



# ***Maintaining the Home***

## ***Ceiling Fans***

# Maintaining the Home: Ceiling Fans

---

Ceiling fans can be used to circulate air throughout your home. They can be used with a mechanical cooling system, or on their own, to create a wind chill effect. Install a fan in each room that needs to be cooled during hot weather.

## Choosing the Right Size

Ceiling fan blades range from 29 to 54 inches, the most popular being the 52-inch model. To determine which size you need, measure the room where the ceiling fan will be installed and follow these guidelines:

Room Dimensions	Suggested Fan Size
Up to 75 square feet	29 - 36"
76 - 144 square feet	36 - 42"
144 - 225 square feet	44"
225 - 400 square feet	50 - 54"

## Choosing the Appropriate Mounting System

Ceiling fans should be installed, or mounted, in the middle of the room and at least 7 feet above the floor and 18 inches from the walls. If ceiling height allows, install the fan 8 - 9 feet above the floor for optimal airflow.

- **Standard mounts** — These come with a 3 to 5-inch downrod, which is the metal pipe that extends from the ceiling bracket to the top of the fan. Downrods are usually either 1/2" or 3/4" inch inside diameter.

- **Extended mounts** — These can be used to hang the ceiling fan at the desired 8 – 9 feet from the floor for tall ceiling heights. Downrods can be purchased from 6 inches (9-foot ceiling) to 120 inches (20-foot ceiling). Check with the manufacturer or sales associate to determine the right downrod length for you.
- **Flush mounts** — Anchor the fan directly against the ceiling. Most standard fans can be installed as a flush mount however, many manufacturers sell “hugger” or “low profile” ceiling fans that are specifically designed for this purpose. Hugger fans are ideal for rooms that have ceilings under 8 feet in height or in situations where a fan with optional light would hang down too low. Hugger fans will not move as much air as a regular fan because the blades are closer to the ceiling.
- **Sloped mounts** — These are used for angled or vaulted ceilings.

## Wet/Damp Rating

If you are placing a ceiling fan in a bathroom or other humid location, purchase a fan that has been listed by Underwriters Laboratories (UL) with a “damp” rating. For fans that may come in direct contact with water, like on a patio or front porch, look for a UL “wet” rating. These fans include features such as sealed/moisture resistant motors, rust resistant housing, stainless steel hardware and all weather blades.

## Ceiling Fan Installation and Usage Tips

Ceiling fan performance and energy savings rely heavily on the proper installation and use of the ceiling fan. Here are a few tips to ensure quality product performance.

**Note:** Consumers should read and understand manufacturer instructions before attempting to install a ceiling fan.

**Choosing the appropriate UL-rated electrical box.** Make sure that you use the appropriate UL-listed metal box, marked “For Use With Ceiling Fans.” This outlet box is mounted above the ceiling and also is the point where the fan is attached. This box houses all wiring needed to operate and connect the ceiling fan. If you are replacing a ceiling fixture, most likely you will need to replace the electrical box.

**Mounting the ceiling fan.** If possible, the ceiling fan should be anchored to a ceiling joist. In the case that the joist is not located in the center of the room, a special ceiling fan mounting bracket with spiked ends should be installed between joists. Keep in mind that ceiling fans can weigh as much as 50 pounds.

**Balancing a Wobbly Fan.** All fan blades should be balanced prior to shipment; however, if the fan is wobbly after installation, there are ways to fix it. First, make sure that all connections are properly aligned and tightly fastened. Check the alignment of the blades by holding a yardstick vertically along the edges; you may be able to gently bend a misaligned blade holder back into proper place. If all blades are aligned, a balancing kit can then be used to pinpoint the culprit. These kits are either provided within product packaging (e.g., balancing clips and blade weights) or can be sent by the manufacturer free of charge.

**Turn off when not in the room.** Ceiling fans cool people, not rooms. If the room is unoccupied, turn off the ceiling fan to save energy.

