficiency Companies can help with installing insulation and polythene – call 0800 388 588 or visit the EECA website www.energywise.govt.nz to find out the companies operating in your area. For houses built prior to the year 2000 there are subsidies available

**If you live in rented accommodation, talk to your landlord or property manager if you think any of these maintenance tasks are required.*



How much dampness do the following actions create?

| Cause of humidity/moisture | Litres of water vapour |
|-----------------------------------|--|
| Cooking | Up to 3 litres per day |
| Clothes washing | 0.5 litres per wash |
| Showers and baths | 1.5 litres per person |
| Washing dishes | Up to 1 litres per day |
| Un-vented clothes drying | 5.0 litres per load |
| Unflued gas heater | 0.5-1.0 litre per hour of use |
| Damp ground under floorboards | Up to 25 litres per day |
| Breathing, active adult | 0.2 litres an hour per person |
| Breathing, adult asleep | 0.02 litres an hour per person |
| Pot plants | pot plants or frequent watering of pot plants will increase humidity |

Source: Consumer Magazine

If you would like to discuss any specific issues relating to your home please feel free to call an energy advisor at the eco advise centre on 0508 787824, or email advice@sustaintrust.org.nz



Home Advice

For free personal advice, contact
Home Advice Wellington

0508 SUSTAIN (78 78 24)
advice@sustaintrust.org.nz

