

CONTROLLING CONDENSATION IN BUILDINGS

CONDENSATION:

Condensation is a natural phenomenon on window systems in our climate, as you are aware, it is not uncommon for condensation to develop on the interior surfaces of thermally sealed and horizontal sliding window units given our Canadian climate. Condensation development is dependent on several factors which include the temperature difference between the interior and exterior, interior relative humidity and ventilation to name a few. Proactive measures may be adopted by individual unit owners to help minimize the development of condensation by improving overall ventilation within their suites, reducing interior relative humidity levels and maintaining reasonable interior temperatures.

In order to reduce condensation problems to a minimum, the following chart of outside air temperature to indoor relative humidity shows optimum humidity.

OUTSIDE AIR TEMPERATURE

INDOOR RELATIVE HUMIDITY

-28°C or below	not over 15%
-28°C to -23°C	not over 20%
-22°C to -17°C	not over 25%
-16°C to -12°C	not over 30%
-11°C to -6°C	not over 35%
-5°C to 4°C	not over 40%

If moisture can be reduced to the humidity shown above, it may help cure troublesome surface condensation problems.

Some controllable sources of water vapour which add humidity within the individual units are: use of a humidifiers, a kettle left boiling, long hot showers, dishwashing, over-watering of plants and/or too many plants in a give space, cooking, fish tanks, etc.

Excessive winter humidity can usually be reduced by effective ventilation. Use the kitchen range hood and bathroom fans provided in the units to exhaust excessively humid air directly to the outdoors. Occasionally open a window for a short time, bringing in cooler, less humid air into the unit thus reducing the overall humidity.