

Humidify Your Home

Skill Level: Beginner

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If winter in your home means dry skin, scratchy throats and lots of static electricity, you may have a problem with low humidity. Humidity refers to the amount of water vapor in the air. When you close the windows and turn the heat on in the winter, you begin to reduce the humidity in your home. Lowe's is happy to provide this information as a service to you.

Low Humidity and Your Health

Dry air in your home can make your throat and skin feel dry and scratchy, cause or aggravate respiratory problems, dry out nasal passages and make you more susceptible to colds or the flu. Although winter weather is often blamed for these problems, another major cause is dry air produced by artificial heating. Humidifying your home to provide proper moisture levels will help alleviate these symptoms.

Other Problems Associated with Low Humidity

Dry air can also cause problems that are not health-related:

- Static electricity is a direct result of dry air. In addition to causing painful shocks, it can damage computers and other electronic equipment.
- Hardwood floors lose moisture and contract when the air in a home is extremely dry. This can cause the floor to separate at the seams.
- Houseplants suffer from dryness caused by low humidity.
- Wallpaper may peel at the edges if the air in a home is excessively dry.

Solving Low Humidity Problems

Low humidity can be an aggravation for homeowners, but a humidifier is a simple solution. Humidifiers increase the humidity in the air in a safe, water vapor form. They help make your home healthy and comfortable.

Financial Benefits of Humidifying Your Home

Controlling humidity can also help you save money on energy bills. The heat our bodies feel is a combination of temperature and humidity. In other words, the more humid the air, the warmer you feel. If you add humidity to dry, heated air in the winter, you can set your thermostat lower and still be comfortable.

Choosing a Humidifier

Don't simply look at cost when purchasing a humidifier. Capacity is an important factor. A humidifier's capacity should match your household's needs. Capacity is measured in gallons per day of operation. One method of estimating the capacity you need is to determine the square footage of the you want to humidify. Use the chart below to determine what output level is best for you:



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AREA	OUTPUT RATING (gallons per day)
500 sq. ft. or lower	1.5-2.0
530-600sq.ft.	2.2-2.5
700-800 sq.ft.	3.0-3.5
900-1000 sq. ft.	4.0-5.0
1000-2000 sq.ft.	7.0-9.0
Over 2000 sq. ft.	10.0 or higher

Types of Humidifiers

When selecting a humidifier, take into account the purchase price, operating costs and maintenance costs of the unit. Some models consume more energy than others, so choosing a model that is right for your home and budget is important. Some of the most popular types of humidifier are listed below.

- Warm mist humidifiers use a heating system to release a warm, clean mist into the air. This type of humidifier tends to warm the room slightly. You can also add medication to the air with a warm mist humidifier. Warm mist humidifiers differ from steam vaporizers because the steam is cooled before it exits the machine. This means there's no risk of steam burns. You should frequently clean the heating element of warm mist humidifiers according to the manufacturer's instructions to prevent mineral deposit buildup.
- Steam vaporizers use two electrodes to turn water into steam. The vapor exits the unit and adds humidity to the home. Some models allow you to add medication into the air. The electrodes should be cleaned according to the manufacturer's instructions to prevent mineral deposit buildup.
- Cool mist humidifiers operate in one of two ways. Impeller humidifiers use a rapidly-rotating disc to propel water through a screen, creating water vapor. Evaporative humidifiers use a fan to move air through a filter or wick saturated with water. The air gains moisture as the water held in the filter evaporates, adding humidity to a home in the form of a cool, invisible mist. The filter also traps minerals and impurities from the water. Many people prefer cool mist humidifiers because, unlike vaporizers and warm mist humidifiers, they don't have a heating element inside. Cool mist humidifiers are recommended by the American Academy of Pediatrics.
- Console humidifiers work like evaporative humidifiers to humidify the whole house.

Whether you choose a warm mist or cool mist humidifier is a matter of personal taste. Both types raise the humidity level and make your home more comfortable. The cool mist humidifier is the most effective in adding moisture to the air: it works faster, doesn't make the room hot and lasts longer. Also, with a cool mist humidifier there is no risk of being scalded with hot water or steam.

Safety Note: Warm mist humidifiers and steam vaporizers produce very hot water and steam. Use caution when operating them.



