

A Double-digit Rate of Return in This Economic Climate?

By Steve Seawright

Are you so financially secure that you can't be bothered by A NO RISK, DOUBLE-DIGIT, GUARANTEED rate of return? If your answer is "yes," congratulations! You are part of the "lucky gene pool." If not, and you live in a home built prior to 1990 and have not commissioned an Energy Audit of your home, then what are you thinking!?

A no risk, double-digit, guaranteed rate of return from commissioning and acting upon an Energy Audit? It might seem like I'm channeling Bernie Madoff, but I'm not. I am, however, passing along this advice: "Obtain a full Energy Audit of your home through your local electric utility, which probably is heavily subsidizing the audit cost, and invest in implementing the Audit's most cost-effective recommendations for energy conservation." Do this and you are assured of having a "no risk, double-digit, guaranteed" rate of return on your investment for as long as you own your home.

Energy Audit? Wasn't that "Bubba with a clip board", who walked around the house, made a few notes on a check list, said "Uh-huh" a lot, grunted a little and left me with the check list before disappearing?

While that may have been an apt characterization of a so-called energy audit 15 years ago, that was then and this is now. Today an energy auditor will be a licensed, certified professional, schooled in advanced building science and equipped with \$12,000 - \$15,000 in testing instrumentation. This high-tech hardware enables the certified technician to measure and document all of the characteristics of your home affecting energy efficiency and all of the correctable factors that result in energy loss. At the same time the energy auditor will check gas or oil furnaces for combustion efficiency, will check flues for proper draft and will check for detectable levels of carbon monoxide.

The underpinning of an energy auditor's complete audit of your home will be 1) a "blower door test"; 2) a "duct blast test"; 3) "thermographic imaging" (a camera that sees and can photograph "heat signature", showing precisely where heat inappropriately is being either lost or gained, which affects both energy consumption and indoor comfort); and 4) crawling into and visually examining portions of your crawl space and attic that you probably never have seen before.

While a duct blast test typically would not be part of an Energy Audit subsidized by a utility company, the duct blast test is necessary for a full understanding of a key factor (ductwork air infiltration) that may be affecting home energy use adversely. Although a "Blower Door Test" will measure whole house air infiltration into the home as a system, it does not specifically measure the results of poorly installed ductwork, which is the sole object of the duct blast test.

As to the cost of an Energy Audit, the first thing to understand is that, "It does not cost. It pays." An Energy Audit more than pays for itself by a wide margin if you implement only a few of the most cost-effective recommendations for energy conservation improvements made by the energy auditor.

If you are a Potomac Edison or PEPCO customer, your present, subsidized Energy Audit cost will be \$140 or \$100 respectively. This same audit would cost the builder of a new home (which does not qualify for the audit subsidy) between \$400 and \$500.

For Energy Audit draft-stopping recommendations that can be accomplished by a handy homeowner, the investment of another \$50 - \$100 in caulking, foaming and taping materials readily can result in reductions in energy consumption of \$50 - \$250 each month during peak heating and cooling seasons for your remaining period of ownership.

Three take-away points are 1) An Energy Audit and energy conservation home improvements are the closest things to a "guaranteed return" that ever will be available to you; 2) you work hard for your money and you should make what you earn work hard and smart for you; and 3) if an Energy Audit will not address the most important things you would like to change about your present home, invest in a new "high performance" home (a verified HERS Index of 70 or less), where the incorporation of advanced building science and energy conservation testing already have been accomplished for you.