

Mobile home owners have many ways to increase energy efficiency

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Of the 413,000 housing units in Montana in 2000, about 59,000 were mobile homes. However, almost half of existing mobile homes were manufactured before 1976, when a federal housing code was passed that required them to be built with more energy efficient options. Some of the homes manufactured before 1976 have little or no insulation.

The good news is that there are many ways to increase the energy efficiency of a mobile home, which will lower utility bills and make it more comfortable. Some steps you can do yourself, and others require the skills of trained weatherization professionals.

Once the home arrives at its destination, it is secured on a level foundation with proper drainage. If the home is not level or the ground below is too moist, weatherization and repair steps will not be effective. Enlist the help of a qualified professional for help with siting.

In the late 1980s, the U.S. Department of Energy sponsored a two-year study to determine the most cost-effective energy conservation measures for mobile homes in cold climates. The study identified the following top five measures:

- Sealing air leaks and furnace ducts;
- Furnace tune-up;
- Blowing insulation into the home's underside (called the belly);
- Installing interior storm windows; and
- Blowing insulation into the roof.

Because of the wide construction variations of mobile homes, with the exception of installing plastic storm window kits that you can purchase at a hardware store, these measures will likely require the skills of professionals. Though you can easily seal noticeable leaks around your home's windows and doors, these efforts will have little effect on your energy consumption if the big hidden leaks go untouched.

Leaks are most easily found using a "blower door," which is a piece of equipment commonly used by professional weatherization crews. If you are on a limited income, you may qualify for free weatherization assistance. Contact your local utility, Human Resources Development Council or tribal weatherization program for details.

Weatherization makes good sense but, before tightening your home, it is imperative to make sure all combustion appliances such as furnaces, stoves and water heaters are in good working order and are properly vented. Failure to do so could lead to the accumulation of dangerous amounts of carbon monoxide in your home. This is another reason to consult a weatherization professional before taking on a major weatherization job yourself. It also is important to balance the fresh air intake needed by natural gas, propane and wood-burning appliances with the air sent outward by exhaust fans in the kitchen and bathroom.

If you cannot enlist professional help, you can still go after some big leaks. Plug all holes around chimneys, vents, water pipes and heating system ductwork. Seek out hidden air passageways in closets and cabinets.

Make sure the rodent barrier is intact and patch it if torn. Once you have stopped all the big leaks you can find, turn your attention to the little ones--around windows, doors, electrical outlets and light switches.

Low-cost but effective steps you can take to save energy in general

include:

- Installing a water-heater insulation blanket and a low-flow showerhead,
- Keeping your hot water temperature at 120 degrees Fahrenheit,
- Keeping your furnace thermostat at a comfortable but conserving temperature, such as 68 degrees, but reducing it at night and when you are away during the day,
- Keep forced air-furnace filters clean or replace them monthly,
- Keep electric baseboard heat registers cleaned,
- Keep furnishings from obstructing the flow of heat to the room,
- Periodically have your furnace checked and serviced,
- Wash clothes in cold water using cold water detergent, and
- Wash only full loads of laundry.

Provided by Montana State University

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