



Energy & Health Audit Report

Sample Client



1234 S Main St.
Salt Lake City, Utah

Energy & Health Auditor

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REPORT INTRODUCTION & NEXT STEPS

Thank you and congratulations for requesting a *Comprehensive Home Energy & Health Audit*. It is an important first step to ensure your building or home is energy efficient, healthy and safe, comfortable, durable and environmentally responsible.

This report will provide you with a detailed energy and health analysis of your building or home based on our Client interview, inspection and diagnostic testing (included with Audit) from a building-as-a-system building science approach. The report is organized into separate categories such as Envelope Air Sealing and Water Heating. Each section begins with general remarks and recommendations and ends with specific comments about your building or home. I offer in the recommendations category a list of energy and health upgrade opportunities along with financial estimates tailored to your building and priorities (note that financial estimates may be provided shortly after your original audit is performed and reported).

The opportunities and recommendations are divided into three levels of priority with the first including the most important and simplest actions to implement. Your Audit includes time with me as needed to help you begin prioritizing your retrofitting strategy. This way, you are more easily able to stage your retrofitting work to match your budget and schedule.

Once we develop an action plan, *Airlock LLC* will be ready to implement some or all of my weatherization and retrofitting recommendations with the help of their certified Trade Partners. *Airlock LLC* is a licensed general contractor who brings together the best energy auditors, energy and green building trades, builders and suppliers in the industry. They are unique in that they provide objective Auditing while also providing you with complete project management from project design to retrofitting to diagnostic testing to ensure my recommendations and your priorities are properly implemented with the quality you expect.

Call or email *Airlock LLC* and we will contact you within 48 hours Monday through Friday to continue the process of finalizing, pricing and implementing your action plan. I or another Auditor Partner will continue to represent your interests by visiting your building or home during retrofitting if necessary and will return to observe, review or perform final inspections.

Thank you again - I look forward to working with you. Remember, while this Audit is a critical first step, your building or home will not become a more energy efficient and healthy environment without taking action!

Airlock LLC
Providing Comprehensive Auditing and Home Energy Solutions
www.airlockutah.com - info@airlockutah.com

CLIENT INTERVIEW & BUILDING OR HOME DATA

The following information was collected from an onsite or telephone Homeowner interview:

HOMEOWNER CONCERNS

		Data
Cold/Hot Rooms	1	Immediate Action
Odors		
Need Insulation		
Environmental	3	Needs Attention
Unhealthy Crawl		
Renovation Soon		
OK to Call HO		

		Data
Drafts	1	Immediate Action
High Energy Bills	1	Immediate Action
Indoor Air Quality	2	Needs Attention
High Moisture		
Need HVAC Work		
Indoor Pets		Yes
Likely Service		

GENERAL DATA

		Data
Date of Audit		1/29/2015
In Attendance		
Temp During Audit		41-50
Ground Condition		Dry

		Data
Date of Report		1/29/2015
Number Occupants		6
Weather		Cloudy
Rain Last 3 Days		No

HOME DATA

		Data
Style of Home		Traditional
Type of Home		Single Fam Det
Stories Above Grd		2
# Bedrooms		4

		Data
Approx Age - Home		6
Home Faces		North
# Bathrooms		2.5
Garage		Attached 3 Car

First Flr Contioned		1232
Third Flr Conditnd		0
Other Condtnnd		0
Bsmnt Uncondtnnd		

Second Flr Condtnnd		2200
Bsmnt Conditioned		0
Bonus Uncondtnnd		
Other Uncondtnnd		

Total Conditioned		3432
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Total Uncondtnnd	1200	0
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Volume First Flr		6400
Volume Third Flr		0
Other Volume		0

Volume Second Flr		17600
Volume Basement		0
Total Volume		24000

1 ENERGY CONSUMPTION

One indicator of environmental impact is our energy consumption. Unlike many environmental factors that are hard to measure, we have very precise records of how much energy we are consuming each month and each year. We can use these records as a tool to help manage our consumption.

