

Do It Yourself
ENERGY SAVING TIPS

FURNACE

- Change your air filter regularly. Check your filter every month, especially during heavy use months (winter and summer). If the filter looks dirty after a month, change it. At a minimum, change the filter every 3 months. A dirty filter will slow down air flow and make the system work harder to keep you warm or cool — wasting energy. A clean filter will also prevent dust and dirt from building up in the system — leading to expensive maintenance and/or early system failure.
- If your furnace is old, consider replacing it with a high efficiency unit, which will save you a considerable amount of money on your heating bill as well as help reduce your carbon footprint.

BOILER

- Bleed trapped air from hot-water radiators once or twice a season (if needed).
- Place heat-resistant radiator reflectors between exterior walls and the radiators.

HOT WATER HEATER

- Install aerating, low-flow faucets and showerheads.
- Repair leaky faucets promptly; a leaky faucet wastes gallons of water in a short period of time.
- Lower the thermostat on your water heater; water heaters sometimes come from the factory with high temperature settings, but a setting of 120°F provides comfortable hot water for most uses and helps prevent scalding. Lower the temperature if you're going to be away for a few days or more.
- Take more showers than baths. Bathing uses the most hot water in the average household.
- Insulate your electric hot-water storage tank, but be careful not to cover the thermostat. Follow the manufacturer's recommendations.
- Insulate your natural gas or oil hot-water storage tank, but be careful not to cover the water heater's top, bottom, thermostat, or burner compartment. Follow the manufacturer's recommendations; when in doubt, get professional help.
- Insulate the hot and cold water pipes connected to the water heater.
- Although most water heaters last 10-15 years, it's best to start shopping for a new one if yours is more than 7 years old. Doing some research before your water heater fails will enable you to select one that most appropriately meets your needs.
- Consider tank-less water heaters. Researchers have found savings can be up to 30% compared with a standard natural-gas storage tank water heater.
- Reduce hot water usage – Take showers instead of baths to reduce hot water use. Fix leaky faucets and run clothes- and dishwashers with a full load. Install water-flow restrictors in showerheads and faucets. Restrictors can cut hot-water use without affecting comfort.

THERMOSTAT

- Check thermostat settings to ensure the cooling and heating system keeps you comfortable when you are home and saves energy while you are away.
- Set your thermostat as high as comfortably possible in the summer. The less difference between the indoor and outdoor temperatures, the lower your overall cooling bill will be.
- Don't set your thermostat at a colder setting than normal when you turn on your air conditioner. It will not cool your home any faster and could result in excessive cooling and, therefore, unnecessary expense.
- Don't place lamps or TV sets near your thermostat. The thermostat senses heat from these appliances, which can cause the air conditioner to run longer than necessary or your heat to shut off too soon.

Programmable Thermostat

- You can save as much as 10% a year on your heating and cooling bills by simply turning your thermostat back 10% to 15% for 8 hours. You can do this automatically without sacrificing comfort by installing an automatic setback or programmable thermostat.
- Using a programmable thermostat, you can adjust the times you turn on the heating or air-conditioning according to a pre-set schedule. As a result, the equipment doesn't operate as much when you are asleep or when the house or part of the house is not occupied. Programmable thermostats can store and repeat multiple daily settings (six or more temperature settings a day) that you can manually override without affecting the rest of the daily or weekly program.

MISCELLANEOUS

- Clean warm-air registers, baseboard heaters, and radiators as needed; make sure they're not blocked by furniture, carpeting, or drapes.

DUCTS

- Seal your heating and cooling ducts - Ducts that move air to-and-from a forced air furnace, central air conditioner, or heat pump are often big energy wasters. Sealing and insulating ducts can improve the efficiency of your heating and cooling system by as much as 20 percent — and sometimes much more. Focus first on sealing ducts that run through the attic, crawlspace, unheated basement, or garage. Use duct sealant (mastic) or metal-backed (foil) tape to seal the seams and connections of ducts. After sealing the ducts in those spaces, wrap the ducts in insulation to keep them from getting hot in the summer or cold in the winter. Next, seal ducts that you can access in the heated or cooled part of the house.
- Check your ducts for air leaks. First, look for sections that should be joined but have separated and then look for obvious holes.
- If you use tape to seal your ducts, avoid cloth-backed, rubber adhesive duct tape, which tends to fail quickly. Researchers recommend other products to seal ducts: mastic, butyl tape, foil tape, or other heat-approved tapes. Look for tape with the Underwriters Laboratories logo.
- Remember that insulating ducts in the basement will make the basement colder. If both the ducts and the basement walls are un-insulated, consider insulating both.*
- If your basement has been converted to a living area, hire a professional to install both supply and return registers in the basement rooms.
- Be sure a well-sealed vapor barrier exists on the outside of the insulation on cooling ducts to prevent moisture buildup.

- When doing ductwork, be sure to get professional help. Changes and repairs to a duct system should always be performed by a qualified professional.
- Ducts that don't work properly can create serious, life-threatening carbon monoxide (CO) problems in the home. Install a CO monitor to alert you to harmful CO levels if you have a fuel-burning furnace, stove or other appliance, or an attached garage.
- For new construction, consider placing ducts in conditioned space—space that is heated and cooled—instead of running ducts through unconditioned areas like the crawlspace or attic, which is less efficient.

AIR CONDITIONING

- Check and inspect the condensate drain in your central air conditioner, furnace and/or heat pump (when in cooling mode). A plugged drain can cause water damage in the house and affect indoor humidity levels.
- Clean evaporator and condenser air conditioning coils. Dirty coils reduce the system's ability to cool your home and cause the system to run longer, increasing energy costs and reducing the life of the equipment.
- Check your central air conditioner's refrigerant level and adjust if necessary. Too much or too little refrigerant will make your system less efficient increasing energy costs and reducing the life of the equipment.
- Clean and adjust blower components to provide proper system airflow for greater comfort levels. Airflow problems can reduce your system's efficiency by up to 15 percent.
- Whole-house fans help cool your home by pulling cool air through the house and exhausting warm air through the attic. They are effective when operated at night and when the outside air is cooler than the inside.

FIREPLACE

- Natural gas fireplaces offer a realistic dancing flame that resembles a genuine wood fire - without the mess. Most units feature an electronic ignition and fingertip heat controls. New fireplaces can be vented through an outside wall, eliminating the need for a chimney. Or, your current wood-burning fireplace can be retrofitted with a natural gas log set that will allow you to enjoy increased energy efficiency and the environmental benefits of natural gas