C.L.I.

# Energy Savers

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**Recent Ohio Headlines**

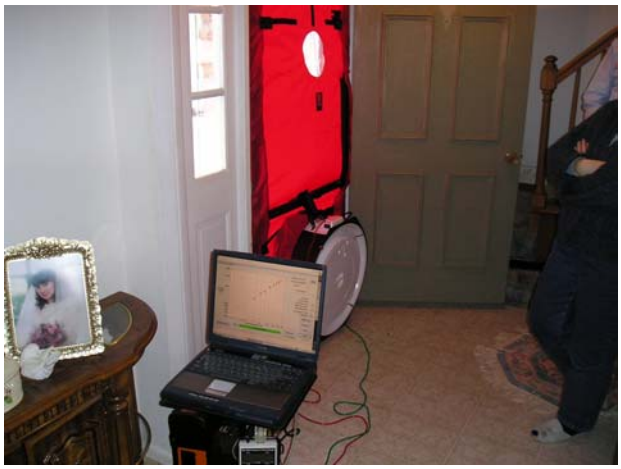
- Residents paying record prices to heat homes
- Some people facing triple digit increases in cost to heat their homes
- Average natural gas customer will see 43 percent increase in cost this year

## You Have to Find Leakage to Fix It

Whether you are hiring outside contractors or performing your own energy saving retrofits there are a few things you will want to know before you begin. Surprisingly, many of the most common updates may not achieve the desired results. For example, simply adding new windows to an older home may not end high heating bills.

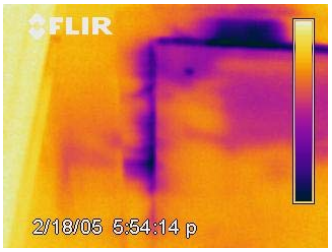
Studies have shown that windows and doors play a small roll in energy being lost from most homes. When you consider the cost of replacing older windows, there may be more effective retrofits which could be performed at a much smaller cost. Of course, some homeowners change windows for purely aesthetic reasons in which case energy savings is not the goal. However, if it is energy savings you desire, you will first want to track down the biggest energy losers. To do that, you should hire a certified home energy rater. A certified HERS rater has specialty knowledge and equipment that can greatly reduce the guess work in energy retrofits.

Using equipment such as blower doors and thermal imaging camera's the rater can not only find the leakage in the building, but quantify it as well. The ability to find hidden leaks can greatly improve your retrofitting project.



## Using Infrared Technology in Energy Battle

Infrared thermography, used in conjunction with the blower door is the raters way to find hidden air leakage and leakage pathways in the building. This allows for sealing operations to be both fast and efficient by allowing the contractors to seal the leaks in order of importance and not waste time in areas that are not leaking. This saves costs in both time and materials. The darker areas in the image show a severe leakage point at the wall/ceiling line in a bedroom. Cold air was sucked through the leak during de-pressurization. This could be your heat leaking out. This leak was one easily found and easily corrected. No wasted time or materials here.



## What To Look For in an Energy Consultant

Finding the right energy consultant can make the difference between finding cost effective solutions to energy problems and not finding them. An energy consultant, in addition to being trained and experienced in energy matters should have other training as well.

Building Science—in order to understand the building and how all of the components work together an energy consultant should have both training and experience in building science issues.

Building Codes—a consultant should be a certified energy inspector and plans examiner. This shows that the consultant knows the requirements of the energy codes and how to interpret drawings to look for discrepancies between the drawings and the finished product.

Certification—the consultant should be not only certified in energy codes, they should be a certified HERS rater through RESNET. This certification shows that the rater has shown through training and testing that they possess the required field of knowledge and experience to properly evaluate a homes energy usage. A consultant MUST be a Certified (HERS) rater in order to perform Energy Star ratings, energy efficient mortgage ratings, etc.


**Energy saving measures should start at the design stage**

## Duct Leakage

Duct leakage can be one of the biggest sources of energy lost in a home. Poorly fitted ductwork can also lead to many other serious conditions within the home including pressure related problems from pressurization or de-pressurization of the building or areas of the building.

Today, the word MOLD strikes fear in homeowners, insurers and builders alike. Many mold related issues can be attributed to duct leakage. There are other environmental hazards which can also be traced to duct leakage. Carbon Monoxide issues should be considered during any retrofitting project. Altering a building by adding windows, insulation, exhaust fans, etc. can all affect the way the building and it's systems operate.

Successfully diagnosing and correcting a duct leakage problem requires experienced technicians.

***"Call Closer Look Inspections today to have your home audited by a HERS Certified Energy Rater (440) 946-7191"***

## Backdrafting

As stated above, duct leakage can lead to other problems within the building. In some cases, areas of the building can become de-pressurized by duct or building leakage, exhaust fans, etc. When this de-pressurization occurs in areas housing fossil fuel fired appliances, a danger of backdrafting of exhaust gases can occur.

Your energy consultant should understand backdrafting and how to find it. This critical test should not be overlooked.

Closer Look Inspections performs WCD (Worst Case Draft) assessments as part of all retrofitting projects to assure that energy related retrofits have not altered the buildings pressures causing backdrafting. If backdrafting does occur, mechanical ventilation can usually correct the problem.