Scott Home Inspection, LLC
Complete Home Performance Assessment
970-532-2424
www.ScottHomeInspection.com

Energy Audit Report

Anonymous Incognito

Property Address:
111 Cold House Lane
Anytown CO

Inspection Date:
10/28/2014

CERTIFIED INSPECTOR

General Information

NOTE: This is a sample report only, and many of the inspection notes in this report are not accurate to this home.

This confidential report is furnished for the use of the client only. It is not intended to be relied upon for any purpose by any other party not named on the report and Inspection Agreement.

This Energy Audit was performed in accordance with and under the terms of a ***Home Inspection Agreement***. The agreement was signed and agreed upon before the preparation of this report and a signed copy of the agreement is available upon request. An unsigned copy of the agreement is available on our web site at; **www.scotthomeinspection.com/agreement.html**

Scott Home Inspection conducts all Energy Audits according to a self-created Standard of Practice, developed from RESNET, and follows the American Society of Home Inspectors Code of Ethics.

Date: 10/28/2014	**Time:** 8:51 AM	**Report ID:** EAsample
Property: 111 Cold House Lane Anytown CO	**Customer:** Anonymous Incognito	**Real Estate Professional:**
Style of Home: Single Family	**Age Of Home:** Over 25 Years	**Weather:** Clear
Temperature: Below 60		

Interpreting the Inspection Results

Each item or area inspected will be marked with a finding, which represents the inspection result for that item. The following descriptions represent an explanation for each of the inspection findings.

Inspected - Appears Functional = The item, component, or unit was visually observed, and if no other comments were made, then the item appeared to be functioning as intended, allowing for normal wear and tear.

Repair or Replacement Recommended = The item, component or unit was visually observed, and is not functioning as intended or needs further inspection by a qualified specialist. Items, components or units that can be repaired to satisfactory condition may not need replacement.

General Maintenance Item = These are repairs that, in the opinion of the inspector, are regular maintenance items typical for all homes. Repair to these items is not urgent, but should be performed in the near future.

Service Needed = The item, component, or unit is functioning, but a service check-up is recommended to optimize performance.

Limited Inspection = The item, component, or unit was not fully inspected, and some form of limitation is preventing a complete inspection of the item/area. The report will state a reason for the limited inspecting of the item.

Energy Savings-Efficiency Recommendation = An enegy related improvement item is noted with recommendations on the appropriate upgrade or repair.

Not Inspected = The item, component, or unit was not inspected, and no representations of whether or not it was functioning as intended are made. The report will state a reason for not inspecting the item.

Not Present = The item, component or unit is not in this home or building.

Table of Contents

1. Insulation and Ventilation

DESCRIPTION:

Basement / Crawlspace:
Full Basement

Basement/Crawlspace Insulation:
Fiberglass
Batts

Attic info:
Attic hatch

Attic Insulation:
Blown
Fiberglass

OBSERVATIONS & RECOMMENDATIONS

1.0 ATTIC INSULATION

High Priority Energy Recommendation

Attic Insulation: The attic is insulated with approximately 3-6"" of insulation. I recommend adding another 10" of blown insulation in the accessible areas of the attic. The recommended level of total insulation is R-49 for the attic. Visit the following sites for information on insulation levels: http://www1.eere.energy.gov/consumer/tips/insulation.html http://www.energystar.gov/index.cfm?c=home_sealing.hm_improvement_insulation_table

1.0 Item 1(Picture)

1.0 Item 2(Picture)

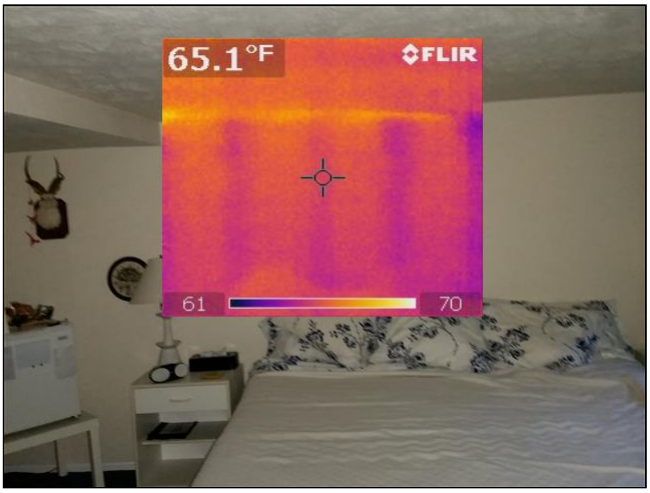
1.0 Item 3(Picture)

