

## Adjust Your Heating and Cooling to Lower Your Energy Bill

As much as half of the energy used in homes goes toward heating and cooling. The following are a few ways that energy bills can be reduced through adjustments to the heating and cooling systems:

- **Add insulation to the building envelope** (walls, floors and ceiling) to bring the home up to the U.S. Department of Energy-recommended limits for the climate zone where your home is located.
- **Insulate heating ducts.** Up to 40% of energy can be lost in uninsulated heating ducts routed through unheated space. This means that up to 40 cents of every dollar spent on heating can be wasted.
- **Install a ceiling fan.** Ceiling fans can be used in place of air conditioners, which require a large amount of energy.
- **Periodically replace air filters in air conditioners and heaters.**
- **Set thermostats to an appropriate temperature.** Specifically, they should be turned down at night and when no one is home. In most homes, about 2% of the heating bill will be saved for each degree that the thermostat is lowered for at least eight hours each day. Turning down the thermostat from 75° F to 70° F, for example, saves about 10% on heating costs.
- **Install a programmable thermostat.** A programmable thermostat saves money by allowing heating and cooling appliances to be automatically turned down during times when no one is home and at night. Programmable thermostats contain no mercury and, in some climate zones, can save up to \$150 per year in energy costs.
- **Install a wood stove or a pellet stove.** These are more efficient sources of heat than furnaces.
- **At night, curtains drawn over windows will better insulate the room.**

## Electrical Safety Tips

Electricity is an essential part of our lives. However, it has the potential to cause great harm. Electrical systems will function almost indefinitely, if properly installed and not overloaded or physically abused. Electrical fires in our homes claim the lives of 485 Americans each year and injure 2,305 more. Some of these fires are caused by electrical system failures and appliance defects, but many more are caused by the misuse and poor maintenance of electrical appliances, incorrectly installed wiring, and overloaded circuits and extension cords.

Some safety tips to remember:

- **Never use anything but the proper fuse to protect a circuit.**
- **Find and correct overloaded circuits.**
- **Never place extension cords under rugs.**
- **Receptacle outlets near water sources should be GFCI-protected.**
- **Don't allow trees near power lines to be climbed.**
- **Keep ladders, kites, equipment and anything else away from overhead power lines.**
- **Routinely check your electrical appliances and wiring.**
- **Frayed wires can cause fires. Replace all worn, old and damaged appliance cords immediately.**
- **Keep clothes, curtains and other potentially combustible items at least 3 feet from all heaters.**



## 15 Tools That Every Homeowner Needs

The following items are essential tools, but this list is by no means exhaustive. Feel free to ask me during your next inspection about other tools that you might find useful.

- **Plunger**
- **Combination Wrench Set**
- **Slip-Joint Pliers**
- **Adjustable Wrench**
- **Caulking Gun**
- **Flashlight**
- **Tape Measure**
- **Hacksaw**
- **Torpedo Level**
- **Safety Glasses/Goggles**
- **Claw Hammer**
- **Screwdriver Set**
- **Wire Cutters**
- **Respirator/Safety Mask**
- **Duct Tape**

## Spring Maintenance Checklist

Use this seasonal maintenance checklist in addition to the regular maintenance program for your house:

- **Check for damage to your roof.** Hail and wind can cause significant damage. After a major storm, consider scheduling an inspection to evaluate the condition of your roof.
- **Check all the fascia and trim for deterioration.** Wood elements should be checked for fungal and insect infestation. Inspect all caulked joints, particularly around window and door trim.
- **Repair all cracked, broken or uneven driveways and walks to help provide a level walking surface.**
- **Check the shutoff valve at each plumbing fixture to make sure it functions.**
- **Inspect and clean dust from the covers of your smoke and carbon monoxide alarms.** Replace their batteries when you change your clocks for Daylight Saving Time.
- **Replace all extension cords that have become brittle, worn or damaged.** Frayed wires can cause fires.
- **Check your fire extinguishers and review your fire escape plan with your family.**
- **Have a professional air conditioning contractor inspect and service your system.**

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## Appliance Life Expectancies

The following list details the predicted life expectancy of common household components. How long an appliance will last depends a great deal on how it is used. Furthermore, consumers often replace appliances long before they become worn out due to changes in styling, technology and consumer preferences.

