

AIR LEAKS

- Weather-strip doors and windows.
- Caulk cracks
- Seal unused doors.
- Use heavy plastic to replace missing storm windows or doors.
- Close door of attached garage in winter.
- Insulate outlets using foam pads available commercially.

TEMPERATURE CONTROL

- Reduce daytime home heating in winter, maintaining 68 degrees or lower temperature.
- Reduce nighttime winter temperature 5 to 10 degrees from usual setting.
- Reduce heating and cooling temperatures when away from home for long periods of time. No lower than 45 degrees.
- Close all doors leading from living areas into unheated (or cooled) basements, garages, attics, or crawl spaces.
- Leave doors ajar to unused rooms and closets and shut off heating and cooling outlets. If electric heat, turn thermostat low or off. Closing them completely might cause moisture to build up on sills.
- Keep all windows and doors shut when furnace or air conditioner is working.
- Limit in-and-out trips. Shut doors quickly.
- Close off flue when fireplace is not in use or block the opening with removable cover.
- Move furniture, curtains, or anything that blocks air circulation from heating and cooling outlets and return air ducts.
- Open draperies and roll up shades to take advantage of sun's free heat in winter; close them at night.
- Repair leaks and insulate heating and cooling ducts in spaces not heated or cooled.
- Keep air filters clean to make it easier for heating and cooling system to do its job. Check monthly.
- Use kitchen and bathroom exhaust fans only when necessary.
- Install ceiling fans. During the winter, reverse the fan to suck cool air up, and since warm air rises, it will circulate warm air from near the ceiling down to where you can feel it. This is especially important with tall ceilings.

SUMMER TEMPERATURE CONTROL

- Shade windows from direct sun in summer with draperies and roll-up shades.
- Use breezes from summer cooling. Open windows in evening; close during midday.
- Use window fans for cooling during summer when outside temperature is below house temperature.
- Set air-conditioning unit to recirculate cool air instead of pulling warmer outside air.
- Increase temperature setting for summer air-conditioning, 78 degrees or higher.
- Trim shrubbery or tree leaves so they do not restrict air flow on air conditioner.
- Cut down use of heat-generating appliance while air conditioner is operating. Schedule laundry and dishwashing during coolest part of day.
- Avoid air-conditioning laundry room.

HEATING WATER

- Reduce the amount of hot water used (install flow restrictors on shower and faucets).
- Heat water to the lowest temperature needed. Most dishwashers require 140 degrees temperature for effective cleaning.
- Insulate long hot water pipes, especially those under the house or in unheated basements.

- Drain a bucket of water from the faucet at the base of the hot water heater at least once a month to reduce mineral deposits.
- Repair leaky faucets.
- If you have an old water heater, buy a heater blanket, available for about \$15. These have vinyl-backed fiberglass and help eliminate heat loss.

LAUNDRY

- Wash only full loads of laundry.
- Use heated water in only the washing cycle.
- Use water no hotter than necessary for adequate soil removal and sanitation.
- Pre-treat stains to obtain satisfactory results in one washing process.
- Clean lint filters on washer and dryer after each use.
- Avoid over-drying in the dryer.
- Dry clothes in consecutive loads. Once the dryer is warm, it cuts down on initial energy use.
- Line dry garments and household items when practical.
- Use the dryer efficiently. Avoid drying one or two items at one time. Dry full loads, but don't overfill.
- Remove items when dryer stops to avoid unnecessary wrinkling, which will require ironing to remove.
- Reduce ironing to a minimum by careful selection of garments and household linens.

REFRIGERATION

- Avoid opening door unnecessarily.
- Keep grills and evaporator coils clean.
- Keep drains clean on self-defrost refrigerator.
- Locate refrigerator and freezer away from a heat source such as the range, hot air register, or direct sun.
- Provide adequate ventilation space above, behind, and on the sides for proper circulation.
- Defrost as needed.
- If cold air is leaking around door, have door adjusted or gasket replaced.
- When taking an extended vacation, turn off, empty, clean and leave refrigerator door opened.
- Cover all liquids stored in refrigerators. Moisture drawn into the air makes the refrigerator work harder.
- Don't store food such as unopened catsup, mustard, pickles and salad oil that don't require refrigeration.

COOKING AND BAKING

- Check pilot light adjustment on gas range to be sure it is not using excess energy.
- Turn off oven, surface units, or burners promptly when food is cooked. Electric surface units can be shut off a short period before food is done. It will continue to cook from stored energy.
- Reduce heat to maintain necessary cooking temperature when using surface units or burners.
- Use cooking utensils which fit the electric unit or gas burner.
- Use tight-fitting lids on cooking utensils, when appropriate. A pressure cooker and slow cooker or crock pot can save time and energy.
- Use small appliances for cooking, baking, and toasting if they are more efficient than the range.
- Substitute oven for surface cooking when appropriate. Oven cooking is more economical.
- Use oven to capacity. Two or three dishes can be baked with little more energy than one.
- Preheat oven only when necessary. Do not preheat longer than needed to attain required temperature.
- Reduce peeking into the oven to a minimum. Every time the door is opened, 25-50 degrees is lost.

DISHWASHING

- Turn hot water off between rinses when washing dishes by hand or use a pan of hot water for dipping.
- Accumulate dishes; hold until the dishwasher is filled. If dishes are hand washed, rinse and hold breakfast dishes until noon or evening.
- Avoid using drying cycle on dishwasher.

LIGHTING

- Turn off lights, when not needed, indoors and out.
- Reduce lighting levels to minimum for task to be performed.
- Use bulbs with lower wattage in halls, stairways, and other areas of general illumination.
- Use light colors in decorating to improve lighting efficiency.
- Do tasks which require a high light level during the daylight hours when possible.
- Keep lighting fixtures clean.
- Use fluorescent lighting for maximum light from electrical energy used. Although compact fluorescent light bulbs are more expensive, they use 66% less energy than standard incandescent bulbs and they last 10X longer (about 10,000 hrs).
- Use timers to turn lights on in the evening rather than leaving lights on all day when gone on vacation.

CLEANING AND MAINTENANCE

- Empty or replace vacuum cleaner bag frequently to keep it functioning efficiently.
- Eliminate unnecessary vacuuming and floor polishing.
- Use hand equipment rather than power equipment when practical.
- Develop preventive maintenance practices. Routine checkup and servicing will prevent great problems later.

PERSONAL CARE

- Minimize hot water used in bathing. Check to see if less water is used in showering than in bathing.
- Do not leave water running while shaving, brushing teeth, etc.
- Turn off faucets promptly after use.

RECREATION AND ENTERTAINMENT

- Turn off TV, radio, or stereo when no one is really watching or listening.
- Disconnect an instant-on TV when you are not going to be using it regularly.
- Maintain tools in good operating condition.
- Encourage family members to develop leisure activities such as bicycling, hiking, reading, swimming, etc., that have low energy costs.
- Spend vacations closer to home.
- Encourage home and neighborhood activities.

TRANSPORTATION.

- Walk, ride a bicycle, carpool or use public transportation whenever possible.
- Drive smoothly with gradual starts and stops.
- Don't warm up the car for more than a minute or two before driving.
- Provide proper maintenance; make sure you have well-tuned engines and properly inflated tires.
- Combine errands by careful planning. Short trips take over 60% of the gasoline families use.

Prepared by Iowa State University FAMILIES EXTENSION ANSWER LINE 800-262-3804