1.0 Item 4(Picture)

1.1 WALL INSULATION

Inspected - No Actions Recommended

Wall Insulation: a basic inspection of the wall insulation was done using infra-red scans, and observing insulation levels behind outlet plates, where possible. This limited inspection showed that the walls appear to be adequately insulated well at this time. No significant gaps, voids or missing areas were noted.



1.1 Item 1(Picture)

1.1 Item 2(Picture)

1.1 Item 3(Picture)

1.1 Item 4(Picture)

1.2 BASEMENT INSULATION

Low Priority Energy Recommendation

Basement Insulation: The basement foundation walls and rim joist area are not insulated at the unfinished utility room. It appears that the finished areas of the basement are insulated. In this utility room, I recommend adding fiberglass batt insulation, or vinyl faced draped insulation, to the concrete walls and adding insulation in the rim joist area where accessible.

1.2 Item 1(Picture)

1.3 VENTILATION OF ATTIC

Inspected - No Actions Recommended

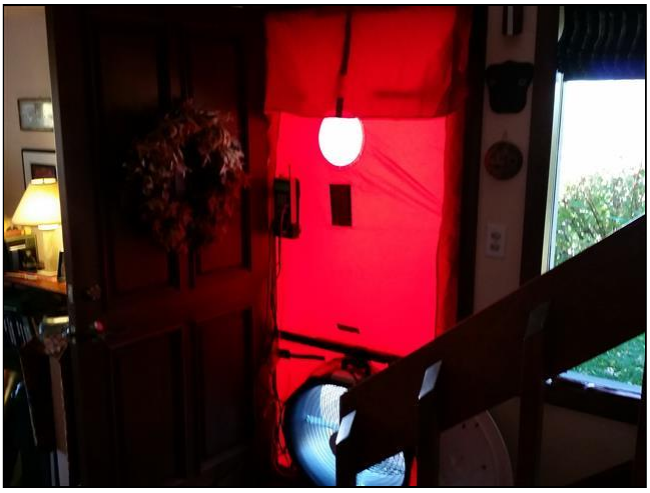
2. Air Leakage and Air Sealing

OBSERVATIONS & RECOMMENDATIONS

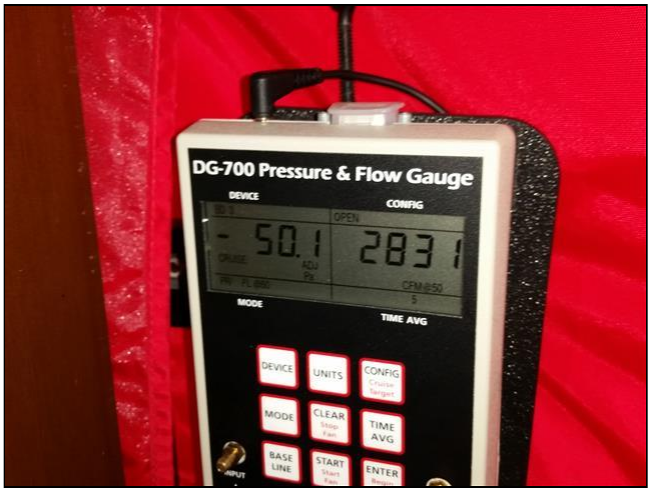
2.0 BLOWER DOOR TESTING / AIR LEAKAGE RATE

High Priority Energy Recommendation

The air sealing in the home needs to be improved. The blower door test measured 2831 CFM at 50 PA, which calculates to 7.6 Air Changes per Hour at 50 PA, or .41 NACH (Natural Air Changes per Hour). A NACH over 0.30 indicates leakage rates where air sealing efforts would be beneficial. The following areas of leakage were discovered and need to be improved.