ELEC	Data
Total Elec Anl Kwh	17500
Date Range Util Bill	

Total Anl Elec Bill	\$2,154
Month Avg Elec Bill	\$ 180

TOTALS	
Tot Kwh (inc BTU)	57564
Total Energy Costs	\$3,637
% Elec of Total	59%

Tot Anl Baseload	\$1,228
Baseload % of Tot	34%

Hm Htg Index (HHI)	10
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GAS/OIL	Data
Total Anl Therms	1367
Tot Anl BTU to Kwh	40064

Total Anl Gas Bill	\$1,483
Month Avg Gas Bill	\$ 124

TOTALS	
Total Avg Month	\$303
% Gas/Oil of Total	41%

Seasonal % of Tot	66%
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Tot Kwh per SQ FT	17
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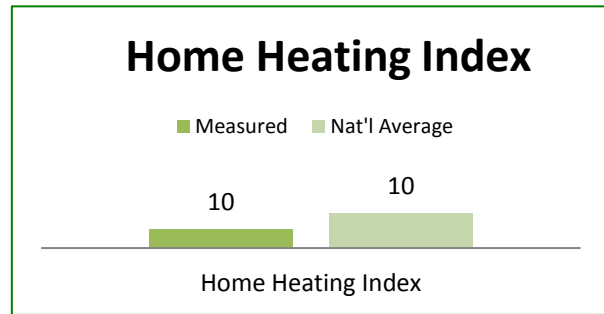
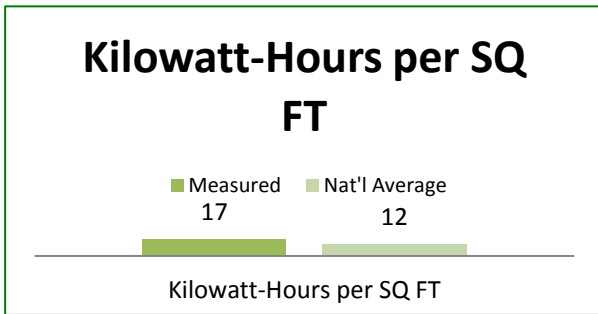
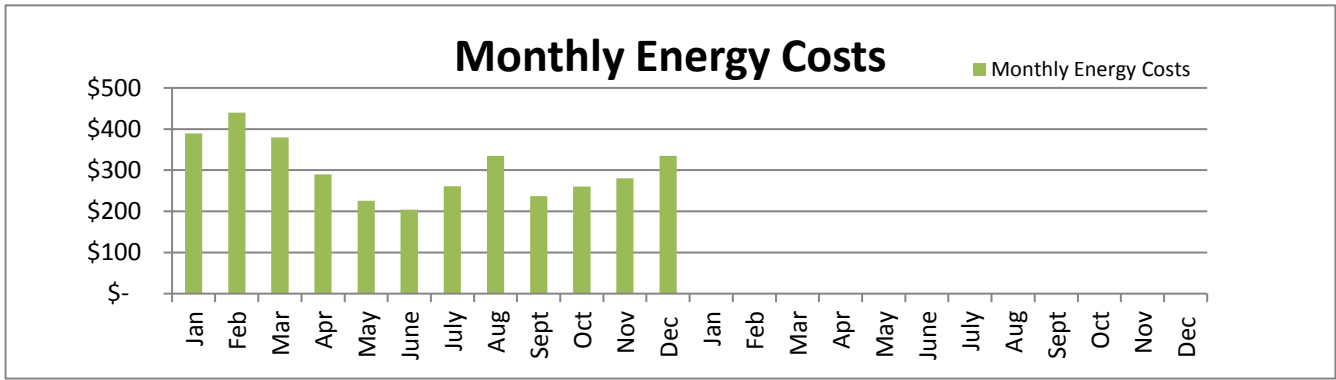
Chart Description: Baseload=Total electrical load not including heating & cooling. It does include water heating; Kw=1000 watts; 1 Kwh=1 kilowatt used in one hour; Therm=unit of energy for volume of gas; 1 BTU=Amount of energy which is approximately energy used to burn one wooden match; Rcmd % BLoad Kwh=Percentage of baseload of total energy used. HHI=Home Heating Index.

Auditor

Please copy the appropriate Energy Consumption Chart from the Bill Analysis-Res Worksheet and paste it here

Homeowner

If an Energy Consumption Chart is not visible, there is currently no Chart for the types of equipment you have in your home



1.0 Utility Bill Analysis

Your home is more efficient than the national average. You pay less than most to heat and cool your home.

