



HOME ENERGY AUDIT

A home energy audit is useful to review how much energy your home consumes, and to evaluate what measures you can take to make your home more energy efficient. You can easily conduct a home energy audit yourself. With a simple but meticulous walk-through, you can spot many problems in your home. Keep a checklist of areas you have examined and problems you have found.

First, make a list of obvious air leaks. Look for indoor air leaks, such as gaps along the baseboard or edge of the flooring and at corners of the walls and ceiling. Inspect windows and doors for air leaks. If you can see daylight around a door or window frame, then the door or window leaks. Check to see if air can flow through these places:

- Electrical outlets
- Switch plates
- Window frames
- Baseboards
- Weather stripping around doors
- Fireplace dampers
- Attic hatches
- Wall- or window-mounted air conditioners

If you are having difficulty locating leaks, you may want to conduct a basic building pressurization test:

1. First, close all exterior doors, windows and fireplace flues.
2. Turn off all combustion appliances such as gas burning furnaces and water heaters.
3. Then turn on all exhaust fans (generally located in the kitchen and bathrooms) or use a large window fan to suck the air out of the rooms.

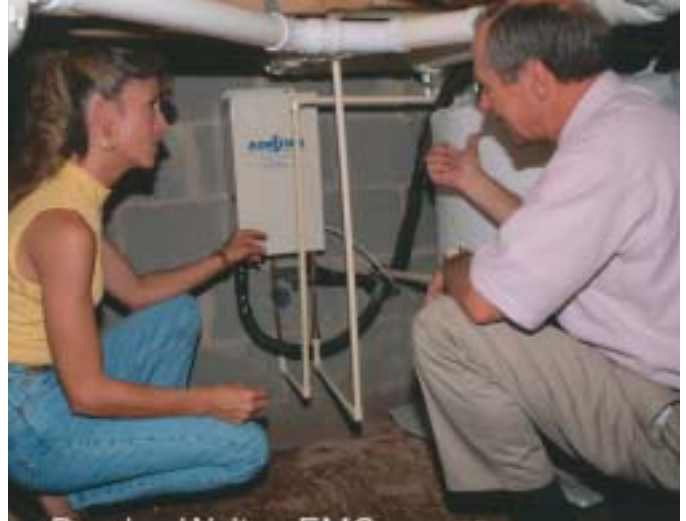
This test increases infiltration through cracks and leaks, making them easier to detect. Use your damp hand to locate these leaks.

On the outside of your house, inspect all areas where two different building materials meet, including:

- All exterior corners
- Where siding and chimneys meet
- Areas where the foundation and the bottom of exterior brick or siding meet.

You should plug and caulk holes or penetrations for faucets, pipes, electric outlets and wiring. Look for cracks and holes in the mortar, foundation and siding and seal them with the appropriate material. Check the exterior caulking around doors and windows and see whether exterior storm doors and primary doors seal tightly. Consider replacing old windows and doors with new high-performance ones.

- Check to make sure insulation is at recommended levels.
- Check to see that the attic hatch is well insulated.



With a simple but meticulous walk-through, you can spot many problems in your home. Keep a checklist of areas you have examined and problems you have found during your home energy audit.

- Inspect your heating and cooling equipment annually.
- Examine the wattage size of the light bulbs in your house. You may have 100-watt bulbs where 60 or 75 watts would do. Consider compact fluorescent lamps for areas where lights are on for hours at a time.

Home Energy Saver

The Home Energy Saver is designed to help consumers identify the best ways to save energy in their homes, and to find the resources to make the savings happen. The Home Energy Saver was the first Internet-based tool for calculating energy use in residential buildings. The project is sponsored by the U.S. Department of Energy (DOE), as part of the national Energy Star Program for improving energy efficiency in homes.

The Home Energy Saver quickly computes a home's energy use online. Users can estimate how much energy and money can be saved and how much pollution prevented by implementing energy-efficiency improvements. All end uses (heating, cooling, major appliances, lighting) are included as well as a detailed description of underlying calculation methods and data.

Users can begin the process by entering their zip code for instant initial estimates. By providing more information about the home the user will receive increasingly customized results along with energy-saving upgrade recommendations.

Visit the Home Energy Saver website at www.hes.lbl.gov.

Sources

John Krigger, Saturn Resource Management. www.srmi.biz. Author of numerous energy efficiency books including "Surviving the Seasons and Residential Energy: Cost Savings and Comfort for Existing Buildings."

U.S. Dept. of Energy, Energy Efficiency and Renewable Energy, www.eere.energy.gov