- **Dishwasher:** 8 to 10 years
- **Dryer:** 8 to 14 years
- **Electric Water Heater:** 5 to 12 years
- **Faucets:** 10 to 15 years
- **Freezer:** 10 to 20 years
- **Garbage Disposal:** 8 to 10 years
- **Gas Oven:** 10 to 18 years
- **Humidifier:** 5 to 7 years
- **Microwave Oven:** 9 to 13 years
- **Refrigerator:** 10 to 18 years
- **Sink (China):** 15 to 20 years
- **Sink (enameled cast iron):** 20 to 30 years
- **Smoke Detector:** 5 to 10 years
- **Washer:** 12 to 16 years
- **Window A/C:** 5 to 8 years

## The Importance of Getting an Annual Home Inspection

Homeownership is a great experience, and home maintenance is a great responsibility. As time moves on, parts of your house will wear out, break down, deteriorate, leak or simply stop working. Your home is one of the largest investments that you will make in your lifetime. So why should it be inspected less often than your vehicle? When you schedule your annual inspection, the following areas will be covered:

- **roof;**
- **exterior;**
- **basement, foundation and crawlspace;**
- **heating and cooling;**
- **plumbing;**
- **electrical;**
- **fireplace;**
- **attic, ventilation and insulation;**
- **doors, windows and interior;**
- **and more.**

## Summer Maintenance Checklist

Use this seasonal maintenance checklist in addition to the regular maintenance program for your house:

- **Check children's backyard playground equipment.**
- **Check your wood deck or concrete patio for deterioration.** More decks collapse in the summer than during the rest of the year combined. If you are unsure about the safety of your deck or patio, an inspection should be scheduled.
- **Check the nightlights at the top and bottom of all stairs.**
- **Check exterior siding.** Look at all painted surfaces for peeling, blistering and checking. All wood elements should be checked for fungal and insect infestation. Check siding for loose, bent, cracked or broken pieces.
- **Check all window and door locks.**
- **Check your home for water leaks.** Unwanted water can intrude through cracks in the protective skin of the house. It can also accumulate from interior water sources. If leakage is suspected, an infrared inspection is highly recommended.
- **Check the water hoses on the clothes washer, refrigerator, ice maker and dishwasher for cracks and bubbles.**

## Childproofing Your Home

About 2.5 million children are injured or killed by hazards in the home each year. The following is a list of safety devices to protect your children:

- **Safety Gates:** Install safety gates to help prevent falls down stairs and to keep children away from potentially dangerous areas, such as pools.
- **Door and Safety Gate Locks:** Use locks on doors and safety gates to help prevent children's access to rooms and other areas that are potentially dangerous or that are not childproofed.
- **Anti-Scald Devices:** Use anti-scald devices for faucets and showerheads, and set your water heater temperature to 120° F to help prevent burns from hot water.
- **Safety Latches:** Install safety latches and locks on cabinets and drawers in the kitchen, bathrooms and other areas to help avert poisonings and other injuries by preventing children from gaining access to medicines and household cleaners, as well as knives and other sharp objects.
- **Window Guards:** Use window guards and safety netting to help prevent falls from windows, balconies, decks and landings.
- **Door Stops:** Use door stops and door holders on doors and their hinges to help prevent pinch and crush injuries to fingers and hands.
- **Electrical Receptacle Protectors:** Use receptacle (or outlet) protectors to help prevent children from exploring electrical wall outlets, which could lead to possible electrocution and death.
- **Edge Bumpers:** Apply corner and edge bumpers to furniture and fireplace hearths to prevent serious injury by softening any possible falls against sharp edges and rough surfaces.
- **Cordless Blinds:** Window blind cords should be cut to help prevent strangulation.
- **Smoke and Carbon-Monoxide Detectors:** Use a carbon-monoxide (or CO) detector outside each bedroom and smoke detectors on every level of your home and near bedrooms.
- **Cordless and Cell Phones:** Use a cell or cordless phone to make it easier to continuously watch young children.

