

CONTROLLING MOISTURE DURING WINTER MONTHS



A common complaint among homeowners during winter months is dampness or ice buildup on and around windows and glass doors.

What causes condensation?

When warm air inside your home comes in contact with cold surfaces like windows it leads to condensation. Some condensation is to be expected when the temperature outside is a lot colder than inside. But if there's too much moisture trapped inside your home, you'll get a lot of condensation. And, this can cause damage to surrounding walls, trim, hardwood floors and furnishings. If left uncorrected it can also lead to other problems like mildew and mould.

Most North American new home warranties do NOT cover damage caused by condensation if it can be traced back to a failure to maintain adequate ventilation. This is outlined in your local Construction Performance Guidelines. Therefore it's very important that you learn how to maintain proper humidity levels to ensure that there's adequate ventilation.

Do energy efficient windows prevent condensation?

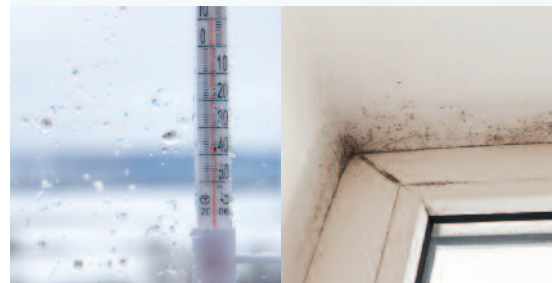
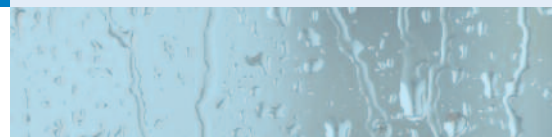
There is no such thing as a condensation-free window. Even walls can "sweat" under conditions of high humidity. Windows do not cause condensation, they simply prevent the moisture from escaping to the outside and serve as a highly visible surface where condensation can easily be noticed. If the inside glass surfaces of windows show excessive condensation, you can be reasonably sure that moisture is also collecting in your walls and ceilings. When outside condensation occurs, this does not mean your insulating glass unit is defective. In fact, it shows that the unit is doing its job of insulating the building from the environment.

What can you do to prevent condensation?

Your everyday activities add to the level of moisture in your home, things like: taking showers and baths; cooking; doing laundry; keeping plants and having pets, like fish. One shower produces a 1/2 pint of water vapor, a houseplant generates one pint of water vapor a day and one person's breathing produces 3 pints of water vapor per day. Although controlling moisture can be a challenge, there are a few things you can do to help reduce moisture levels in your home.

- Run the furnace fan continuously.
- When you're cooking, turn on your kitchen fan a few minutes before you start and leave it on for a while after you're done, even when using rice cookers. And, cover pots that are simmering or boiling to reduce the amount of steam.

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What can you do to prevent condensation? *continued*

- Turn the bathroom fan on before you start your bath or shower and leave it on for a while after you're done.
- If you have a dryer make sure that the vent is installed correctly and that it directs vapor outside your home or unit. Also, make sure that the lint trap is cleaned regularly.
- If you have curtains or shutters open them so that they don't block airflow to the window surface. Drapes and blinds should be left open during daytime. At night, raise blinds at least 4" up to allow air to flow against the glass. When possible, open windows for short time. Ventilation is the most effective means to remove moisture from your home. By exchanging some of the drier outdoor winter air for warm humid interior air, the moisture level inside the house will be reduced.
- Do not store firewood inside - a cord of wood can release 60 gallons of water.
- Make sure attic, basements and crawl spaces are well-ventilated and free of obstructions. Simple housekeeping also controls moisture; keep storage areas tidy to allow air circulation. Store newspapers, magazines and clothing in dry areas and investigate any musty odors around the house.
- If you have a humidifier, set it to the correct outside temperature.
- Install energy efficient windows and doors.
- And finally, consider using a dehumidifier.

You can measure your home's humidity level by using a hygrometer. Hygrometers are inexpensive and are available in most hardware supply stores. Ask your Pollard Sales Representative about purchasing a hygrometer from one of our Display Centres or a Pollard Dealer near you.

During winter months you want the humidity in your home to be in the range of 15 to 40% depending on the outside temperature. Please follow this chart for the appropriate levels. If your humidity level is high, there are some practical steps you can take to bring it down.

OUTSIDE AIR TEMPERATURE	RELATIVE HUMIDITY
-28°C or below	Not over 15%
-28°C to -23°C	Not over 20%
-23°C to -17°C	Not over 25%
-17°C to -12°C	Not over 30%
-12°C to -6°C	Not over 35%
-6°C to 4°C	Not over 40%

Following these steps should reduce the amount of condensation on your windows. If the situation doesn't improve, you may want to consider contacting a Heating, Ventilation and Air Conditioning Professional to help you determine what is causing the problem and how you can address it.

