

THE HERALD



Since 1984

Winter 2009

A Comprehensive Home Assessment Gets To The Heart Of The Problem

Doctors...

...don't treat without a diagnosis. Our BPI (Business Performance Institute) Certified Home Energy Performance professionals take the same approach. They start with a Comprehensive Home Assessment using high-tech instruments and sophisticated software to pinpoint just where you are wasting energy.

Your wasted energy may not be the furnace's fault. It could be insufficient insulation, leaky windows and doors, unsealed or incorrectly sized ductwork. Or, it could be an inefficient furnace. Our pros will identify areas that need attention and make energy

saving recommendations that will pay for themselves, with help from incentives, rebates or low interest loans, as well as federal tax credits.* This assistance is available only if you use a BPI accredited contractor like Halco and we install ENERGY STAR® products.

Home Performance Incentives. You can qualify for incentives, including 10% cash back or low interest financing. Income qualified homeowners may also be eligible for a matching subsidy of up to \$5,000.

Utility Rebates. If New York State Electric & Gas (NYSEG), Rochester Gas & Electric (RG&E) or National Grid is your gas provider, you may qualify for a \$500 - \$1,500 rebate for having us install a new high efficiency furnace, a high efficiency boiler and/or an indirect water heater.

Federal Tax Credit. You can still

take advantage of the federal tax credit of up to \$1,500 for replacing your old furnace, boiler, heat pump or air conditioner with a new high efficiency model. This credit may be taken regardless of whether you qualify for any other incentives.

Geothermal Tax Credit. If you install a geothermal system, powered by a ground source heat pump, you will get a federal tax credit of 30 per cent of your total investment.

A typical ground source system may cost \$40,000. Under this program, you will be able to take a \$12,000 federal tax credit on your 2009 return.

Call now for your Comprehensive Home Assessment and take advantage of these incentives.

** Cannot combine utility rebates with Home Performance incentives.*



BPI Accredited Home Performance contractors use diagnostic testing to make your home healthier, safer and more energy efficient.



SEVEN DAYS TIL NINE - WITH NO OVERTIME

Two Earn Thermal Imaging Certification



Todd Martin

David Smith

Todd Martin and David Smith spent two days in September and two days in October learning best practices for thermal imaging.

When Todd and David completed the intensive four day seminar, they received the first of three national certifications for non-destructive testing.

The certification school, which included both field experience and classroom study, was presented by the American Society for Non-Destructive Testing. This class was sponsored by the Building Performance Contractors Association.

Thermal imaging is one method used by our Home Energy Performance professionals to pinpoint air leaks. They use an infra red camera to examine the surface temperatures of walls, floors and ceilings to find signs of thermal transfer caused by lack of insulation or air leakage.



The alternative to this non-destructive method would be to make holes in the walls to visually check insulation or to remove molding from around windows and doors.

The best way to see this process in action is to have us conduct a Comprehensive Home Assessment.

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Hal Smith To Lead ACCA

Halco President Hal Smith has been elected chairman of the Upstate New York chapter of the Air Conditioning Contractors of America. Hal will begin his two year term on January 1, 2010.

Halco joined ACCA in 1987, and Hal was first elected to the board of directors in 2006. He progressed through the offices, serving as secretary, treasurer, vice chairman, and now chairman.

Hal has also been active in the national organization. In 2007, he presented a



seminar on "going green" at the ACCA national conference. In 2008, ACCA recognized Halco as the company with the best training program in the nation.

Recently, Hal has been meeting with heating and air conditioning contractors in Syracuse to work with them to create a Central New York chapter.

Halco has gained a great deal of knowledge and information from membership in ACCA, and this is an opportunity for Hal to give back to the organization – an opportunity that he is looking forward to with his usual gusto.

Halco Adds New Direct Exchange Geothermal Capability

Geothermal technology is changing rapidly as property owners turn to this sustainable heating and cooling method. To serve this fast growing market segment, we have trained our people and acquired the necessary equipment to design and install the next generation of geothermal comfort. This new approach to geothermal is called direct exchange. The theory is the same as previous generations, except that this advanced system can be installed on smaller residential properties.

The direct exchange system uses small holes, bored into the ground by our special air drill (pictured). The drilling process uses highly compressed air with the mechanical drilling process.

Each tube radiates out, at an angle, from a single point to a depth of 65 feet. (See diagram) Only a small circle of ground has to be disturbed to bore the holes.

Copper tubes, filled with refrigerant, are placed in the holes, and connected to manifolds. Liquid and vapor lines run from the manifolds to the heat pump, which can be placed inside or outside your house.

Geothermal systems, common today use

plastic tubing containing water and glycol (anti-freeze). The tubes are laid in horizontal trenches and connected to manifolds and the heat pump like the advanced system.



The refrigerant in the advanced system is more efficient than a water/glycol mixture. As a result, no back-up is necessary.

A direct exchange system can reduce your heating costs by 30 to 70 percent, your cooling costs by 20 to 50 percent and your hot water costs by 70 percent. These systems perform better; a 2,000 square foot home can be heated and cooled for as little as 50¢ per day.



Homer Family Cuts Heating Bills With Geothermal

When one spouse teaches at Syracuse University and the other is a researcher at Cornell, the Cortland area is a central location in which to live. In 2002, Ulrich English and his wife, Karin Ruhlandt did just that. They bought a new house in the Cortland County community of Homer.

