

A Cooperative Effort for Energy Efficiency www.TakeControlAndSave.coop

Seal your attic to save

When you want warmth and comfort

When winter approaches and temperatures fall outside, many people go indoors to escape the cold. So when the warm comforts of home leave you feeling chilled by air leaks or 'drafts' while your energy bill seems to be rising, taking control is your best option.

Look above to save

While you may feel those drafts around doors and windows, in many homes the most significant air leaks are in the attic and basement. These are the leaks that can significantly raise your energy bill and make your house feel uncomfortable. In cold weather, the warm air in your house rises, and is wasted as it leaks out the unsealed attic openings. Additionally, the moist interior air entering walls and ceilings through leaks can cause condensation buildup that can damage or destroy insulation, wiring, wood or other building material.

Did you know?

Even if you have enough insulation in your attic, sealing attic air leaks will enhance the performance of your insulation and make a more comfortable home.

Where do you start?

Air infiltration is fairly easy to correct, as long as you don't have a condition listed in the sidebar on the right. The process requires a careful inspection of your home and some inexpensive weather-stripping, caulking and filler material. However, develop a plan prior to jumping in.

Make a sketch of your home's floor plan to reference potential leakage areas, such as dropped soffits over kitchen cabinets or bath vanities, where walls (both inner and outer) meet the attic floor, slanted ceilings over stairways and any other dropped ceiling areas.

Gather your supplies before you begin to minimize trips in and out of the attic, and be sure the area is well-lit by using a drop light and having a flashlight handy. Wear lightweight coveralls, a hat and gloves to keep insulation off your skin, a mask to avoid inhalation of hazardous substances, and knee pads to prevent pain from crawling on attic joists. Above all, stay safe. Walk only on trusses or joists you trust and watch for nails sticking through the roof deck.



Look under your insulation to find and seal potential leaks in your attic floor.

Do you need a contractor?

Attic air sealing can be a do-ityourself (DIY) project if your attic is accessible and not too difficult to move around in. But you should contact a contractor first if your attic inspection finds any of the following.

- Wet or damp insulation indicating a leaky roof
- Moldy or rotted attic rafters or floor joists indicating moisture problems
- Kitchen, bathroom, and clothes dryer vents that exhaust moist air directly into the attic space instead of outdoors
- Little or no attic ventilation
- If you have unsealed and uninsulated recessed can lights, special care must be taken when insulating around these fixtures

Concentrate on the biggest leaks first

Your largest savings will come from fixing the largest leaks. Once in your attic, look at your sketch to find where these leaks are likely to be the greatest. Look for dirty insulation, as this indicates air is moving through it. Push back or scoop out the insulation so you can seal soffits and stud cavities, and replace the insulation when you are finished. Finished rooms built into attics often have open cavities in the floor framing under the side-walls or kneewalls. Plug these cavities in order to stop air from traveling under the floor of the finished space.

Additional sources of leaks

Holes in the attic floor

Seal all openings around electric wires, pipes, ducts, and vents with a good general-purpose caulk or spray foam. You may need to use a filler material for larger holes.



Furnace flues

The opening around a furnace or water heater flue or chimney can be a major source of warm air moving in the attic. Since the pipe gets hot, building codes usually require one inch of clearance from metal flues to any combustible material, such as insulation. Seal with lightweight aluminum flashing and special hightemperature caulk. Before you put the insulation back, build a metal dam to keep it away from the pipe.

Recessed can lights

Recessed lights can be sealed, but it is difficult and can create a hazard if not done properly with non-combustible materials. Since any older light requires air space to vent the heat from the bulb, consult a local professional before sealing them. Or recessed lights may be replaced with Insulated Ceiling Air-Tight (ICAT) rated fixtures that insulation can touch and are sealed to reduce air leaks.

Take Control & Save!

For step-by-step instructions and a glossary of listed terms, go to *www.energystar.gov* and search attic sealing. There you can view the DIY guide. To find out more about how to save energy and money, visit *www.TakeControlAndSave.coop*.



Attic door and fan

Your attic door and whole house fan access (if you have one) should be properly sealed as they are often big sources of heat loss.

Attic door: Attach insulation to the top of the door and add weather-stripping under where it rests on the lip of the opening. Measure the door to be sure it fits the opening, overlapping the molding lip so the weather-stripping seals well. If you have to make a new one, use a piece of half-inch drywall.

Attic pull-down stairs: Use a special insulated cover, such as a lightweight large rigid-foam domed device that covers the folded stairs from above, or a flexible zippered insulated cover that is permanently attached to the attic floor for a good airtight seal.

Whole house fan: Your fan should have a tight-sealing cover in place when it isn't running. Insulating kits can be purchased that you install on your ceiling below the fan shutter, or build your own to insulate the fan opening. Be sure to remove the cover or insulation prior to running the fan.

For instructions to seal attic openings, watch Touchstone Energy Cooperative videos at *youtube.com/user/TESimpleSavings*.



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