

# Seal Your Home (and Wallet)

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**Staying comfortable at home often means turning up the heat or air conditioning. But comfort can be costly if your home is not properly sealed from the elements.**

Roughly half of the energy used by a home powers heating and cooling. In a poorly insulated home, conditioned air slips outside.

Sometimes air leaks are obvious. If you pass by a window or door and feel a change in temperature, something is wrong. Some folks think it means they need new windows, and that could be the case. But for most, spending a few minutes and a few dollars to seal a home adds up to big savings.

Cold air enters a home through small openings. To find problem areas, use a lit incense stick or a recently extinguished match and move it around the edge of closed windows and doors. Here are a few remedies to fix the problem:

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Add weather stripping to the edges of windows and doors. Stripping typically uses sticky tape to adhere to the side of the window and fill gaps.

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If your home uses single pane windows, consider adding storm windows to the exterior as added insulation.

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Replace old cracked caulking. Make sure you use caulking designed for the application. There are different types of caulk for exterior, interior, and bathroom applications; don't use bathroom caulk on the outside of your home. Also, make sure the caulk can be painted if you want it to blend in with the rest of your home.

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Use insulated curtains to prevent further heat loss.

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Remove window air conditioning units when summer ends.



A quick walk around the outside of your home reveals other prime candidates for quick and easy repairs. Anytime a hole is drilled into a home, it creates potential for energy loss. Check pipe and wire penetrations—they should be sealed on both exterior and interior walls. This not only helps prevent energy loss, but also keeps critters from taking up residence.

The ductwork of a forced air furnace, central AC unit, or heat pump is another source of energy loss. According to ENERGY STAR, sealing and insulating ducts improves system efficiency by as much as 20 percent.

Of course, this requires effort and time. First, focus on ducts running through unconditioned crawl spaces, garages, and attics. Seal ducts using a special duct sealant or metal tape that can be found at most home improvement stores. Despite the name, don't use duct tape—it doesn't last as long as sealant or metal tape.

Once ducts are sealed, check connections at bends and air registers to make sure everything is tight. Once finished, wrap ducts with insulation. Since this may be a dirty and time-consuming job, many homeowners ask a HVAC company to perform this work.

Another dirty job involves adding insulation to the attic and floors exposed to crawl spaces or unheated areas. The amount of insulation needed varies depending on your home's location.

R-values reflect the ability of insulation to resist the transfer of heat. Higher R-values indicate more effective insulation. The typical home will need anywhere from R-38 to R-49 in

an attic and R-25 in floors. You can get advice on how much insulation you need at your local hardware store. In an ideal world, wall insulation should also be increased, but this generally is not practical.

Remember, no amount of insulation will help if doors or windows are left open. A rush of cold outside air can cause your heating unit to fire up, especially if the door isn't closed right away. Create a jar and charge repeat offenders \$1 each time a door is left open when someone leaves or enters the home. Use that money to buy caulking and weather stripping to seal up windows and other cracks.

Sealing your home can even into a fun activity. Have each member of the family explore the house and identify problem areas. Whoever finds the most areas to fix gets to be the foreman while the rest of the family fixes the problems. It's a fun and simple way to get the entire family engaged as you work together to seal your home and your wallet! ■



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