

TIPS

AIR SEALING BASICS



What is air sealing?

Air sealing is the process of identifying and reducing the amount of unwanted air that leaks into and out of your home.



Powering The Center of What's Possible

Why would you air seal a home?

Air leakage occurs when unwanted air moves in and out of your home, causing drafts that make you feel colder than it really is. As a result, your heating and cooling systems have to work harder and longer to keep you and your home at a comfortable temperature. This results in an increase to your monthly utility bill. Air sealing reduces these air leaks, making your home more comfortable and more efficient at the same time.



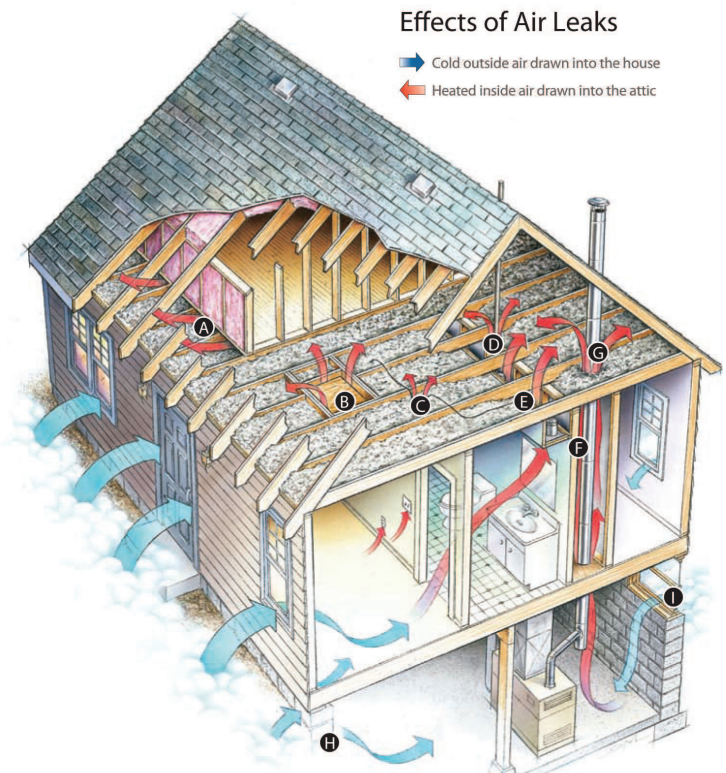
Where do common air leaks occur?

Air leaks can occur anywhere there is a penetration in the interior wall, ceiling or floor of your home.





COMMON HOUSEHOLD AIR LEAKS

- A** Behind Kneewalls
- B** Attic Hatch
- C** Wiring Holes
- D** Plumbing Vent
- E** Open Soffit
(the box that hides recessed lights)
- F** Recessed Light
- G** Furnace Flue or Duct Chaseways
(the hollow box or wall feature that hides ducts)
- H** Basement Rim Joists
(where the foundation meets the wood framing)
- I** Windows and Doors



Effects of Air Leaks

-  Cold outside air drawn into the house
-  Heated inside air drawn into the attic

Reprinted with permission from the U.S. EPA's ENERGY STAR® program

CONTINUED ON BACK

EASY WAYS TO REDUCE AIR LEAKS

Some areas of air sealing are best left to professionals, but there are many simple, low cost solutions for sealing air leaks in your home that are do-it-yourself (DIY) projects.

DOOR WEATHER-STRIPPING

If you can see light around or at the bottom of the door, it needs better weather-stripping. Use a base shoe at the bottom of the door to seal between the door and the threshold. Use a foam strip or door gasket at the sides and top of the door to make a tight seal. The total cost of materials is typically less than \$20.



FOAM GASKETS

Use foam gaskets behind switch and outlet covers. They are inexpensive, easy to install and significantly reduce the amount of air leakage at these locations. The total cost is less than 25¢ per outlet.



SPRAY FOAM AND CAULKING

Spray foam is useful to fill larger gaps often found where pipes penetrate through the wall. Use caulking to seal the inside and outside of windows where the window meets the house. Materials typically cost \$3-\$5 per can or tube.



**Step-by-step DIY
guides on Air Sealing:**

ENERGY STAR®
energystar.gov/index.cfm?c=diy.diy_locating_leaks

Silicon Valley Power
siliconvalleypower.com/weatherization

Department of Energy
energy.gov/energysaver/articles/air-sealing-your-home