## **GUIDE TO UNDERSTANDING CONDENSATION**





## What is Condensation?

Condensation is a natural occurrence on all surfaces in the home caused by excess humidity in the air. The moisture that suddenly appears in cold weather on the interior or exterior of windows or patio doors can block the view, fog or even freeze on the glass.

It can be an annoying problem. You're probably wondering why your new vinyl replacement windows show more condensation than your old drafty ones. Your old windows allowed air to flow between the inside of your home and the outdoors. Your new windows create a tight seal between your home and the outside. Excess moisture is unable to escape, and condensation becomes visible. Windows do not cause condensation, but they are often one of the first signs of excessive humidity within the home.

All air contains a certain amount of moisture, even indoors. There are many factors that create indoor humidity such as heating systems, humidifiers, cooking and showers. In fact, every activity that involves water, even cleaning the floors, adds moisture to the air.

Condensation is more likely to occur in homes where outside temperatures drop below 35°F. It is normal to experience condensation at the start of each heating season. Recommended humidity levels in winter months should not exceed 30 -35%.

Outside Air Temperature	Inside Relative Humidity 70° F Indoor Temperature
-20 degrees F or below	not over 15%
-20 degrees F to -10	not over 20%
-10 degrees F to 0	not over 25%
0 degrees F to 10	not over 30%
10 degrees F to 20	not over 35%
20 degrees F to 40	not over 40%

## When is Condensation a Problem?

There are several red flags you'll need to keep your eye on when condensation occurs.

- Condensation in between the panes of the insulated glass unit.

  This is a sign of seal failure. The glass would need to be replaced by the installer.
- A "damp feeling" in the home.
- Discoloration of interior surfaces or peeling wallpaper with black mold growth.
- Mold or mildew on surfaces or a musty smell.
- Warped wooden surfaces.

When surface condensation occurs, this does not mean your window is defective, it simply shows the unit is doing it's job; insulating your home. By controlling indoor humidity, you can help reduce interior condensation this winter.