**Using the ceiling fan year-round.** In the summer, use the ceiling fan in the counterclockwise direction. The airflow produced by the ceiling fan creates a wind-chill effect, making you feel cooler. In the winter, reverse the motor and operate the ceiling fan at low speed in the clockwise direction. This produces a gentle updraft, which forces warm air near the ceiling down into the occupied space. Remember to adjust your thermostat when using your ceiling fan. This also can save energy and money.

This material was adapted from publications produced by the U.S. Department of Energy. DOE publications can be found on the Web at <http://www.eere.energy.gov/>.

*This resource is one in a series on **Maintaining the Home** which include:*

---

### **Interior Maintenance**

Preventive Home Maintenance Checkup  
Make a Basic Toolkit for Simple Home Repairs  
Selection and Use of Home Cleaning Products  
Discovering the Secrets of Successful Storage

### **Heating**

Furnace Care  
Fireplace and Chimney Care

### **Cooling**

Evaporative Cooler  
Air Conditioner  
Ceiling Fans

### **Plumbing**

Fixing Plugged Sink Drains  
How to Unclog a Toilet  
Repairing Dripping Faucets

### **Electrical**

How to Set or Reset a Circuit Breaker  
How to Replace a Fuse

### **Appliances**

How to Buy an Energy Efficient Home Appliance  
Choosing a Water Heater

#### **Maintenance:**

Dishwasher Care and Dishwasher Cleaning  
Dryer Care and Dryer Cleaning  
Freezer Care and Freezer Cleaning  
Garbage Disposal Care and Cleaning  
Range and Oven Care and Range Cleaning  
Refrigerator Care and Refrigerator Cleaning  
Small Electrical Appliance Care and Cleaning  
Washer Care and Cleaning

### **Flooring**

Buying new carpet  
Carpet Care and Cleaning  
Wood Floors Care and Cleaning  
Ceramic Tile Floors Care and Cleaning  
Vinyl Floor Coverings Care and Cleaning

### **Walls**

Selecting and Applying Paint  
Wallpaper Selection and Cleaning  
Repairing Walls

### **Furniture**

Furnishing Your New Home: Color and Design  
Selecting Fabric For Home Furnishings

### **Exterior Maintenance**

#### **Home Exterior**

Foundations, Basements and Yards  
Exterior Walls, Windows, and Doors

#### **Roof**

A Guide To Roofs  
Roof Maintenance

#### **Landscaping and Lawn Care**

Principles of Xeriscape  
Watering Your Lawn

### **Home Safety**

Child-Proofing Your Home  
Is Your Home Safe From Fire Hazards?  
Smoke Alarms Save Lives  
Carbon Monoxide Alarms  
Are Your Children Safe From Poisons?  
Protecting Yourself Against Burglary

---

### **Maintaining the Home: Ceiling Fans**

---

## **Conservation**

Weatherize Your Home  
Easy Tips to Save Money and the Planet  
How to Stop Air Leaks Around Windows  
Energy-Efficient Heating and Cooling  
Indoor Water Conservation Tips  
Outdoor Water Conservation Tips

## **Environment Issues**

Green Building  
Reduce-Reuse-Recycle: Alternatives for Waste Management  
Create a home recycling center  
Healthy Indoor Air for New Mexico Homes  
Dealing with Mold  
Household Hazardous Waste  
Hazardous Household Substances: Alternatives That Are Relatively Free of Toxic Effects  
Radon

## **Pest Control**

Cockroaches and Their Control  
Southwest Insects

## **Accessible Living**

Update your home for a lifetime of living  
Vision Loss & Hearing Loss  
Hand Dexterity, Strength and Range of Motion  
Cognitive Difficulties  
Mobility Impairments, Balance and Coordination

---

Sponsored by New Mexico State University and the City of Las Cruces. Supported by U.S. Department of Housing and Urban Development. New Mexico State University is an equal opportunity/affirmative action employer and educator. NMSU and the U.S. Department of Agriculture cooperating. © 2005 NMSU Board of Regents. All rights reserved.



## **Maintaining the Home: Ceiling Fans**