

High Humidity in the Home

A high relative humidity in your home encourages mold growth and dust mites, can make your house smell musty, and can potentially damage your home and your possessions. In simplest terms, “relative humidity” refers to the amount of dampness in the air. This Pillar-to-Post® Info Series offers suggestions for addressing high humidity.

Measure It

You can measure humidity levels with an inexpensive device called a hygrometer, easily obtained at any hardware store. Take a measurement in a few areas to see if the problem is localized, or if the house is humid throughout. A humidity level of 50% is normal for the summer. In the winter, the ideal indoor humidity depends on the outdoor air temperature and may be 30% or less on colder days.

Outdoor Temperature	Maximum Indoor Humidity
40 degrees F (4 C)	45 %
32 degrees F (0 C)	40 %
20 degrees F (-7 C)	35 %
10 degrees F (-12 C)	30 %
0 degrees F (-18 C)	25 %
-10 degrees F (-23 C)	20 %

Control Humidity at the Source

Whole House High Humidity

- **Lack of ventilation** – newer homes are “tight,” meaning well-sealed, restricting ventilation. Without fresh air circulation, humidity builds up inside your home (only an issue during heating season when the windows are closed). Consult an expert on ventilation.
- **Oversized central air conditioner** – central air conditioning is an excellent dehumidifier. An oversized central air conditioner, however, has on-cycles that are too short to effectively remove humidity. Also, the cold air may actually increase the relative humidity, making your home colder and clammy.
- **Caution** – a gas-fired appliance not venting properly may cause high humidity. If you have any doubt, immediately contact a qualified heating contractor to investigate.

Localized High Humidity

- **Overcooling** – if an area, such as a basement, gets too much cold air supply, you may create condensation and a high humidity problem. Adjusting the supply registers prior to the cooling season may help.

- **Clothes dryer discharging into house** - this situation creates a huge source of moisture concentrated in a small area. Clothes dryers should discharge to the exterior even in winter. Verify that the discharge pipe is clear and connected properly at the back of the dryer.
- **Bathroom fans** - showers and baths add a great deal of moisture. Install an exhaust fan.
- **Basement dampness** - before you crank on a dehumidifier, find the moisture culprit and reduce or eliminate it at its source.
- **Crawlspace dampness** - put a sheet of plastic over a dirt floor crawlspace to keep the dampness down. The plastic is usually covered in sand or gravel. Note: if you have not installed the plastic yourself, you may not see it immediately.

Dehumidifier

A dehumidifier may be your only way to control moisture in a damp area. A dehumidifier removes moisture from the air and drains the liquid into a reservoir or drain. It is designed to work in an environment of 65 degrees F (18 C) or higher. If the room is colder, the dehumidifier may ice up. In this case, shut off the unit until it has defrosted then turn it back on. You may also have to increase the temperature of the space. Some units will operate down to about 42 degrees F and automatically defrost when they ice up.

Buy a dehumidifier sized appropriately to the space. An undersized unit will not achieve desired humidity levels. But be aware that dehumidifiers use the same amount of energy as a small window air conditioner; that is, quite a bit.

