

Humidity – Homeowner Copy

Your new home is constructed as air tight as possible. So controlling indoor humidity is very important. Your home has a humidifier installed to add moisture to your home as we live in a very dry climate. Understanding how to control the amount of moisture in your home throughout the seasons is **very** important. Humidity levels that are too high can cause various issues with condensation throughout your home, such as but not limited to, excess moisture build-up on the interior pane of the windows and moisture in your exhaust vents.

Excess moisture on the windows can cause damage to the window trim, walls and surrounding areas. Any moisture seen on the interior panes of windows should be cleaned up immediately to mitigate any damages. It is the homeowner responsibility to ensure window coverings are not hindering air movement, furniture is not covering heat vents and the warm air can circulate freely around your home.

The moisture in the exhaust vents occurs when warm moist air goes up into the vent and freezes. As the condensation in the vent pipe thaws, the water will drip back down the pipe and into the home. To mitigate this, you should turn the fan on during and after bathing/showering for minimum 20 minutes. This will draw the warm air back up the vent and assist with the evaporation of the accumulated condensation. Failure to utilize these fans can cause damage to ceilings, appliances, and flooring. If ceiling staining does occur, do not touch the ceiling while it is the grey color. Let it dry and you may notice it turns yellow/brown or pink. Once it is dry, you can spray the area with a 50/50 mixture of bleach and water; this will remove the stain.

During periods of extended cold weather, moisture from the living space or the outside sources, carried by air movement can accumulate as frost on the underside of roof trusses and sheathing. The degree of frost accumulation is related to the relative humidity of the house air, the rate of air movement into the attic and the length of the cold spell. When temperatures rise above freezing, this build up may melt faster than the attics ventilation system is able to exhaust the accumulated moisture.

Although we can minimize the moisture reaching the attic by ensuring the air/vapor barrier is as continuous as possible, air leakage into the attic cannot be completely eliminated. Homeowners have a responsibility to mitigate damage by reducing humidity levels in their homes during cold weather.

Warmer Months (April – September):

The humidity in your home needs to be around 35-45%, this is very hard to control as the humidifier only adds the moisture to the air, when the furnace calls for heat. This is where the use of your ventilation fan is required.

Colder Months (October – May):

The humidity in these months needs to be reduced, around the 25-35%. The reason for this is that we are heating the home a lot more in these months we are then adding more moisture and because of the colder conditions outside, the warmer air is carrying more moisture. **In extreme cold conditions these levels may need to be lower again 10-15%**

There are also things that we do in the home that contribute to moisture levels. Cooking, bathing, showering, sleeping and even breathing adds moisture to the air. It is very important to use the ventilation systems in your home (bath fans, fans over the stove and the ventilation fan) to remove this excess moisture. If taking a shower/bath the bathroom fan/fans should be run for a minimum of 20 minutes after you have finished in shower/bath. **Even longer in colder weather.** Ensure to run your fan over the stove **every** time you are cooking and for 20 minutes after you have finished.

Understanding the effects of moisture on your home is very important part of your home maintenance as **DAMAGE** caused by humidity is **NOT** covered by your home warranty.

For more information, please refer to your New Home Maintenance Manual, Section 10.16 Condensation, Ventilation and Relative Humidity.