2 ENERGY MODELING

While we are able to analyze your utility bills to gain basic information about your energy consumption, it is difficult to accurately predict energy savings from future retrofitting measures since there are so many measures and combinations to choose from. Please though see your potential retrofitting Return on Investment (ROI) at the end of this report which is based on potential savings from your actual utility bill data in lieu of more unreliable energy modeling predictions. It is easy to see how even a little energy savings can create a very high return on your investment. If you are participating in a local utility program, the program may also include an energy modeling report which is typically created from entering specific information about your home. Some of these energy models are moderately accurate and some are not. While we plan and expect to experience energy savings, most homeowners choose to retrofit their homes to make them more comfortable, healthy and safe, durable and for those who are interested, environmentally responsible.

3 EXTERIOR & LANDSCAPING

A healthy, energy efficient home is one that is adequately protected from the damaging external elements: wind, rain and sun. It is important that the building envelope is constructed well to ensure the proper separation of the interior and exterior environments. Landscaping can also influence a building's energy and resource consumption. Deciduous trees, for example, provide shade protection during the summer, and let solar radiation through during the winter.

General Recommendations

- a) Ensure outdoor A/C or heat pump units are shaded.
- b) Periodically check that dryer vent flap is in working order and not clogged with lint.
- c) Periodically check that crawl space vents are intact, unobstructed.
- d) Plant trees that will provide shade to the South and West sides of your home.
- e) Plant native species when adding to your garden. These are more adapted to the local climate and require less water than other non-native plants.

		Status
North Shading		Completely Exposed
East Shading		Completely Exposed
Cantilevers		
Roof Slope		
Gable Vent		

		Status
South Shading		Completely Exposed
West Shading		Completely Exposed
Roofing Material		
Gutters/Downspts		
Soffit Vent		

3.1 Shading

Consider adding a patio cover on the back patio to reduce radiant heat gain in the summer and make the patio more comfortable.

4 FOUNDATION - BASEMENT - CRAWL SPACE

5 ATTIC ZONE

Attic components play a major role in the comfort and health of your home. Temperature differential is usually greater in a building's roof zone and requires greater insulation.

General Recommendations

- a) Install attic stair cover over drop down stairs.
- b) Weatherize attic access hatches.
- c) Insulate at least to R-38.

		Status
Ventilation Type		Individual Soffit
Adequate Ventiltn		Acceptable

		Status
Add'l Vent Type		
Radiant Barrier		No

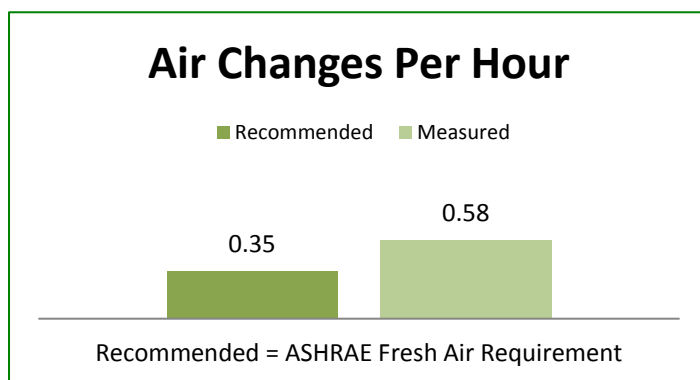
6 ENVELOPE AIR INFILTRATION

Warm air leaking into your home in the summer and out of your home in the winter wastes lots of energy and draws moisture into unwanted areas such as wall cavities. One of the most effective action steps to make your home more energy efficient and healthy is to make your home as air and vapor tight as possible by caulking, sealing and weatherstripping every hole, nook and cranny that is accessible. Surprisingly since the following is typically one of the first do-it-yourself projects, weatherstripping your windows and doors is not nearly as effective as sealing your ceiling to the attic or your floor to the crawl space. You should never insulate any area of your home without first air sealing the surfaces that will be surrounding the insulation. Warm or cold air allowed to enter an insulated area diminishes the effectiveness of the insulation.

