

## Condensation

Condensation is the change of water vapour in the air to liquid water on a cool surface. Once the air has cooled beyond its water-holding capacity, water or ice will form on cool surfaces such as window glass or metal frames. Condensation occurs because the air can hold less water vapour at low temperatures. **Humid air + cool glass = condensation**

Although it is natural to assume that the windows are to blame, the fact is that the windows are merely visible sign that humidity exists in the home. Newer construction methods, weather-tight materials and improved heating systems have been designed to conserve energy and reduce air leakage but the more airtight the home, the easier humidity can build up inside. Indoor moisture is caused by a variety of factors. Common household activities such as cooking, showering, running washing machines and dishwashers – every activity that uses water – adds moisture to the air.

Condensation on your windows on cold days is not considered a serious problem and can often be prevented by adjusting the humidity and airflow in your home.

## Controlling Humidity

- Drapes and blinds should be left open during the daytime. Even at night leave Venetian blinds up off the frame to allow the flow of warm air against the glass.
- Free air circulation is important. Do not cover hot or cold registers. Leave bedroom and bathroom doors open.
- If you have a fireplace, open the damper occasionally to allow moisture to escape.
- Consider restricting houseplants to limited areas.
- Ensure humidifiers are correctly set according to the outside temperature. When it's colder outside, regulate for a lower relative humidity inside, in order to minimize condensation.
- Be sure to run your kitchen fan while cooking. Ideally the kitchen fan should be vented directly to the outside to achieve the desired effect.
- Showers are a high source of moisture. Bathroom doors should be kept shut and the exhaust fan running during and after the shower.
- Vent clothes dryers to the outdoors. Do not hang clothes to dry inside during cold weather.

- Opening a door or window for short periods. Ventilation is an effective means to remove moisture. By exchanging some of the drier outdoor winter air for warm humid interior air the moisture level will be reduced.

So condensation on the inside of your windows is normal although not so desirable... however, **moisture between the panes of glass** in your sealed unit (not inside or outside) is another matter – this indicates that the seal of your unit has **failed**. The only way to correct this is to replace the sealed unit.