

# Get Control of Your Home's Humidity

By Tim De Stasio

Humidity is defined as the moisture in the air. The most common way to measure humidity levels is the Relative Humidity percentage scale. It measures how much moisture is in the air compared with how much moisture the air can hold.

The air around us is like a sponge. It can hold moisture up to its limit. Just like when a sponge is completely saturated and cannot hold any more water, when the air is at 100% relative humidity, it is completely saturated and cannot hold any more moisture. It is also important to understand that moisture in the air will always move to dryer areas.

Most people are comfortable from 40%-60% relative humidity. In the south, outdoor summer humidity levels can stay 90% or more. So we get uncomfortable when it is that humid. This is because the high moisture level in the air contains heat. This makes it harder for the body to cool itself down. Wood floors can swell and buckle. Windows and doors expand and stick.

A home's cooling system is designed not only to cool the home but dehumidify as well. But if the system is not operating efficiently, this ability can be severely reduced. Or if the air conditioning unit is oversized, it will not run long enough to pull the moisture out of the air. Also, if a house is not properly sealed, humidity will infiltrate the structure at a high rate. Even a newer home can allow moisture to enter through cracks, seams and holes like windows, doors, electrical, plumbing and HVAC penetrations in the walls, floors and ceiling. But these causes can be controlled.

The first step is to seal these holes. A BPI or RESNET certified Building Analyst can identify where moisture is leaking into your home and give a solution to seal them up. Second, a properly sized and regularly serviced air conditioning system will remove the moisture in the home faster than it can re-enter it. Third, your HVAC contractor can install a modern thermostat with a humidity control feature. These will help your home stay comfortable and dry in the summer.

In the winter, the exact opposite problem is the case. The outdoor humidity is too low. Many people suffer from dry sinuses and dry skin. Wood floors shrink. Doors and windows can shrink, exposing gaps that allow even more moisture in the home to escape outside. Most heating systems actually dry the air even more, contributing to the problem. But there are ways to control this.

Again, the best measure taken is to seal and weatherize a home. This will help keep the needed moisture inside. Second, if needed, a whole house humidifier that cooperates with the HVAC system can be professionally installed. It is important that the house is not over-humidified. This will result in condensation forming on windows and eventually moisture damage.

So a weatherized home with proper dehumidification in the summer and a professionally installed humidifier in the winter can keep humidity levels comfortably between 40-60% r.h. Proper humidification control can allow you to set your thermostat to a more economical setting and save energy too. To learn more, [contact us](#). We are NATE certified licensed HVAC professionals and BPI certified building analysts.