	Data	Status
CFM50	4300	Needs Attention
ACH50	10.75	
ACHn	0.58	Needs Attention
N Factor	18.5	
# Top Flr Rec Lights		0
Stairs Over Uncond		Needs Attention

	Data	Status
Location Blower	Front Dr	
Ring Used	Open	
Recommend ACHn	0.35	
Style Rec Lights		N/A
Stairs to Attic/Bsmt		

Chart Description: CFM50=Cubic feet per minute or air infiltration with blower door running; ACH50=Auditor Data; ACHn=The number of air changes per hour with home at natural state. The recommended air changes is .35 which equals one full air change in a home every three hours; IC=Insulation Contact style recessed lights. If non-insulation style, insulation can not touch light which creates a void of insulation. Stairs Over Uncond=Stairs over unconditioned areas such as a garage - concern is area under stairs may not be airsealed/insulated.



6.0 Blower Door Testing - General Comments

The air infiltration test identified you have moderate leakage. The recommended infiltration equals a complete air change of air in the home once every three hours. Your home air change (ACHn) is once every two hours. Highly recommend a complete air sealing package to reduce infiltration along with its effects of moisture intrusion, drafts and higher energy bills.

6.8 Recessed Can Lights -Attic Covers

Recommend installing "tents" over any recessed can lights penetrating the ceiling.

6.15 House to Basement/Attic Stairs

Recommend insulating stairs to basement.

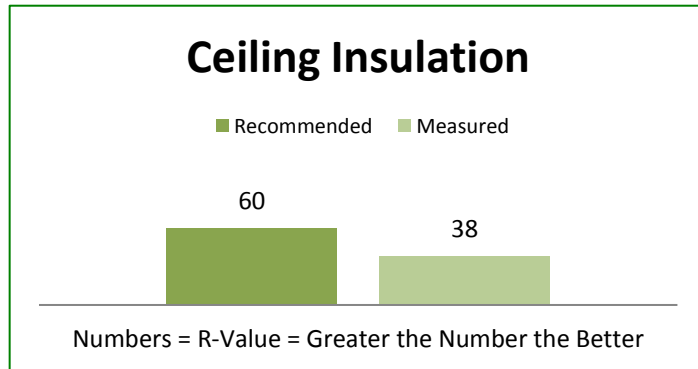
Highly recommend air sealing between attic and living space.

7 CEILING INSULATION

The primary purpose of a building's thermal insulation is to control heat transfer and protect a building from excessive heat loss during cold seasons and heat gain during hot seasons. This control can effectively reduce the amount of energy required by a building's heating or cooling equipment to maintain conditions for the occupants' comfort.

	Data	Status
Insulation Type		Blown Cellulose
Baffles Present		No
Attic Flat Ins SF		

	Data	Status
Existing R-Value	38	
Recommend R-Val	60	Needs Attention
Vault Blow Ins SF		
Vault Pack Ins SF		



7.0 Insulation Level

Recommend adding insulation in attic to reach R-60.

8 WALL INSULATION

Heat moves from a warm area to a colder area, from your heated house to the outdoors. The colder the temperature outside, the faster heat travels. Insulation works to slow this heat transfer.

	Data
Insulation Type	Batt Fiberglass

	Data	Status
Existing R-Value	R-10	Acceptable

Chart Description: Since wall insulation is hidden, data above is best guess information.

9 KNEE WALL INSULATION

10 FLOOR INSULATION

Floors over unheated areas, such as crawl spaces, garages, and basements, can contribute to heat loss in an otherwise well-insulated house.

	Data	Data/Status
Insulation Type		
% Coverage	None	
Batt Ins Needed SF		Needs Attention

	Data	Status
Existing R-Value	R-0	Needs Attention
Insulation Falling		

- 10.0 Insulation Level**
Recommend adding floor insulation.

11 COMBUSTION SAFETY

12 HEATING & AIR CONDITIONING EQUIPMENT

Heating and cooling your home uses more energy than any other system in your home and can typically be 40%-50% of your utility bill. Whatever your system, it makes sense to always maintain and upgrade your systems to ensure more comfort and lower energy bills. While homeowners assume their equipment is functioning properly, the national average of equipment performance efficiency is only 60%. One of the biggest problems is leaky ducts. If your ducts are leaking, you are wasting money heating and cooling air that never makes it to the living areas of your home. Another typical problem in the heating and cooling industry is oversizing the equipment. If you are considering a new system, we strongly recommend you require your contractor to provide a properly created room-by-room load calculation to help ensure proper sizing.

