



Typical home ductwork

photo provided by Current Energy

Green Home Evaluation

By DeAnn Daley Holcomb

THE NEW HIP TERM, “Go Green,” may be taking on new meaning as consumers open their electric, water and gas bills, realizing in today’s economy, it goes beyond just remembering to clean or replace an air conditioning filter to save money.

In our summer and fall extreme heat, electrical and water costs have soared, as air conditioners and pool pumps work overtime. Now may be the time for existing homeowners to seek ways to cut down on their energy bills. One solution might be having an energy audit conducted of your entire home.

Frisco was the first city in the country to mandate “Energy Star” standards as part of its innovative 2001 “Green Building” Program by adopting the Environmental Protection Agency (EPA) minimum standard requirements for new home construction. Under the ordinance, new homes are required to have a Home Energy Rating System (HERS) conducted with a rating score required of at least 86. The HERS score is based on plan analysis, insulation

and duct inspection and blower door/duct pressurization testing. A certified third party conducts tests to determine the HERS score. Frisco’s “Green Building” program also focuses on water conservation, indoor air quality and recycling. It was updated in 2006 with more stringent requirements adopted for energy efficiency and water conservation.

While this move may be saving new homebuyers as much as 30 percent on their utility bills, existing homeowners are looking to energy efficiency experts for help. For example, refrigerators more than 10 years old are significantly less efficient than new models, according to energy efficiency experts. Older refrigerators may cost \$120 - \$150 a year to operate compared to \$50 for a newer model. Experts say because a homeowner’s air conditioning makes up 50-60 percent of energy costs, it is important to have it consistently checked.

Many homeowners are turning to businesses like Current Energy to help

identify areas to be more energy efficient, save money and the environment. It means not only examining your air conditioner but also reviewing the type of light bulbs you use, to checking your toilet and appliances for improvements.

“People are interested in all of the commodities they purchase; gas, water and electricity,” said Joseph Harberg, a principal partner of Current Energy. This Dallas-based company utilizes certified home energy consultants to conduct energy assessments and make customized energy efficiency recommendations. “We calculate and chronicle everything that is going on from the gas, water and electric prospective. Current Energy evaluates a home’s contributors to energy consumption, from light bulbs to showerheads to heating/cooling systems.

The energy assessment begins with the home air conditioning unit(s). Current Energy consultants inspect and identify operating efficiency of air conditioning components and systems including thermostats, humidifiers, filters, fans, air

flow, duct leakage and UV equipment. Next, it is on to the attic to inspect insulation ventilation and radiant barrier where accessible. A homeowners lighting is on the checklist, recording all lighting, watt, type and location. The energy assessment continues with the inspector surveying domestic water systems including water heater, toilets and showerheads. Next on the list are sites for air penetration, such as windows, throughout the house for quick and inexpensive solutions, such as weather stripping. Last of all the energy consultant will calculate air leakage through duct systems and note conditions that require immediate attention.

Current Energy was founded in 2001, by Josh Stern, as an energy procurement company. Mr. Harberg came on board in 2005 and by 2006 Current Energy created its home energy assessment and opened the world's first energy efficiency store™ in Dallas. Current Energy was honored by the Department of Energy with the Energy Innovators Award in 2007 for its innovative retail concept and its suite of energy-efficient solutions for residential and commercial customers.

Consumers can come in and talk to representatives about their electric bills and check out the products and services available. Today, Current Energy has its "Green Trucks" rolling throughout the Metroplex, having gone from previously conducting three assessments a week to daily audits, six-days a week in today's market.

"Once Current Energy conducts a home energy assessment, we produce a 40-60 page report to explain in detail to the homeowner all of the energy efficiency opportunities we found in the home," Mr. Harberg said. "We don't stop there. We also help the customers prioritize what needs to be done first. There are terrific new solutions on the market from high-efficiency air conditioning units to radiant barrier, but you have a game plan for implementation. We have discovered there is a real art and science in prioritizing energy efficiency improvements and we enjoy helping homeowners, whether they are about to build a house, remodel or update. It doesn't have to take a lot of money to see significant savings on your energy bills."

The "Current Energy Assessment" is the company's most comprehensive home energy assessment. It combines the Basic Energy Assessment, Advanced Heather and Air Conditioning Assessment, Air Quality Assessment and the Irrigation Assessment. The Current Energy Assessment costs \$500 plus \$0.15/square foot. With at least 21 energy efficiency solutions from Current



Radiant barrier and insulation
photo by Chris Johnson

Green Statistics

HERE ARE the latest figures on how the "Green Building Program" has positively impacted the environment:

Statistics for Green Building Program as of August 4, 2008:

CO2 Avoided = 27,838.02 tons

NOX Avoided = 79.64 tons

SO2 Avoided = 85.49 tons

Average kWh savings =
4,650 per house per year

Utility savings per year per home =
\$436 or more

11,746 Green Homes/Energy Star
Homes built since May 2001

Energy properly implemented inside the home, most Current Energy residential clients realize savings up to 50 percent on monthly energy bills.

GREEN COMMERCIAL APPLICATIONS

As part of its continuing effort to enhance environmentally friendly programs and services and to protect Frisco's natural resources, the City of Frisco adopted

an ordinance in 2006 requiring new businesses to meet the "Commercial Green Building" regulations.

Ryan J. Middleton, who is a planner with the Comprehensive & Environmental Division of the Planning & Development Services Department for the City of Frisco, said the new requirements highlight roof construction, landscaping, water conservation and recycling.

"Commercial and multi-family construction projects have to meet our core minimum roof standards which include the reflectivity of the roof rating for the roofing products and most of those roofing products already have those in the label," Mr. Middleton said. "There is also the commercial recycling requirement where additional stone and metal products used on construction sites needs to be recycled."

The planning department has received some concerns about the requirements.

"We have received some questions about our 'cool roof' requirements and we have meet with developers and architects to discuss ways to help them comply with these requirements," said Mr. Middleton.

Mr. Middleton believes one of the success stories to come out of the Green Building Program involves water conservation.

"The goal of the landscape ordinance is to reduce water consumption by recommending the use of native plants and requiring evapotranspiration (ET) controllers, which are devices that measure soil moisture and weather conditions to determine how much water is needed," Mr. Middleton said.

To help the Frisco community understand recent programs implemented to assist existing homes in energy efficiency upgrades the City of Frisco will be hosting the Green Home, Health and Safety Fair on Saturday, October 4, at the Frisco Athletic Center, 5828 Nancy Jane Lane, from 9 a.m. to 1 p.m. The community is urged to come and learn more about taking better care of their family and the environment and check out the latest green home products and services.

DeAnn Daley Holcomb is a freelance writer living in Plano. Web site references are also listed on page 84.