Console Humidifier



Cool Mist Humidifier

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Setting up a Humidifier

Central heating can lower humidity levels in your home to as low as 10 percent during extremely cold weather. A humidity level of 35-40 percent is considered best. You may want to raise or lower it slightly, depending on personal preference, but the Environmental Protection

Agency recommends a humidity level no higher than 50 percent. Many humidifiers feature a humidistat that allows you to control the amount of humidity released into the air. When the humidity level in the room is below the level you have set, the humidifier will produce moisture. When it has reached the set humidity level, the system stops. When the humidity drops below the set humidity level, the unit will automatically start and produce moisture again. This cycle will repeat until the tank needs to be refilled.

When setting up a humidifier, place it on an inside wall, away from obstructions and as close to the cold air return of your furnace as possible.

Care and Maintenance

Consistent maintenance helps prolong the life of your humidifier for several reasons. After each operation of your humidifier, the inside should be cleaned to prevent the accumulation of concentrated minerals and to prevent bacterial growth. Follow the manufacturer's instructions. If your humidifier has a filter, it needs maintenance also. If you don't change your filter, minerals will build up and reduce your humidifier's output. As a filter collects impurities, it begins to discolor. When the lower portion of the filter shows discoloration, it's time to change it. Replace your filter at least once during the season. If you have hard water or water with high mineral content, you need to replace your filter more often. If you haven't used your humidifier for an extended period of time, dispose of the filter and install a fresh one.

Adding a Whole-House Humidifier to Your Heating Unit

Whole-house humidifiers are installed in the ductwork, next to your furnace. They add humidity to your entire home. Most have humidistats, allowing you to set the exact level of humidity you want. Installing a humidifier is an easy job if you're replacing your furnace, but you can also have a humidifier fitted to your current system.

Most whole-house humidifiers operate on the basis of a simple concept. Air heated by your furnace or heat pump passes through a ceramic-coated pad in the humidifier, called an evaporator pad. The evaporator pad is saturated with water. The air absorbs moisture from the pad and adds humidity throughout the home as it circulates. Depending on the model you choose and the size of your home, a humidifier will use from 1.5 to 12 gallons per day when the furnace is operating. This small amount of water is enough to raise the humidity to your desired level, but not enough for you to notice a difference on your water bill.

been treated with water softener. The chemical agents found in water softeners can cause problems in the humidifier.

Do not use additives in the water that are not specifically recommended by the humidifier manufacturer. Unless there is a manufacturer's recommendation, using additives can cause irreparable damage.



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Too Much Humidity?

Be careful not to add too much humidity to your home. When warm, moist air comes in contact with a cold, dry surface, the water in the air condenses, creating water droplets. Your humidistat is set too high if this moisture is excessive. There are several ways to determine excess humidity:

- Frequent fogging of windows may indicate too much humidity. The appropriate relative humidity allows only slight condensation along the lower edges or corners of windows.
- Drop three ice cubes into a glass, add water and stir. Wait three minutes. If moisture forms on the outside of the glass, the air is likely too humid.
- Moisture buildup or mold on closet walls or room ceilings and walls indicates high humidity.

Keep in mind that a tight, energy-efficient house holds more moisture. Adjust your humidistat until you reach an appropriate humidity level. Additionally, you may want to run a kitchen or bath ventilating fan or open a window briefly if the humidity level gets too high.

Things to Remember

Always follow the manufacturer's operating and maintenance instructions included with your humidifier. For safer use of humidifiers:

- Always place your humidifier on a hard, level surface that will not be damaged by spilled water. Do not place your humidifier on a carpet or any cloth. Air must be allowed to circulate under the appliance.
- During operation warm mist humidifiers and steam vaporizers boil water. Keep the appliance out of reach of children and infants to prevent them from being scalded by the hot water in the appliance.
- Use only the type of water recommended by the manufacturer. Some types of water can damage a humidifier. Do not use water that has been treated with water softener. The chemical agents found in water softeners can cause problems in the humidifier.
- Do not use additives in the water that are not specifically recommended by the humidifier manufacturer. Unless there is a manufacturer's recommendation, using additives can cause irreparable damage.
- If a medicine cup is provided, only use liquid medications that are specified by their manufacturer for application with the humidifier.

Your family's health and comfort are a priority. Humidifying your home in the winter keeps your home comfortable and helps protect your belongings. Remember that maintaining proper moisture levels in your home provides health benefits and helps to reduce energy costs. Choose a humidifier that fits your space and best serves your needs.