General Recommendations

- Set your thermostat as low as is comfortable in the winter and as high as is comfortable in the summer.
- Clean or replace furnace filters once a month or as needed.
- Clean registers, baseboard heaters and radiators as needed and ensure they are not covered by furniture, carpeting or drapes.
- During the heating season, keep draperies and shades on south facing windows open during the day to allow the sunlight to enter your home and closed at night to reduce the chill you may feel from cold windows.

	Location	Size Furn	Age	Size AC	Filter/Loc	System Type	Status
System 1	Other	60K BTU	6-10 yrs	4.0 ton	Ind Retr	Forced Air Gas	Acceptable
System 2							
System 3							
System 4							
System 5							
System 6							
Chart Description: Location=Location of air handler for a typical forced air system; Size=approximate tonnage of air conditioner or heat pump. Age of equipment is approximate.							

12.3 System Zoning

Your existing zone system will help keep the home more comfortable and reduce energy bills.

12.4 Thermostat

Installing a programmable thermostat will significantly reduce your heating and cooling costs.

The location of your upstairs thermostat may be influenced by the temperature of the main floor. Consider moving this to a location that will more accurately reflect the upstairs temp.

12.9 Humidification

Installing a humidifier will keep your family healthier and allow you to keep the home a couple of degrees cooler which will save you on heating costs.

13 AIR DISTRIBUTION (DUCT) SYSTEM

When it comes to your heating and cooling system, it's important to remember it's not all about your equipment - let's don't forget the ducts! Your duct system could possibly be causing 40%-50% of your heating and cooling energy loss. Ducts have the critical job of carrying the conditioned air throughout your home but often suffer from poor design, kinks, leaks and little insulation. Ducts in our region are typically installed in attics and crawl spaces and typically draw pollutants from these regions through unsealed joints and distribute them into your home by forced air. While poor duct systems create potentially serious health issues, energy is wasted due to your heating and cooling equipment having to work harder to heat or cool the unconditioned air being drawn into the system. Duct renovation is typically named as a high priority when improving a home's performance.

	Location	Trnk Duct	Brch Duct	Conditn	DB Test	DB Target	Status
System 1 Air Hndlr	Attic	Metal	Flex	Good			Needs Attention
System 2 Air Hndlr							
System 3 Air Hndlr							
System 4 Air Hndlr							
System 5 Air Hndlr							
System 6 Air Hndlr							

Chart Description: Location=Location of duct system for typical forced air system; Duct Blst=Results of Duct Blaster infiltration test. This test is typically performed at beginning and end of duct renovation; DB Target=Target reading of Duct Blaster infiltration test - retrofitting target; Rtd TESP=Rate/Available Total External Static Pressure; Msr TESP=Measured Total External Static Pressure. A central system blower is rated at a maximum capacity of pressure - a number greater than the rated pressure reduces energy efficiency, equipment life and comfort.

13.4 Duct Sealing

Recommend ductwork be sealed. Use an aerosol based duct sealing process to seal air ducts. Mastic and tape methods can only seal exposed ductwork, where aerosol based systems can seal the entire system.

13.5 Duct Insulation

Insulating ductwork in unconditioned spaces can make the home more comfortable and significantly reduce heating and cooling costs.

14 MOISTURE MANAGEMENT & VENTILATION

15 WATER HEATING

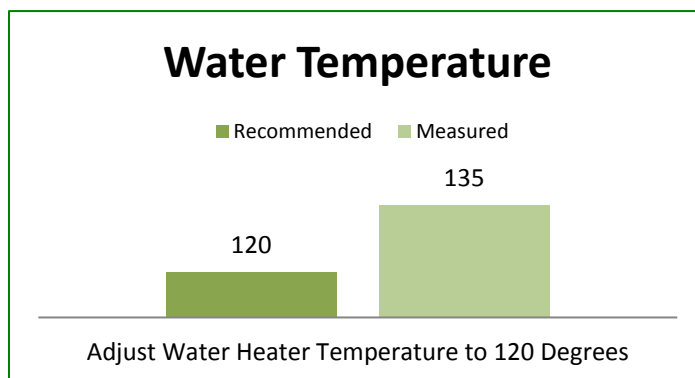
Heating water can take up to one-fifth of the total energy used in a typical household. That makes it the second largest single use behind space heating. Consequently, large energy savings are possible if you pay attention to conserving energy devoted to water heating.

