

# Dehumidifier For Your Home

Do You Have a Household Moisture Problem? If you notice creaking floors, condensation developing on windows, or exacerbated allergy symptoms, your home's humidity levels may be out of whack. Low humidity levels can cause problems such as increased static electricity; respiratory problems; and cracking and peeling of furniture and paint, but purchasing an inexpensive humidifier for your home is an easy solution. However, high humidity levels are often a more challenging problem. If your home is too wet, it can be a breeding ground for mildew growth; stained ceilings and walls; and excess condensation on windows and mirrors. Those living in hot, humid climates may also find that their homes provide the optimal environment for pests such as termites.



**All About Humidity Levels** – We hear about humidity daily in weather reports, and humidity is often likened to that muggy, steam-room feeling you experience on a summer day. Humidity is usually expressed in ways such as absolute humidity and relative humidity. Absolute humidity refers to the mass of water vapor divided by the mass of dry air in a volume of air at a given temperature. As such, the hotter the air, the more water it

contains.

On the other hand, relative humidity refers to the ratio of the current absolute humidity to the highest possible absolute humidity. If an environment has 100 percent relative humidity, this means the air is saturated with water vapor and can hold no more moisture. As a result, this creates the possibility of rain. Overall, humans are quite sensitive to humidity because the skin relies on air to get rid of moisture. Sweating is your body's way of keeping cooling and maintaining its current temperature. This is why you feel much hotter than the actual temperature when humidity levels are high. Conversely, when there is low relative humidity, you feel much cooler than the actual temperature because sweat is quickly evaporating and cooling us off. In other words, if the air temperature is 75° F with zero relative humidity, the temperature will feel like it's 69° F. However, if the relative humidity is 100 percent at the same air temperature, it will feel like it's 80° F.

With that in mind, according to the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) Standard Environmental Conditions for Human Occupancy, it is recommended that relative humidity be kept between 30% to 50% in the summer, and 30% to 40% in the winter. In order to measure humidity levels, you can purchase a small, inexpensive hygrometer (often called a humidity sensor or relative humidity indicator). This device measures the humidity level in your home and will confirm whether there is too little or too much humidity. Once you are aware of the humidity levels in your home, you can then decide if you need to take action.

Again, if your air is too dry, you can regulate moisture levels with a humidifier. However, if your air is too moist, a dehumidifier can help

maintain the indoor relative humidity at the desired level, control musty odors, and protect furniture from water damage.

**What is a Dehumidifier?** Dehumidifiers are household appliances that help reduce the humidity levels in the air. There are primarily two types of humidifiers – desiccant and mechanical.

Desiccant dehumidifiers (or passive dehumidifiers) are named for their use of a desiccative substance to dehumidify the air. This substance has an affinity for water vapor, and the dehumidifying process involves exposing the desiccant matter to an air stream with high relative humidity. These dehumidifiers do not utilize compressors and are best used in areas with low temperatures and relatively low humidity levels. Desiccant dehumidifiers can also be used instead of mechanical units or in combination with them. Although not as efficient as mechanical models, they are usually very inexpensive to purchase. Examples of desiccant dehumidifiers would be the Eva-Dry EH-500F and the Eva-Dry EDV300.

Mechanical dehumidifiers (or active dehumidifiers), however, are much more common, efficient, and are simply air conditioners with both the hot and cold coils in the same box. A fan draws the room's air over the cold coil of the AC to condense the moisture, and this is often collected into a bucket. Dry air will then pass through the hot coil to heat it back up to its original temperature. Therefore, mechanical dehumidifiers will slightly raise the air temperature, as opposed to air conditioners, which will cool the air as it dehumidifies it. Examples of mechanical dehumidifiers would be the NewAir AD-400 and the Soleus CFM40.

How to Buy a Dehumidifier When shopping for a dehumidifier, there are

several factors to consider such as the size of the unit, dehumidification capacity, and safety features. Below is a list of some of the most common things to look for when choosing a dehumidifier and what they mean to you:

**Size:** The size of a dehumidifier is generally based on the amount of moisture extracted from the air in 24 hours, which is usually measured in pints. Purchase a larger capacity model over a smaller one because larger units can dehumidify more area in a shorter amount of time. Furthermore, a dehumidifier with a smaller capacity may run continuously and still not lower the humidity to proper levels.

**Portability:** If you're looking to move your dehumidifier from room to room, look for a unit that is compact, lightweight, and includes a carrying handle or rolling casters.

**Built-In Humidistat:** If you'd like to be able to adjust different humidity levels, finding a dehumidifier with a humidistat is key. This feature will automatically turn the unit on/off depending on the humidity setting.

**Automatic Shut-Off:** This function will allow you to turn the unit on or off without having to unplug it, and it also prevents overfilling when the storage tank is full.

**Low Temperature Operation / Automatic Defrost:** If you may be using the dehumidifier in temperatures colder than 65° F, look for a unit that has an anti-frost sensor and can operate in cold temperatures. This prevents quick cycling and frost from accumulating on the sensor.

**Storage Tank Capacity:** Almost all dehumidifiers have storage tanks for the collected water. If you're not planning to purchase a model with a continuous drainage port, you'll have to empty the tank periodically. If the dehumidifier is to be placed in an area where you may not be able to empty it frequently, look for a tank size of at least 15 pints.

**Continuous Drainage:** Dehumidifiers with a continuous drainage port will eliminate the hassle of emptying a condensation tank. Simply attach a hose to the dehumidifier, and the moisture will drain out through the hose.

**Washable / Removable Air Filter:** Dehumidifiers that have washable filters trap airborne dust and particles. If the filter is washable, this makes maintenance a breeze: simply pull out the filter; rinse it with mild soap and water; and replace it back within the unit.

Source:

<http://www.thebestdehumidifierreviews.com/>

<https://www.facebook.com/thebestdehumidifierreviews/>

<https://twitter.com/DehumidifierTW>

<https://www.google.com/+ThebestdehumidifierreviewsGP>