## Fall Maintenance Checklist

Use this seasonal maintenance checklist in addition to the regular maintenance program for your house:

- **Have a professional check your heating system every year.** Replace the air filter. If the furnace is equipped with an oil or propane tank, the tank should be full.
- **Run all gas-powered lawn equipment until the fuel is gone.**
- **Test your emergency generator.**
- **Remove birds' nests from chimney flues and outdoor electrical fixtures.** The chimney should also be inspected for nesting animals trying to escape the cold. Squirrels and raccoons have been known to enter chimneys for this reason.
- **Make sure the caulking around doors and windows is adequate to reduce heat/cooling loss.**
- **Clean the gutters and downspouts.** If debris is left in gutters, it can get wet and freeze, permitting the formation of ice dams that prevent water from draining. This added weight has the potential to cause damage to gutters. Also, trapped water in the gutter can enter the house and lead to mold growth.
- **Make sure that the caulking around your bathroom fixtures is adequate to prevent water from seeping into the sub-flooring.**

## Exterior Service Life Expectancies

The following list details the predicted life expectancy of common exterior materials, systems and components. Exterior paints can last for 15 years or longer. However, homeowners typically paint more frequently. Surface preparation is the most important determiner of a house paint's life expectancy.

- **Asphalt, Wood Shingles/Shakes:** 15 to 40 years
- **Asphalt Driveways:** 8 to 12 years
- **Brick and Concrete Patios:** 15 to 25 years
- **Brick and Stone Walls:** 100+ years
- **Concrete Block Foundations:** 100+ years
- **Concrete Walks:** 10 to 20 years
- **Garage Doors:** 10 to 20 years
- **Gravel Walks:** 4 to 6 years
- **Gutters and Downspouts:** 25 to 30 years
- **Poured Concrete Foundations:** 100+ years
- **Pumps, Sump and Well:** 5 to 12 years
- **Sheet Metal:** 20 to 50 years
- **Stucco:** 20 to 40+ years
- **Tile:** 30 to 40+ years
- **Wooden Decks:** 12 to 20 years

## Winter Maintenance Checklist

Use this seasonal maintenance checklist in addition to the regular maintenance program for your house:

- **Inspect your chimney.** A chimney-cleaning professional should clean the chimney if it has not been cleaned for several years.
- **Confirm that firewood is at least 20 feet away from your home.**
- **Remove screens from windows and install storm windows.** Storm doors and windows should be installed to insulate the house and protect against bad weather.
- **Check your water heater.**
- **Insulate exposed pipes to prevent freezing.** All exposed water pipes in cold areas, such as attics, garages and crawlspaces, should be insulated. Foam or fiberglass insulation can be purchased at most hardware stores. Insulation should cover the entire length of the pipe.
- **Make sure that all electrical holiday decorations have tight connections.**
- **Test your heating system.** Test the furnace by raising the temperature on the thermostat. If it does not respond to the adjustment quickly, it might be broken.
- **Check all AFCI and GFCI devices.**

## Fire Safety Tips for the Home

The U.S. Fire Administration reports that more than 403,000 home fires occurred in the U.S. in 2008, causing 2,780 deaths and more than 13,500 injuries. Most home fires are preventable. Follow these safety tips to prevent home fires and protect your family.

- **Plan and practice your escape from fire.** Panic and fear can spread as quickly as a fire, so map out an escape route and a meeting place outdoors, and involve even the youngest family members so that everyone can work as a unit to make a safe escape.
- **Plan your escape around your abilities.** Keeping a phone by your bedside will allow you to call 911 quickly, especially if the exits of your home are blocked by smoke or flames. Keep a pair of shoes near your bed, too. If your home or building has a fire escape, take some time to practice operating it and climbing it.
- **Smoke alarms save lives.** If you don't already have permanently installed smoke alarms hard-wired into your electrical system and located outside each bedroom and on each floor, purchase units and place them in those locations.
- **Give space heaters space.** Make sure you give space heaters at least 3 feet of clearance. Be sure to turn off and unplug them when you leave or go to bed.
- **If you smoke, smoke outside.** Not only will this keep your family members healthier and your home smelling fresher, it will minimize the chance that an errant ember from your cigarette will drop and smolder unnoticed until it causes damage.
- **Be kitchen-wise.** Monitor what you have on the stove and keep track of what's baking in the oven. You should wear clothes that will not easily catch on the handles of pots and pans, or graze open flames or heating elements.
- **Stop, drop and roll.** Fight the urge to panic and run if your clothes catch fire because this will only accelerate its spread, since fire needs oxygen to sustain and grow.
- **Know your local emergency number.** People of all ages need to know their emergency number (usually, it's 911). Posting it near the phone and putting it on speed-dial will save precious moments when the ability to think clearly may be compromised.



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