General Recommendations

- a) Insulate the water heater with a blanket.
- b) Turn the thermostat down to 120 degrees F.
- c) Insulate all hot water pipes and the first five feet of cold water pipes.
- d) Every four months, drain a quart of water from your tank using the valve at the bottom.
- e) Install a timer on the water heater so it shuts off at night when you're sleeping, or during the day when no one

	Data	Status
Location	Other	Acceptable
Age	6-10 yrs	Acceptable
Water Temp	135	Needs Attention
Wtr Htr Blanket		Needs Attention

	Data	Status
Type	Gas Tank	
Fuel	Nat Gas	
Recommend Temp	120	Needs Attention



15.1 Water Temperature

Existing water temperature is higher than the recommended 120 degrees. Recommend lowering the temperature. Measure water temperature by filling a glass in your kitchen sink with running hot water and placing a digital thermometer in the glass (hottest available allowing the water to continue to overflow the glass while measuring). Allow time for your new water heating setting to take effect and remeasure. After finding the proper setting, place a mark on the water heater temperature dial for future reference. Be sure and set your water heater to vacation mode (or simply lower setting) when leaving your home for an extended period.

15.2 Blanket & Pipe Insulation

Recommend installing blanket wrap insulation around tank water heaters. If gas water heater with top of tank diverter, do not place insulation on the top of the tank. Cut around panel to burner. Install blanket if water heater is indoors or outdoors. Even if indoors, there is still a large temperature differential between inside tank temperature and outside tank temperature. Install pipe insulation on both cold and hot water lines at least 4-6 feet from tank. If gas water heater with top of tank diverter, do not place pipe insulation below the level of the flue diverter a few inches above the top of the tank.

16 WATER CONSERVATION

17 LIGHTING

Lighting offers a great opportunity for saving energy. Not only do compact fluorescent lamp (CFL) light bulbs use 75% less energy than their incandescent counterparts, but they last up to 10 times longer and will need less frequent replacing. While they cost more up front, they are actually cheaper in the long run when you take into account the reduced energy costs.

General Recommendations

- a) Replace all incandescent bulbs with CFL counterparts.
- b) Replace halogen torchiere lamps (which are fire hazards) with CFL torchiere lamps.

17.1 Light Bulbs

Recommend incandescent bulbs be replaced with CFLs or LEDs.

17.3 Timers

Recommend installing timers on outdoor lights. This decreases the chance of break-ins and eliminates the chance of lights being left on all day.

18 APPLIANCES

Appliances account for about 17% of your household's energy consumption. There are two price tags associated with major appliances. The first one covers the purchase price, and the second is the cost of operating the appliance during its lifetime. You'll be paying that second price tag every month with your utility bill for the next 10 to 20 years, so it is important to pay attention to its efficiency as well as the up-front cost.

General Recommendations

- a) Use SmartStrip® power strips for all home entertainment systems.

	Data	Status
Refrigerator Age	6-10 yrs	Acceptable
Dryer Fuel	Electric	
Dryer Vented	Yes	

	Data	Data/Status
Freezer Age	0-5 yrs	
Cooktop Fuel	Electric	

18.6 Clothes Dryer

If possible, replace with a natural gas dryer. Natural gas is cheaper to operate in this area.

19 WINDOWS AND DOORS

Heat transfer through windows and doors primarily occurs through the glass and at the perimeters. The extent of heat loss or heat gain can be controlled by use of interior and exterior shading devices.

General Recommendations

- a) Install weatherstripping, thresholds and door sweeps on all exterior doors.
- b) Use heavy, light colored drapes to further insulate the window assembly in the wintertime, and to reflect heat back out during the summertime.
- c) Install solar screens on south and west-facing windows in the summertime.

19.0 General Comments

Windows and doors are energy efficient and relatively new.

20 HAZARDS

21 CLIENT AWARENESS & LIFESTYLE

A home is a working system, and the operator's awareness is as important as the system's efficiency. A homeowner's inefficient lifestyle could negate the environmental benefits of an efficient building.

