

HOME ENERGY ASSESSMENT

3/28/2012



PREPARED FOR:

Robert Graham 10 Clancy Ct Little Rock, AR 72223

PREPARED BY:

Joe Auditor on behalf of

Green Buildings Inc.

555-555-5555 joe@audits.com



Dear Robert Graham,

Thank you for participating in the EnergyFit Nevada Program! As the state sponsor of Home Perform-ance with ENERGY STAR we are pleased to help you improve the energy efficiency, comfort, and air quality of your home!

This report contains information about your home's current energy use, general household energy use, and home air quality and safety considerations. A summary of your home's existing components and recommendations for improvement are featured.

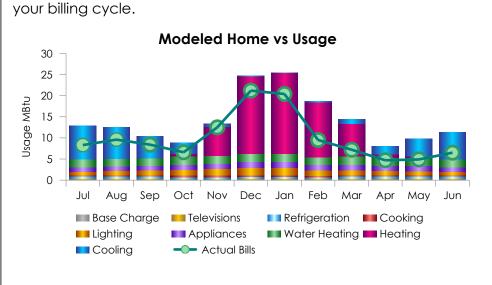
If you have any questions feel free to contact your assessor, contractor, or the EnergyFit Nevada Team at 702-734-2000.

YOUR HOME PERFORMANCE CONCERNS

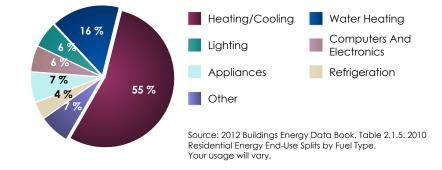
You reported the following concerns about the energy use and comfort of your home:

- House feels drafty.
- Want to save energy and money.
- Moisture issues

YOUR HOME'S MONTHLY ENERGY USE This graph shows how your energy usage can vary each month based on different factors such as weather. The data contained in this graph corresponds to the actual days in the month and not



THE USUAL SUSPECTS: TYPICAL ENERGY USAGE BREAKDOWN





Home Energy Score

Address: 10 Clancy Ct.

Little Rock, AK 72223

Home size: 3000 Sq Ft Year built: 2007

Air conditioned: Yes





homeenergyscore.gov

The **Home Energy Score** is a national rating system developed by the U.S. Department of Energy. The **Score** reflects the energy efficiency of a home based on the home's structure and heating, cooling, and hot water systems. The **Home Facts** provide details about the current structure and systems. **Recommendations** show how to improve the energy efficiency of the home to achieve a higher score and save money.

Assessment date: 2/20/14

Scored in: 2014 Score ID: 46353

Qualified assessor #: SampleAssesorID



HOME FACTS & SUMMARY OF EXISTING COMPONENTS

About this home

Year Built: 2007 Number of Bedrooms: 4 Number of Stories: 2 Ceiling Height: 8

Conditioned Floor Area: 3000 Front of House Direction: North

Air-tightness

Ventilation Rate (ACH): 8.0 (ASHRAE 82-1989 standard is .35 ACH)

Roof, Attic and Foundation

Roof

Roof Contruction: Asphalt Shingles

<u>Attic</u>

Attic Type: Open Cavity Attic Insulation: 16.4

Foundation

Foundation Type: Slab Foundation Insulation Value: R: 5 Floor Insultion Value: 9.45 Rim Joist Insulation Value: Slab: N/A

Wall Construction

Siding Type: Hardboard (0.4375") Wall Insulation Value: 11

Windows and Skylights

Window Type: Double-Pane, Clear, Aluminum Frame

Heating/Cooling Systems

Heating System

System 1 Fuel: Gas Type: Furnace Efficiency: 80% AFUE

Cooling System

System 1 Type: Central Air Conditioning Efficiency: 14.0 SEER

Other Systems

Ducts

Heating Duct 1 Location: Attic (unconditioned)

Leakage: 15% - Somewhat leaky

Insulation: Fiberglass 1.25"

Hot Water System



RECOMMENDATIONS

Improvements	Base	Improved	% Energy Saved
Air seal	3383 CFM	2537 CFM	4.8%
Insulate walls	R=11.0	R=13.0	3.1%
Windows	U=0.81 /SHGC=.67	U=0.39 /SHGC=.52	9.5%
Duct/Pipe Eff	Eff.=68%	Eff.=75%	4.6%
Package Total			22%

This information does not constitute any warranty of energy cost or savings. Modeled energy savings estimates are subject to great variability based upon building characteristics, usage, weather, occupant behavior, and other variables and may not reflect actual savings experienced.



