DURABUILT
WINDOWS & DOORS

It is important to know that windows do not cause condensation, they simply provide a visible surface for it. Here is an overview of common causes and remedies.

FREQUENTLY ASKED QUESTIONS

What is Condensation?

Condensation is the point in which moist air turns into a liquid when surface temperatures fall below the "dew point" of the room. When warm air comes into contact with a cool surface, such as a window, condensation occurs.

What Causes Condensation?

Above average levels of humidity in a home will result in condensation. Window glass traditionally has a low surface temperature thus producing the first signs of condensation

Both new and older homes that do not comply with current building codes can also experience condensation in attics, inside exterior walls and within floors and ceilings.

Why Am I Experiencing Condensation With My New Windows?

A properly installed, new window will make your home more energy efficient, as it provides an air-tight seal. Original drafty windows commonly allow excess humidity and heat to escape, whereas your new windows provide a warmer surface for condensation to occur. Causes of condensation can include humidity levels that are too high, uneven heat distribution throughout the home and poor circulation around your new windows and doors.

How Do I Minimise Humidity and Condensation?

Increase ventilation and control the source of excess moisture. You can mitigate humidity causing factors by performing regular maintenance, acquiring the services of a qualified inspector, installing a humidistat or by purchasing an inexpensive hygrometer that will measure the relative humidity in your home.

CAUSES OF SURFACE CONDENSATION

Windows

Visible Indication	Possible Causes
Condensation on inside surface of inside pane	High humidity Sudden drop in temperature
Condensation on upper storey windows only	Cool air leaking to lower level or storey windows only warm air leaking from upper level
Condensation on window frame	Air leakage window frame Rough opening space Poor weather stripping

Doors

Visible Indication	Possible Causes
Condensation on door frame or threshold	Air leakage around door
Condensation on lock, knob or hinges	Air infiltration due to negative pressure inside

Walls

Visible Indication	Possible Causes
Condensation on closet	Poor air circulation around clothes
Condensation and staining below window	Melted window condensation Window in humid area
Mould on wall	High humidity Poor ventilation / circulation
Stains on celling	Frost build-up melting in attic Leaking roof
Bulging, buckled or rotting siding	Warm moist, inside air leaking through break in barrier Missing flashing, wind-driven rain penetrating wall cladding

HOW TO REDUCE SURFACE CONDENSATION

Windows & Doors

- Replace or adjust weather stripping
- Replace exterior doors with new energy efficient models
- Replace your windows with CSA approved & Energy Star rated products
- Add fresh air duct to your heating system

Bathrooms

- Open windows after showering
- Install a ceiling vent exhausting outside
- Close the bathroom door when using the shower or bathtub
- Properly insulate walls and ceilings
- Use moisture proof paint or wallpaper

Kitchen

- Open windows to release stale, humid air and allow fresh dry air to enter
- Operate vented exhaust over oven range when cooking
- Install a ceiling fan
- Trim cupboard doors so air can circulate

Living Areas

- Seal light fixtures and insulate attic hatch
- Exhaust all vents to the exterior
- Install and seal a chimney fire stop

Exterior Walls

- Add insulation to wall cavity
- Run furnace fan continuously
- Install or repair flashing to direct rain away from the wall
- Caulk exterior siding corners, window brickmoulds, etc.
- Seal and insulate basement walls

RECOMMENDED HUMIDITY LEVELS

Outside AirTemperature in 0C	Relative Humidity withInside Temperature of 200C
-30° or below	Not over 20°%
-24° to -18°	Not over 25%
-18° to -120	Not over 30%
-12° to -6V	Not over 35%
-6° to 0°	Not over 40%