General Recommendations

- a) Take the time to program your thermostat to your schedule as accurately as possible.
- b) Always run full loads of dishes in the dishwasher and clothes and washing machine.
- c) Wash and rinse laundry in cold water, and line dry as many clothes as possible.
- d) Take shorter showers.
- e) Unplug appliances when not using them.

22 RECOMMENDATIONS

The following are recommendations to make your building or home more energy efficient, healthy & safe, comfortable, durable and environmentally responsible. They are divided into three levels with Level 1 being the highest priority. Range is the estimated level of difficulty for the retrofitting measure.

GREEN DESIGN, BUILDING & REMODELING

	Level	Difficulty	Notes
Green Building Consulting			
Green Certification			
Home Remodeling			
Passive Solar Design			
HVAC Load Calculation			
Other			
Other			
Other			

HEATING, VENTILATION & AIR CONDITIONING

	Level	Difficulty	Notes
Duct Renovation			
Add Returns & Supplies	2	Med	
Repair Return			
Add Butterfly Damper			
Jumper Ducts-Transfer Grills			
Add Zoning to Existing Ducts			
Programmable Thermostat	1	Low	
Advanced HVAC Diagnostics			
Tuneup & Air Balancing			
Fresh Air Intake System			
Bath/Kitchen Exhaust			
Whole House Exhaust			
Exhaust Ventilation Pipe			
Garage Exhaust Vent			
Convert Microwv to Exhaust			
Major Equip Replacement			
Geothermal System			
Crawl Space Makeup Air			
Add or Repair Dryer Duct			
Other			

OTHER ENERGY

Level	Difficulty	Notes
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Air Sealing	2	High	
Backup Kneewalls			
Weatherize Kneewall Doors			
Door/Window Weatherize			
Shower Heads/Aerators			
Water Closet Water Saver			
CFL Bulbs	1	Low	
Other Lighting Replacement			
Recessed Light Can Covers			
Attic Stair Cover			
Attic Hatch Cover			
Whole House Fan Cover			
Ceiling Insulation	2	Med	
Wall Insulation - Batt			
Wall Insulation - Dense Pack			
Floor Insulation	2	Med	
Foam Spray Insulation			
Clean Attic Debris			
Vacuum Attic Insulation			
Remove Old Batt Insulation			
Radiant Barrier			
Install Gable/Passive Vents			
Solar Water Heating			
Replace Similar Wtr Heater			
Tankless Water Heater			
Water Heater Tank Insulation	1	Low	
Photovoltaics			
Solar Light Tube			
Solar Pool Heating			
Duct Sealing	1	Med	
Duct Insulation	1	Med	

INDOOR AIR QUALITY

	Level	Difficulty	Notes
Mold Inspection			
Crawl Mold Remediation			
Other Mold Remediation			
Closed Crawl Space			
Crawl Space Door			
Crawl Dehumidification			
Clean Crawl Debris			
Crawl Floor Liner			
Crawl Sump Pump			
Repair or Replace Fireplace			
Radon Control Measures			
CO & Smoke Detector			
Air Quality Monitoring			

Waterproofing			
Other			
Other			
Other			

SITework & MISCELLANEOUS

	Level	Difficulty	Notes
Green Landscape Design			
Rain Catchment			
Gutters & Downspouts			
Downspout Extensions			
Demolition			
Material Reclamation			
Green Cleaning			
Patio Cover	2	High	
Other			

GREEN MATERIALS & INSTALLATION

23 RETROFITTING ROUGH PRICING ESTIMATE

The following are recommendations to make your building or home more energy efficient, healthy & safe, comfortable, durable and environmentally responsible. They are divided into three levels with Level 1 being the highest priority. Range is the estimated level of difficulty for the retrofitting measure.

