

InspectMichiana.com

Certified Home Inspections of Northern Indiana LLC

Education and Discovery of Maintenance in Homes™

WE CAN HELP Your Clients SAVE SAVE SAVE on their ENERGY BILLS \$\$\$

We all want to save money on our energy bills, right? Well, this winter is going to be a tough one. Projections from The Energy Information Administration, a statistical division of the U.S. Department of Energy, show that **natural gas and heating oil prices will be at record levels this winter**. In some cases propane and kerosene are already twice as high as they were two years ago. Recently, the EIA released data projecting that heating fuel expenditures for the average household using natural gas would increase 19 percent over last winter and 30 percent for oil. Making things worse is the soft economy. It's expected that homeowners will be looking for help after receiving the first heating bill of the season.

Save Energy
Save \$Money
Help the Environment



Going back to common sense tips, such as those listed to the right, can help. Even better, **Certified Home Inspections now offers Home Energy Tune-up® ENERGY AUDITS**, a service that shows homeowners how to save energy and money. Energy improvements are unique because they create a stream of income in reduced monthly energy bills that will often cover the monthly cost of the investment.

WHO CAN BENEFIT FROM AN ENERGY AUDIT?

- **SELLERS** – to show potential buyers that the home they're listed IS or HOW TO make it as energy efficient as possible
- **BUYERS** – gives an energy conscious perspective on what they're buying so informed energy efficient improvements can be made because statistics show that most home improvements are made in the first three months of owning a home
- **EXISTING HOMEOWNERS** – to lower their energy bills or make their homes more comfortable

As a **Certified Tune-up® Energy Specialist**, the inspector examines all the energy-related features. The data is entered into the Home Energy Tune-up® software, uploaded to CMC Energy Services for current energy cost calculations and analysis. A comprehensive report is generated identifying: (1) opportunities for improving the energy efficiency of the home and (2) the group of upgrades that saves more than it costs. The estimated costs, savings and payback of the improvement opportunities are customized and listed to enable homeowners to make educated decisions as to which recommendations to implement.

The Home Energy Tune-up® is available NOW and is being offered for an introductory price of \$149. The audit takes approximately two hours with report delivery the next day.

Home Energy Tune-up® ENERGY AUDIT

Energy Efficiency Improvement Opportunities

The following table summarizes the energy efficiency improvement opportunities available for your home and lists estimates of the annual savings, costs, and payback (the cost divided by the annual savings). Details for each improvement opportunity are provided in the recommendations section of the report.

Table 1

Feature	Recommendation	Estimated Annual Savings*	Estimated Cost	Payback (Years)
Programmable Thermostat - Unit 1	Install	\$142	\$221	2
Duct/Pipe Insulation	Insulate	\$32	\$48	2
Gas Boiler - Basement	Obtain tune-up	\$47	\$188	4
Air Sealup	Seal air leaks	\$117	\$583	5
Water Heater - Basement	Replace Due to Age	\$99	\$762	8
4 Mini Basement Window(s)	Replace with double-pane	\$27	\$282	10
Basement Wall Insulation - Area 1	Insulate to R 13	\$14	\$291	21
Clothes Washer - Basement	Replace due to age	\$34	\$775	23
Freezer - Garage	Replace due to age	\$24	\$660	28
Total			\$3,810	

* Total annual savings are not included since each savings estimate assumes that all other features remain the same.

Implementing all these recommendations would result in an annual reduction of Greenhouse Gases equivalent to not driving a car for 2.3 months.

SAMPLE RESULT SUMMARY

COMMON SENSE CONSERVATION TIPS FOR HEAT & HOT WATER

- Check weather stripping around windows and doors.
- Change heating and cooling filters once a month.
- Use a programmable thermostat to automatically turn the heat down at bedtime and when the house is unoccupied it will also turn heat up just before you get up in the morning or return home in the evening.
- On demand water heaters do much the same as the thermostat, heating water only when it is normally used rather than keeping it hot all day and night. Or use electric water heaters that heat during off-peak hours.
- Turn heat off (or close registers) and close doors to unused rooms. Same with air conditioning, only heat or cool the main living area.
- Reduce your air conditioning needs by installing ceiling fans and strategically placing fans to keep living areas comfortable.
- To keep the heat in (or out) Insulate doors, windows, floors, ceilings and walls.
- Insulate your hot water tank and pipes by wrapping insulation around them. Keep the thermostat under 120° F (48° C) for safety and savings.

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Certified Home Inspections is a locally owned, multi-inspector firm serving the Michiana area. Our home inspectors are licensed in the state of Indiana and regularly attend continuing education courses. We do this as part of our commitment to provide the most thorough home inspection possible. Office staff is available to support our clients and realtors with administrative needs such as scheduling and issuing reports. It is our pleasure to help make the home buying and selling experience go as smooth as possible. We look forward to serving you!

John and Dawn Hatfield

Owners

Online home inspection blog!

blog.asktheinspector.info

Email your inspection questions to:
theinspector@asktheinspector.info

Radon and Granite Countertops – Is it Dangerous?

There has been much conversation about the New York Times article this summer titled "What's Lurking in Your Countertop?". Here at CHI we have received several phone calls asking if homes with granite countertops should be tested.

The article stated that a woman on the east coast had a radon tester come into her home with a Geiger counter which showed radon levels 10 times higher in her kitchen than anywhere else in the house. The tester pin pointed the radon emitting from granite countertops in her kitchen was at 100 pCi/l. This woman had her granite countertops removed from her kitchen that very day.

Let's take a look at this story a little closer and answer the following two questions:

Question #1

- IS IT TRUE THAT GRANITE CAN EMIT 10 TIMES THE RADON THAN OTHER AREAS IN THE HOME WHERE GRANITE IS NOT PRESENT?

Question #2

- IS REMOVING GRANITE COUNTERTOPS FROM A HOME NECESSARY TO REDUCE MY RISK OF LUNG CANCER?

The American Association of Radon Scientists and Technologists (AARST) released the following statement regarding radon emissions from building materials including granite. The August 2008 Position Statement "Granite Countertops and Radon Gas" was in response to the New York Times article:

"Direct measurements in a building of the gamma radiation or radon emanation from a material such as granite, is not a reliable indicator of radon concentrations that will be in the air you breathe. Attempts to use such measurements for estimating risk are subject to large errors due to the:

- a) wide variability of radon emanation rates across the surface of granite .*
- b) significant variability in ventilation rates from home to home and room to room.*
- c) volume of space that the building material is contained in.*

The AARST further states, "Diagnostic measurements of the radon in the air you breathe can provide better risk estimates".

SO WHAT DOES THIS MEAN?

Question #1—While it may be true that granite can emit radon levels 10 times higher than radon levels in other rooms without

granite present, **this does not mean you should test the granite countertop itself and use that measurement level as a way to estimate your risk for lung cancer.** The AARST makes a valid point stating when these alleged higher levels come from the granite they immediately mix with the air you breathe. This in turn changes the radon level floating in the air. Since the concentrated level of radon coming from the granite would be much less after mixing with the air, it is fair to say testing this "mixed" air (aka the air you breathe) would give a more accurate reading in determining your risk of lung cancer.

Question #2—**Removing granite countertops from a home is not necessary to reduce your risk of lung cancer.** The EPA stands behind it's protocol in stating that every home should be tested, new or old, basement or no basement and the testing should take place in the lowest livable area. The AARST further suggests testing rooms with granite or other suspected high radon building materials. If test results are over 4.0 pCi/l the EPA states the home should be mitigated only after a second test confirming high levels. According to the EPA, mitigation is a proven and effective way of reducing your risk of lung cancer.