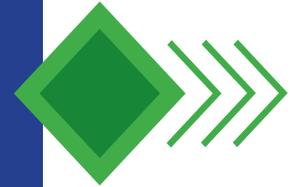




AIR SEALING WHAT TO KNOW

Air sealing is a challenging and important job that involves closing holes and gaps in the shell of your home to prevent outdoor air from entering or indoor air from escaping outdoors. Done right, it can bring increased comfort, safety and health to your home while also saving money on heating and cooling bills. If you are eager to insulate your home, air sealing is a critical first step to help the insulation work better because insulation alone does not stop air leaks.



BENEFITS

Improves comfort.

Households often experience improved comfort, which includes lower indoor humidity in the summer, less dry air in the winter and fewer drafts.

Lowers utility bills.

The impact of air sealing varies dramatically on every home, but energy savings on the heating and cooling portion of the bill can range from 5 to 30%. Energy savings can increase further by properly installing insulation after air sealing is complete.

Keeps out pollutants and pests.

Air sealing typically improves indoor air quality because it involves closing the holes and gaps that allow dust and pests to come indoors. There is some concern that homes can be “too tight” and ultimately be a health hazard, so it’s important to include a home energy professional in the process to ensure appropriate health, safety, ventilation and moisture management measures are in place.



GETTING STARTED SAFELY

Be sure to check your home for possible environmental hazards before starting an air sealing project (or any home energy upgrade).

A few examples of possible hazards include:

- ✘ Sewer gases, fuel oil, chemicals and other pollutants in garages, crawl spaces or attics
- ✘ Microbial growth in attics and crawl spaces
- ✘ Presence of pests/rodents in crawl spaces or attics
- ✘ Lack of carbon monoxide alarms in homes with combustion appliances or attached garages
- ✘ Poorly vented combustion appliances, such as furnaces or water heaters
- ✘ Combustion air intakes
- ✘ Knob-and-tube wiring
- ✘ Unvented gas or kerosene space heaters
- ✘ Vermiculite or pipe insulations that may contain asbestos
- ✘ Deteriorated interior finishes that may contain asbestos or lead in an easily crumbled condition

For more information, the U.S. Environmental Protection Agency’s Healthy Indoor Environment Protocols for Home Energy Upgrades* is a useful tool for finding solutions to common issues.

AIR SEALING • WHAT TO KNOW

ATTIC & FLOOR

✗ BEFORE



✓ AFTER



SEALING PENETRATIONS

Many small holes around wires and pipes add up to lots of leaks.

WHY? Increases energy efficiency.

✗ BEFORE



✓ AFTER



CAPPING CHASES & SOFFITS

Prevents extremely hot or cold attic or crawl space air from making indoor spaces uncomfortably hotter or colder.

WHY? Improves comfort and increases energy efficiency.

WALLS

✗ BEFORE



✓ AFTER



WINDOWS & DOORS

Windows and doors need to be securely latched and weather sealed, especially storm windows and doors.

WHY? Reduces drafts and noise, and increases comfort.

✗ BEFORE



✓ AFTER



ATTIC KNEE WALLS

Attic knee walls need to be air sealed, insulated and covered to stop attic air from radiating uncomfortable temperatures into the living space.

WHY? Improves comfort and increases energy efficiency.

HOME ENERGY PROFESSIONALS

Home energy professionals are trained and certified to analyze and improve homes while mitigating health hazards. Professionals can be found through the Building Performance Institute (BPI) at www.bpi.org or 877-274-1274.

- ▶ We recommend obtaining estimates from at least three companies.
- ▶ Ask for a handful of references and contact at least three from each company to make sure the professionals were respectful, timely and did quality work.
- ▶ It is also helpful to see a sample audit report.

FOR MORE INFORMATION

To learn more about air sealing, visit the ENERGY STAR® website: www.energystar.gov/saveathome/seal_insulate/why-seal-and-insulate