	Level	Pricing	Notes
Combined Level 1 Pricing	2		
		\$3,000 - \$4,000	
<i>Less Utility Rebate</i>		\$1,000 - \$1,500	
<i>Less Fed Tax Credit</i>			
<i>Less State Tax Credit</i>			
Total		\$4,000 - \$5,000	

Combined Level 2 Pricing	2		
		\$9,000 - \$12,000	
<i>Less Utility Rebate</i>		\$1,000 - \$1,500	
<i>Less Fed Tax Credit</i>			
<i>Less State Tax Credit</i>			
Total		\$9,000 - \$12,000	

Combined Level 3 Pricing			
<i>Less Utility Rebate</i>			
<i>Less Fed Tax Credit</i>			
<i>Less State Tax Credit</i>			
Total			

Solar Water Heating			
<i>Less Utility Rebate</i>			
<i>Less Fed Tax Credit</i>			
<i>Less State Tax Credit</i>			
Total			

Other Item			
<i>Less Utility Rebate</i>			
<i>Less Fed Tax Credit</i>			
<i>Less State Tax Credit</i>			
Total			

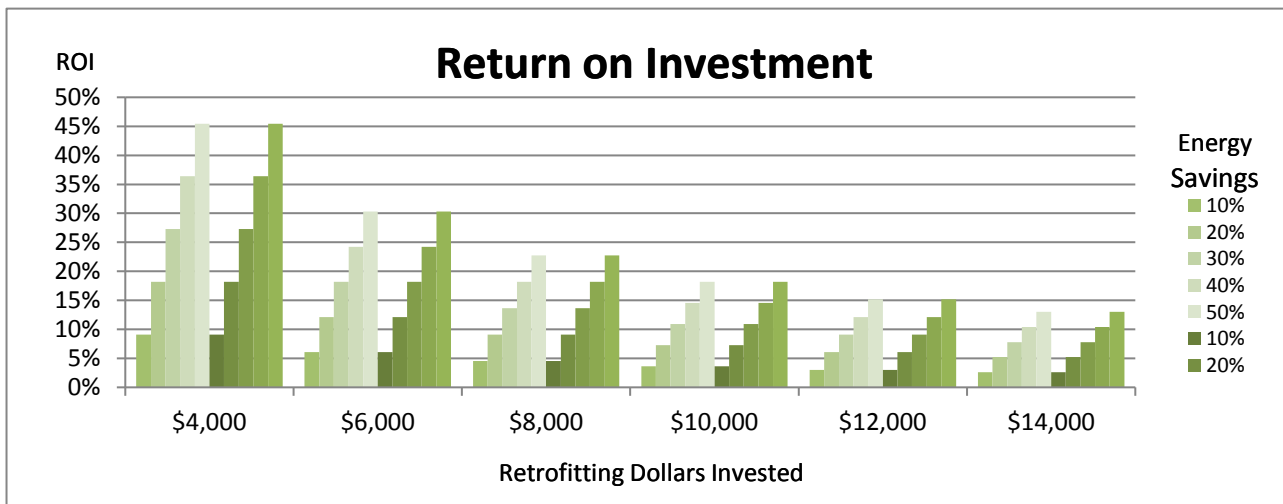
24 RETURN ON INVESTMENT

The following are recommendations to make your building or home more energy efficient, healthy & safe, comfortable, durable and environmentally responsible. They are divided into three levels with Level 1 being the highest priority. Range is the estimated level of difficulty for the retrofitting measure.

Potential % Savings From Retrofitting	10%	20%	30%	40%	50%
Annual Savings From Retrofitting	\$ 364	\$ 727	\$ 1,091	\$ 1,455	\$ 1,819
Monthly Savings From Retrofitting	\$ 30	\$ 61	\$ 91	\$ 121	\$ 152

Dollars Invested	10%	20%	30%	40%	50%
\$ 4,000	9%	18%	27%	36%	45%
\$ 6,000	6%	12%	18%	24%	30%
\$ 8,000	5%	9%	14%	18%	23%
\$ 10,000	4%	7%	11%	15%	18%
\$ 12,000	3%	6%	9%	12%	15%
\$ 14,000	3%	5%	8%	10%	13%

Return on Investment



Typical Payback Periods

Low	Years
Air Sealing	1-3
Duct Sealing	1-3
Attic Stair Cover	1-2
Insulate Water Htr	1-2
CFL Light Bulbs	1-2

Medium	Years
Duct Renovation	3-5
Attic Insulation	2-5
Wall Insulation	2-5
Closed Crawl Space	3-5
Radiant Barrier	3-5

High	Years
Solar Water Heating	6-7
HVAC Equip Replace	5+
Doors & Windows	5+
Photovoltaics	10+
Ground Source HP	5+

Thank You,

0