UNDERSTANDING HOUSEHOLD ENERGY USE

HEATING & AIR CONDITIONING

Heating and cooling account for 54% of the average household's energy usage.*

WATER HEATING

Water heating is typically the second largest use of energy in your home, representing about 16% of your annual energy use.*

LIGHTING

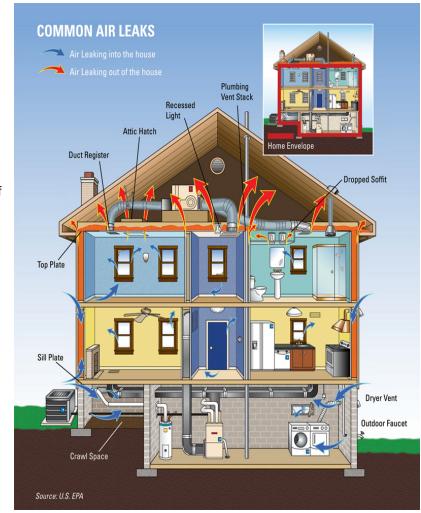
An average household spends about 6% of its annual energy budget on lighting.*

APPLIANCES

Replacing old appliances like refrigerators, freezers and clothes washers for newer ENERGY STAR® models can reduce your energy use for those appliances by 10-50%.*

WINDOWS & DOORS

Old, inefficient windows and doors are often among the primary reasons your home is uncomfortable and inefficient. Good seals around doors and windows create a tight building envelope that greatly enhance the performance of your home.



ATTIC & CEILING INSULATION

Installing the right type and depth of attic insulation helps reduce heating and cooling costs.

WALL INSULATION

Insulating the sidewalls of a home to the recommended R-value will accomplish three critical goals: reduce heat loss in winter and heat gain in summer resulting in lower energy use, reduce air leakage and keep walls closer to the range of optimal comfort.

AIR INFILTRATION & VENTILATION

Air infiltration contributes to drafts, uncomfortable temperature and moisture problems that affect the performance of building materials. To combat these issues, take steps to air-seal your home. Proper ventilation mitigates the presence of indoor pollutants such as molds, chemicals and gases.

FOUNDATION INSULATION

Exposed concrete or masonry wall systems lose a great deal of energy during the heating season. Insulate and properly airseal the rim joist space and foundation in crawl spaces and basements.

^{*}Source: 2012 Buildings Energy Data Book. Table 2.1.6, 2010 Residential Energy End-Use Splits by Fuel Type.



AIR QUALITY AND SAFETY

A recent EPA study showed that the average American home has worse air quality than our most polluted cities, and the air quality in homes is the fifth worse environmental problem in our country. Home air can include chemical contaminants, molds, bacteria, viruses, and gases leading to a variety of health issues.

Ventilation

An air-tight home with controlled ventilation and humidity is a healthy and safe home. Your as a gas, oil, or propane fired furnace, boiler, home was tested with a blower door to determine its air leakage rate. Too much airleakage compromises the comfort and the introduction of mechanical ventilation to

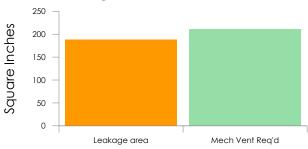
Combustion Safety

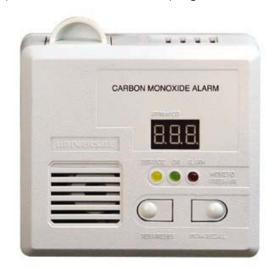
If your home has combustion appliances (such hot water heater, or oven), they were tested to ensure their exhaust does not pose a serious health and safety issue. Carbon monoxide efficiency of your home - too little may require detectors are highly recommended near these appliances and outside sleeping areas.

Other Air Quality Concerns

Eliminating undesirable air infiltration from attics, crawl spaces, and garages will improve the air quality in your home. Air-sealing these spaces, and any HVAC ducts within them, will reduce the introduction of poten-tially harmful contaminants.

Air Leakage Area in Your Home







Your assessor or contractor will point out any specific areas of concern related to your home.

For your continued safety, combustion appliances should be routinely inspected by a qualified mechanical contractor for function, adequate combustion air, draft, and carbon monoxide output.



ZERO-COST AND LOW-COST IMPROVEMENTS

Simply applying the solutions below can lower your energy use and costs while protecting the environment.

ZERO-COST SOLUTIONS

Use a programmable thermostat to automatically adjust the temperature when you are not at home. The US Department of Energy suggests temperature settings of 68° in winter and 78° in summer.

Wash clothes in cold water and let them air dry.

Eliminate "Phantom Loads" by unplugging electronics when not in use.

Clean your refrigerator's coils every six months.

Use the light wash settings on your dishwasher and turn off heated drying.

Turn off your lights when not in use.

Set your hot water heater thermostat to the medium setting, or approximately 120 degrees.

INCENTIVES

Check into Federal, State, and local incentives. Visit www.dsireusa.org and click on your state.



LOW-COST SOLUTIONS

According to ENERGY STAR®, compact fluorescent lightbulbs (CFLs) are 75% more efficient and last up to 10 times longer than standard bulbs.

Running ceiling fans counterclockwise in the winter pushes warm air at the ceiling downward.

Replace HVAC filters every month.

Plug air leaks around doors and windows with caulking and weatherstripping.

Old electric water heaters in unconditioned spaces may benefit from adding blanket insulation. Insulating hot water pipes will also help with energy efficiency.