

# CONDO BOARD NOTICE

## HEATING and AIR CONDITIONING

All of the following should be reviewed by all tenants in order to ensure that the heating and in some suites air conditioning systems are both used and functioning properly. Failure to do so may affect the performance and lifetime of these systems as well as other components of the building.

**1. Filters:** Ensure that the filters for the fan coil heating units installed in all suites are kept clean and free from excess build up. Generally, these filters should be checked once a month. Changing may only be required every two to three months but may be required more often if the clothes dryers are used excessively, as some lint from the dryer may be inhaled by the fan coils. Also, pets may have an adverse affect on the filters as hair also may be ingested.

The heating output of the fan coils will be greatly reduced if the filters are plugged. The fan coils heat the suites by heating air passing through the unit. If this airflow is reduced, so too will be the output. During the winter months, the fan coil units should be switched to the low fan speed as these units are designed to function best with this speed.

The cooling output of the fan coils will be greatly reduced if the filters are plugged. The fan coils cool the suites by cooling air passing through the unit. If this airflow is reduced, so too will be the output. During the summer months the fan coil units should be switched to the high fan speed as these units are designed to function best with this speed. Also, dirty/plugged filters will almost certainly cause the cooling coils in the fan coil units to freeze. Basically, the reduced airflow is unable to absorb enough cooling off of the coil. The refrigerant in the cooling coil then becomes cool enough to freeze the condensation on the exterior of the coil. As this ice builds up, it eventually freezes over the entire coil, completely closing off all airflow. In this case, the cooling must be turned off entirely until the frozen coil completely thaws. In some cases, running the fan coil in the low fan speed may cause these coils to freeze for the same reason - reduced airflow.

**2. Humidity:** Relative humidity is a very important factor in the suites. All suites require humidity to properly maintain the wood floors, but too much humidity can have a detrimental effect on the life of the exterior brick walls, cause windows to frost over and to lesser extent the performance of the heating system.

To maintain the wood floors in all suites it is important to maintain the humidity level in each suite. The mechanical system as installed does not have this capacity. Humidity levels of approx. 20% to 25% should be maintained to preserve the wood floors. However, humidity levels higher than 25%, especially in colder weather, may cause several problems. The windows may start to sweat, condense and in some cases freeze. Obviously, limiting this condition to a minimum would be best. In colder weather, it may be advisable to make sure all window coverings are opened in order to ensure proper air movement past the windows.

In addition, excessive humidity in the suites may cause damage to the exterior brick walls of the building. Humidity may be absorbed into these walls during more temperate

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weather and freeze during colder weather. This freezing and thawing cycle will most certainly have an effect on the life of these walls.

All tenants should be careful to properly set the humidistat in their suite if humidification is installed in their fan coils. In cases where tenants have purchased stand alone humidifiers, it would be suggested they purchase a digital battery operated humidistat from a local hardware store (i.e. Revy, Home Depot, Canadian Tire) so that they can properly observe the humidity in their suites. In addition, it may be useful to hook up these on/off humidifiers to an adjustable timer so that they only run for certain periods. A little observation will indicate how often these have to run to maintain the proper humidity.

**3. Temperature:** The heating system has been designed to maintain approximately 21C in the suites on the coldest day of the year. Given that all suites have wood floors, uninsulated block walls and large windows many tenants may feel that their suites are colder than what their thermostats are set at or seem to indicate. It is important to keep in mind that the air temperature in the suite may very well be 21C or whatever the thermostat is set at. However, air temperature is not always the only factor to consider when considering the comfort level in a residence. The floors, exterior walls, windows and in some suites ceilings all radiate cold in the winter months. This has no effect on air as these radiant waves only are absorbed by solids, in this case the residents or furniture inside the suite.

A perfect example is to stand several feet away from a window on a cold day. The temperature in the suite may be 21C, but the cold radiating off the window may make it feel more like 15C. The suites in our building are much different from a conventional home. This should be considered in the winter. On colder days, it may necessary to dress appropriately.

Setting the thermostat in your suite higher than 21C – 22C may have adverse affect on other suites where the fan coil units are more marginally sized. The extra heating water used in your suite may adversely affect the heating performance in an adjacent suite.