

DIVINE ENERGY SOLUTIONS AIR SEALS - SEAL AIR LEAKS & SAVE MONEY



BEFORE YOU INSULATE, YOU SHOULD MAKE SURE YOUR HOME IS PROPERLY AIR SEALED.

AIR SEALING & DETECTING LEAKS: Air

leakage, or infiltration, is outside air that enters a house uncontrollably through cracks and openings. It can account for 30 percent or more of a home's heating and cooling costs and contribute to problems with moisture, noise, dust, and the entry of pollutants, insects, and rodents. Reducing infiltration can significantly cut annual heating and cooling costs, improve building durability, and create a healthier indoor environment.

You may already know where some air leakage occurs in your home, such as an under-the-door draft, but you'll need to find the less obvious gaps to properly air seal your home. For a thorough and accurate measurement of air leakage in your home, our qualified Home Energy Auditors can conduct a complete Home Energy Assessment, particulary a blower door test. A blower door test, which depressurizes a home, can reveal the location of many leaks. The auditor will also include an insulation check to help determine areas in your home that need more insulation, as well as identifying areas of your home that are in need of air sealing.

SEALING LEAKS & ADDING

INSULATION: Sealing leaks with spray foam, caulk, or weather stripping will have a great impact on improving your comfort and reducing utility bills.

Insulation keeps your home warm in the winter and cool in the summer. When correctly installed with air sealing, insulation can deliver comfort and lower energy bills during the hottest and coolest times of the year.

Insulation performance is measured by R-value, it's ability to resist heat flow. Higher R-values mean more insulating power. Insulation works best when air is not moving through or around it. So it is very important to seal air leaks before installing insulation to ensure that you get the best performance from the insulation.

To easiest place to add insulation is usually in the attic. The recommended insulation level for most attics is R-38, (or approximately 12" or more), depending on the insulation type.

SEALING DUCTS: In houses with forced-air heating and cooling systems, ducts are used to distribute conditioned air throughout the house. In a typical house, however, about 20 percent of the air that moves

through the duct system is lost due to leaks and poorly sealed connections. The result is higher utility bills and difficultly keeping the house comfortable, no matter how the thermostat is set.

Exposed ducts in attics, basements, crawlspaces, and garages can be air-sealed. In addition, insulating ducts that run through spaces that get hot in summer or cold in winter, (like attic, garages, or crawlspaces), can save significant energy.

IN ADDITION: Homeowners are often concerned about sealing their house too tightly, however, this is very unlikely in most older homes. A certain amount of fresh air is needed for good indoor air quality and there are specifications that set the minimum amount of fresh air needed for a house. (If a home owner is concerned about how tight the home is, ask the auditor to recommend a fresh air ventilation system).