Their home is on a 3/4 acre rural site, which is not serviced by natural gas. It heated with baseboard and a propane-fired boiler.

Over the next seven years, the couple watched the price of propane skyrocket, and they saw no end in sight. They expressed this concern to a Halco technician who was servicing their boiler. Our technician talked to them about geothermal, and they began researching this economical heating technology.

When Ulrich and Karin decided to convert to geothermal, they called Halco. Tom McCarthy worked with the couple to design and install a water-to-air ground-source heat pump which passes water over a heat exchanger to heat the air that warms the house. This water is also used to heat domestic hot water. A small propane-fired boiler supplements the ground-source heat.

By converting the house from baseboard heat to forced air, the system can also cool the house in the summer.

Tom notes that the size of the property provided plenty of area for the underground lines. A QT pump controls the loops of supply lines and return lines that run underground below the frost line to absorb or dissipate heat.

Although it is too early to calculate the actual energy saving, Ulrich and Karin have already begun to see their heating expenses go down. The geothermal system has been heating their domestic hot water since it was installed. Now it is also heating the house as winter settles in.

While they have noticed a slight increase in their electricity usage to power the heat pump, they have seen a substantial decrease in propane usage. In fact, they have drastically cut the amount of propane that they purchased for the winter.

Besides saving energy, installing a geothermal system also qualified Ulrich and Karin for substantial incentives and tax credits, which offset a significant amount of the cost.



(Top left) The 3/4 acre property provided plenty of area for the underground loops. (Top right) The property after the system was installed shows no traces of excavation. (Middle left) This heat exchanger converts water, heated or cooled by the ground, into hot or cold air to heat or cool the house. (Middle right) The QT pump controls the loops consisting of four supply lines and four return lines that run underground below the frost line to absorb or dissipate heat. (Above) The domestic water heater and propane boiler before the geothermal installation.

Where We Are

Call any of our local phone numbers listed below and a service or installation team will be dispatched from right nearby to take care of your problems quickly.

COMMERCIAL/RESIDENTIAL

Community Number

Phelps	315.946.6200
	800.533.3367
(FAX)	315.946.6676
Newark	315.331.3912
Geneva	315.781.0556
Canandaigua	585.396.2668
Penn Yan	315.536.0633
Auburn	315.253.7939
Rochester	585.271.4330
Ithaca	607.277.3154
Elmira	607.733.0420
Cortland	607.753.1123
Syracuse	315.437.2048
Lyons (PBS Supply)	315.946.6161

Web sites: www.halcoheating.com
www.halcomeps.com
www.pbssupplyco.com



*From Everyone In
The Halco Family
To Your Family
Have A Safe, Blessed,
Prosperous and Warm
Holiday Season.
Hal & Tammy Smith*

Get Paid To Upgrade

Your Utility Will Pay You When You Upgrade

Take advantage of your utility's (NYSEG, RG&E, National Grid) new rebate program. Upgrade to a high efficiency furnace, high efficiency boiler or an indirect water heater and receive \$500 to \$1,500 (depending on the utility).

NY State Will Pay You When You Upgrade

You may qualify for up a \$5,000 subsidy in matching funds if you are income-eligible. You are also eligible for low interest financing or a 10% incentive from Home Performance With ENERGY STAR® when you have qualifying energy saving upgrades done by a BPI accredited contractor. Call us to find out how.

Uncle Sam Will Pay You When You Upgrade

The federal stimulus package provides a federal tax credit of up to \$1,500 for replacing your old furnace, boiler, heat pump or air conditioner with a new, high efficiency model. This tax credit is available to everyone, and it can be taken even if you receive other Home Energy Performance incentives. If you upgrade to a ground source heat pump geothermal system, you are eligible for a federal tax credit of up to 30% of the total cost of the system.

It all begins with the Most Complete Comprehensive Home Assessment available today!

Using the most sophisticated diagnostic testing equipment and software, we will evaluate your insulation, heating/cooling system, indoor air quality, windows and doors, lighting and appliances, and make energy saving recommendations that will pay for themselves. We recommend the most energy efficient ENERGY STAR® appliances and equipment to solve your comfort problems.

You've been paying into these programs for years through your utility bills. Now's the time to get your money back. Call today to schedule your Comprehensive Home Assessment!

Call 800-533-3367 Today



Home Performance with ENERGY STAR® can help you lower your energy bills and make your home safer and more comfortable.

**IMPORTANT!!!
NEWSLETTER INSIDE**

**Renewable Energy Systems
Design & Installation**



To find out more about how you can save money and the environment, call your local HALCO office or 800-533-3367. Or visit www.halcoheating.com/renewable_energy.

• As a valued HALCO customer, we are offering you 50% off a home site evaluation and project proposal to determine if your home can be converted to solar or wind. That's a \$125 saving.

• Our staff is a NYSERDA (New York State Energy Research & Development Authority) Authorized Installer.

• Our staff has installed more than 30 solar electric systems.

Solar Electric/Solar Heat/Wind Renewable Energy Now From HALCO

Renewable Energy Systems
865 County Road 6
Phelps, New York 14532



PRESORTED
STANDARD
U.S. POSTAGE
PAID
Seneca Falls, NY
Permit No. 14



**Renewable Energy Systems
Design & Installation**

