Resene Meltwater

# dealing to the damp

It's unhealthy, hikes up our power bills, ruins soft furnishings and can rot the very structure of our houses. But condensation is all too common in our homes.

**We all know** the catch phrase: a dry home is a healthy home. But many of us wake to windows streaked with water droplets or condensation sitting on bathroom walls. Then there's the mould growing in the corners of the ceiling, or a damp musty smell in the wardrobes. Having to wipe down windows and walls, and scrub blackened ceilings isn't just annoying, it's a sign that our homes aren't providing a dry, healthy living environment. And with our high asthma rate, it's crucial that we deal with condensation issues before another cold winter arrives.

## How does condensation form?

The process happens when warm water vapour in the air hits a non-absorbent cold surface, such as a window, wall, ceiling or porcelain vanity, and condenses to form small water droplets. Often we don't even notice the condensation until mould starts to grow on that surface. But these mould spores can cause everything from minor immune responses to asthma and headaches, dizziness and depression, and in extreme cases, death.

What's more, condensation can also gradually destroy our home and possessions. Over time, it causes timber and particle board to stain and rot, and can damage carpets, curtains and furniture, as well as clothing and mattresses.

Damp homes are also harder and more expensive to heat because in the process of drying out, wet building materials remove some of the warmth from the air.

Condensation culprits:

- Clothes left drying inside on racks
- Unflued gas and kerosene heaters
- Lack of good extractors
- Showering/bathing, especially with the door open
- Steam from cooking and boiling jugs
- Unvented tumble dryers and bathrooms
- Humans produce 500ml to 800ml of moisture a day through respiration and perspiration

## What can we do about it?

Keeping out moisture doesn't mean sealing your house up tight. In fact, this is one of the contributing factors to condensation in our homes – they're left firmly closed up and cold for most of the day. We then come home, take a hot shower, boil the jug for a cuppa and switch the gas heater on high to try and warm up. The result is more condensation as this hot, wet air hits cold surfaces.

There are, however, homes designed to be airtight but that use a robust home ventilation system that filters the air as it comes in, ridding it of moisture, pollens and pollutants, and then extracts any stale or moist air from inside and expels it. These systems can, of course, be retrofitted into any house to improve air quality.

The key to combating condensation lies in adequate ventilation and maintaining a constant indoor temperature through efficient heating and insulation. Moist air needs to be able to escape outside, but too much ventilation will make a house draughty and cold. Striking the right balance is vital.

You can improve indoor air circulation by opening windows and doors on dry days. If condensation is occurring on outside walls behind furniture such as couches and beds, move them out from the walls so air can circulate around these cold areas.

Too much ventilation (ie. cold draughts) will make a home harder to heat, and an inadequately heated home will in turn encourage condensation. In winter, aim to keep the indoor temperature at a minimum of 16°C (WHO recommendation) or at least 7°C warmer than the outdoor temperature.

However, here's the catch: the way we heat our homes can actually contribute to the condensation problem. Bottled gas and kerosene heaters release up to a litre of water an hour into the air. Cost-effective, wall-mounted panel heaters fitted with timers are a much better option. Or you could invest in a heat pump or central heating, or install a DVS system, which takes warm air from the ceiling space and slowly pushes it into the house to provide a positive pressure that forces damp air outside.

Insulating your walls and ceiling, and installing double glazing will keep your house warmer and make it easier and cheaper to heat. By warming up the surfaces of walls and ceilings, you're providing fewer cold surfaces on which water vapour can condense. Drawing well-fitted, heavy curtains at night will help keep in heat gained from the sun during the day.

Rooms on the southern side of your house or those shaded by trees are more susceptible to damp and humidity so keep a close check on these parts of your home. Dehumidifiers can be expensive to run, but they are a good short-term solution to dry out particularly damp rooms.

## Keeping dry

- Open doors and windows on fine days so air can circulate through your home.
- Lift curtains and pull furniture back from the walls to create space for air circulation.
- Ensure curtains extend right to the floor and that they include a separate thermal/blockout fabric layer, like those offered in the Resene Curtain Collection.
- Air mattresses and pillows in the sun to dry any residual moisture.
- Bathrooms and kitchens should be well ventilated. Install extractor fans over cooktops and in bathrooms to remove steam. Use Resene SpaceCote Kitchen & Bathroom paint which combines anti-bacterial silver protection and MoulDefender mould inhibitor.
- Avoid drying clothes indoors and vent tumble dryers to outside.
- Open windows or use an extractor fan in the bathroom when showering. Leave it on for 30 minutes afterwards with the door closed to remove moist air.
- Place draught-stops beneath doors to keep rooms warm.
- Wipe up any condensation on windows or sills straight away.
- Periodically leave cupboard and wardrobe doors open so air can circulate. And never put damp shoes or clothes in a wardrobe.

## How much humidity?

Ideally, the humidity level in your home should be no more than 50%. Mould requires a relative humidity level of 65-70% to grow. Hardware shops stock cheap humidity meters to easily monitor levels. H

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### *did you know...*

fungicidal washes, such as Resene Moss & Mould Killer, are extremely effective at killing mould and bleaching the moulds clean? They can be used as a cosmetic treatment to clean up mould-infested surfaces and to sterilise old surfaces before repainting.

These types of washes have no residual effect, however, and while most high-quality paints contain fungicide at a level designed to cope with average exposure, areas prone to mould may need extra protection.

Resene MoulDefender is a fungicidal additive designed to be added to waterborne paint to inhibit the growth of mould. It's a standard addition to the Resene Kitchen & Bathroom range which combines anti-bacterial silver protection and MoulDefender mould inhibitor – perfect for minimising unwanted nasties in kitchens, bathrooms and laundries. If you're painting in mould-prone areas inside or out, ask Resene ColorShop staff to add MoulDefender to your waterborne paint.

Resene Waterfront