



# REDUCE CONDENSATION, INCREASE HEALTH AND COMFORT

## **SOME CONDENSATION IS NORMAL, BUT TOO MUCH CAN AFFECT YOUR HEALTH AND HOW COMFORTABLE YOU FEEL INSIDE YOUR HOME.**

The average family produces about 10 litres (2.6 gallons) of moisture a day through simple, everyday activities like cooking, washing dishes, washing clothes and taking baths or showers. This moisture in the air of your home turns into condensation when it comes into contact with a surface or object that is cold enough to chill it below what's called its "dew point." That's when the invisible vapour becomes visible droplets of water.

Too much moisture can lead to mold and mildew, which may cause allergies or lung problems, and to nasty stains on your windowsills, walls and ceilings. It can also cause the paint to blister or peel both inside and outside your home, and can even lead to rot and structural decay in wood-framed houses or buildings.

But all is not lost. There are a number of ways you can reduce condensation in your home and help protect the health of your home and your family.

## **REPLACE YOUR OLD, SINGLE-PANED WINDOWS**

If you have old, single-paned windows, they are most likely allowing a lot of cold air to get into your home and causing a lot of condensation in the process.

Replace your old windows with ENERGY STAR® windows. These two- or three-paned windows will reduce heat flow and prevent condensation. They'll also help keep your home warmer in the winter and cooler in the summer and net you year-round savings of as much as seven per cent on your energy bills (even more if you live in one of the colder areas of British Columbia).

## **SEE MOLD? CALL IN THE EXPERTS**

Mold can be dangerous and should be eliminated. You can usually clean up small areas of mold on your own. For larger mold problems, however, we recommend you call in a professional to take a look and remove the mold if necessary.

The Canada Mortgage and Housing Corporation has detailed guidelines for how to clean up mold safely, and when to call in the experts. Visit [www.cmhc-schl.gc.ca](http://www.cmhc-schl.gc.ca) and search for "mold."

## MAKE SURE YOUR HOME IS PROPERLY SEALED

Moisture can be carried into your walls and attic through openings for plumbing, piping, electrical boxes and wires, through attic hatches and gaps between framing and drywall.

To solve this problem, you'll need to both better seal your home by closing the openings you can see from the inside of your home, and make sure any moisture that still gets into your walls and attic from the inside can escape outside.

Check that your attic has a least one outside vent, and that the outside surface of your home is "breathable." (Exterior paints, for example, are specially made to allow moisture to pass through. Always talk to an expert about what paint or siding is best for your home.)

## BUT NOT SO TIGHT IT CAN'T BREATHE

In an effort to make their homes more energy-efficient, some homeowners go overboard in eliminating all air leaks, both from the inside out and the outside in. To ensure good indoor air quality and manage indoor moisture sources, you need at least some fresh outside air.

You can ensure you have the right amount by:

- using an exhaust fan in the kitchen or bathroom during and for a few minutes after you cook or shower (make sure your fans exhaust directly outdoors; they should not exhaust into your attic or simply re-circulate indoor air)
- installing a dehumidistat to automatically turn on an exhaust fan when your house gets too humid
- leaving your furnace fan, if you have one, on all the time at a low speed
- adding a fresh air duct with a variable damper to your heating system to allow a controlled amount of outside air into your home, and
- installing a heat-recovery ventilator in combination with air sealing. (This kind of ventilator is great for your energy bills, but expensive, so think carefully before you buy)

## MORE TIPS FOR REDUCING CONDENSATION

- A plugged or leaky chimney vent can cause high moisture levels inside your home and is a serious safety hazard. If you have a fuel-fired appliance, such as a wood or gas furnace or hot water heater, call in a heating contractor to make sure the appliance's chimney is in good shape.
- Good air circulation is key to preventing excess condensation. To help air circulate better in your home:
  - open all your drapes and curtains during the day
  - leave closet and bedroom doors open as much as possible, and
  - pull furniture and storage boxes away from your outside walls and up off the basement floor.
- To prevent water getting into your basement or crawl space, make sure the ground slopes away from your home and that your gutters are directed away from basement walls. Also quickly fix broken water pipes and leaks in your roof.
- Unfinished basements and crawl spaces with exposed earth can be damp even without a flood or leak. We recommend you use a ground cover, such as heavy polyethylene or roll roofing, over the exposed earth, weighted down by a layer of sand, and ventilate the space to the outside in the summer.

## ABOUT HUMIDITY LEVELS, HUMIDIFIERS AND DEHUMIDISTATS

Humidity is the amount of moisture in the air. If you've got too much humidity inside your home, it feels damp; if you've got too little, it feels dry. The optimum humidity range for health and comfort is between 40 and 65 per cent.

In a dry house, a humidifier will help increase humidity and can be installed to work in a single room or a whole house. In a damp house, a dehumidifier or a fan controlled by a dehumidistat will help take excess humidity from the air.

A dehumidistat is similar to a thermostat in that it reads information from the air around it, but in this case, it's moist air rather than temperature. Once you've set it (the settings depend on the outside temperature: in general, the colder it is outside the lower you want to set the humidity level) the dehumidistat will automatically turn on a fan, usually in a bathroom, when the humidity level goes over your setting.

## FOR MORE PRACTICAL INFORMATION ABOUT YOUR HOME, INCLUDING HOW YOU CAN SAVE ENERGY EVERY DAY, CONTACT US:

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[bchydro.com/powersmart](http://bchydro.com/powersmart)

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