

From Smart Home Spring 2006

Control the Humidity Level in Your Home

Controlling indoor moisture can increase a home's comfort level, decrease energy bills and improve the air in your home

Home may be where the heart is, but on a hot summer day, it isn't the most comfortable place to be if humidity lurks inside. Air conditioning systems make sultry days tolerable, but did you know humidity also plays a vital role in overall home comfort? Relative humidity, or the amount of moisture in the air, can work with or against your home's cooling system to determine how cool you feel indoors.



"How temperature and relative humidity interact is critical," explains Adam Stark, indoor air quality product marketing manager for Lennox Industries Inc. "The higher the humidity level, the warmer a home feels. You can take the same 70-degree (21 degrees Celsius) room and make it feel warmer with more humidity and cooler with less humidity."

Indoor humidity levels should range from 30 percent to 50 percent in the summer months to achieve the highest level of comfort. When humidity soars above 50 percent, excess moisture in the air makes a home feel warmer and compromises indoor air quality. Mold, mildew, dust mites and other pollutants grow and flourish in humid conditions, triggering ailments such as allergies, asthma, headaches and respiratory problems.

Fortunately, there are several ways you can take control of your home's humidity levels and enjoy the comfort you've come to expect from your haven.

Heat Up With a Humidifier

During colder weather when the air is drier, it may be appropriate to actually add moisture to the air to ensure your home is comfortable. Simply raising the temperature could add to your heating bills. However, humidifiers can make the air inside a home feel warmer by adding an appropriate amount of moisture, and they also can help reduce occurrences of dry skin, chapped lips and shocks from static electricity. In addition, because humidified air feels warmer, a



humidifier can help lower your heating bills. For example, a 69-degree temperature (20.56 degrees Celsius) at 35 percent relative humidity feels just as warm as a 72-degree (22.2 degrees Celsius) setting at 19 percent relative humidity.



Seal the Window Sills

To prevent outside moisture from seeping into the home on humid days, Lennox® recommends applying weather stripping or caulking around windows to make them airtight, which will help prevent outdoor humidity from becoming an issue indoors.

Use controlled ventilation systems installed as a part of your home comfort system (like an energy recovery ventilator or heat recovery ventilator) to exchange and dilute contaminated inside air with fresher outside air.

“Homes today are built tighter than ever before,” Stark explains. “As a result, they end up being a trap for contaminants like dust, pollen, bacteria, viruses, chemical gases and other airborne pollutants.”

Consequently, the air inside your home can be two to five times more polluted than the air outside. According to the EPA, it can be even up to 100 times more polluted. Stark says controlled ventilation systems installed as a part of your home comfort system work in conjunction with your heating and cooling system to dilute contaminated indoor air with fresh outdoor air.

Invest in a thermostat that controls temperature and humidity. Lennox® offers the SignatureStat™ Home Comfort Control, an energy-efficient device that allows the homeowner to adjust humidity and temperature levels according to individual needs. The SignatureStat™ works with a home’s heating and cooling systems and automatically switches between heating and cooling operations as needed. The device also features an Indoor Air Quality Monitor, which alerts the homeowner when it is time



for maintenance of indoor air quality products.



Inspect your home for leaky pipes and dripping faucets. Excess water or dampness in the home triggers the growth of mold spores and mildew and adds excess moisture to the air, which will create a humid and uncomfortable environment and possible unwanted damage to your home. To correct the

problem, seal leaky pipes. And dry up affected areas, including wet basements, within 24-48 hours of leakage to prevent mold growth.

Limit tasks that use water on extremely humid days. Ordinary things like running the dishwasher or washing clothes can add unwanted moisture to the air. One way to alleviate excess moisture is to use a dehumidifier, which will remove warmth and water from the air, thereby making your home more comfortable. Taking showers also adds humidity, so be sure to use an exhaust fan to ventilate the air for the duration of the room's use.