2.0 Item 1(Picture)

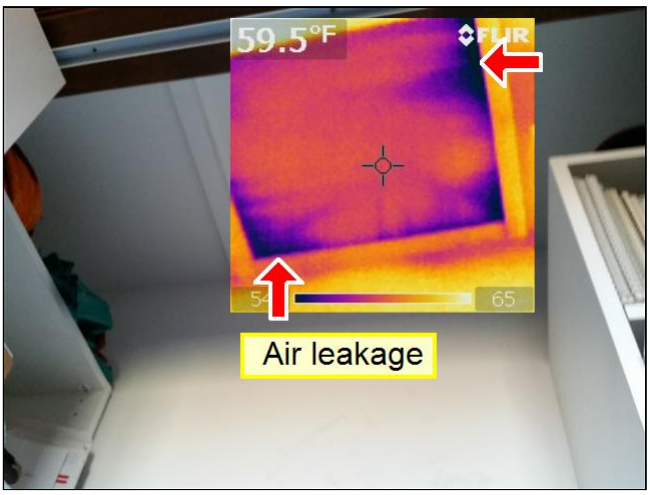


2.0 Item 2(Picture)

2.1 ATTIC AIR SEALING

High Priority Energy Recommendation

Attic Hatch - Weather-strip the attic hatch edges, so that when the hatch drops, it rests on the weather stripping. Also, ensure the upper part of the hatch cover is insulated to at least R-30. If possible, have tightening cam latches installed to keep hatch securely closed.



2.1 Item 1(Picture)

2.1 Item 2(Picture)

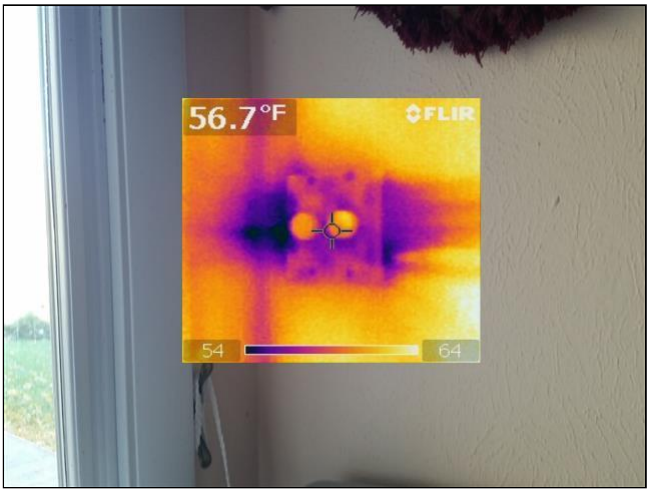
2.2 BASEMENT-CRAWLSPACE AIR SEALING

Inspected - No Actions Recommended

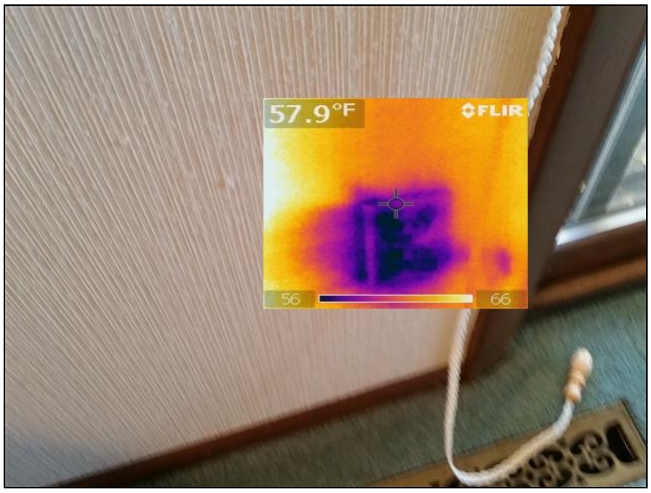
2.3 INTERIOR AIR SEALING

High Priority Energy Recommendation

(1) Electric Outlets/Switches: Install foam sealing gaskets behind exterior wall electric outlet and switch covers. Plug unused electrical outlets on exterior walls with child-safety plugs. These items can be purchased at any hardware store. It is recommended power be removed to the outlets and switches when installing gaskets, for safety.



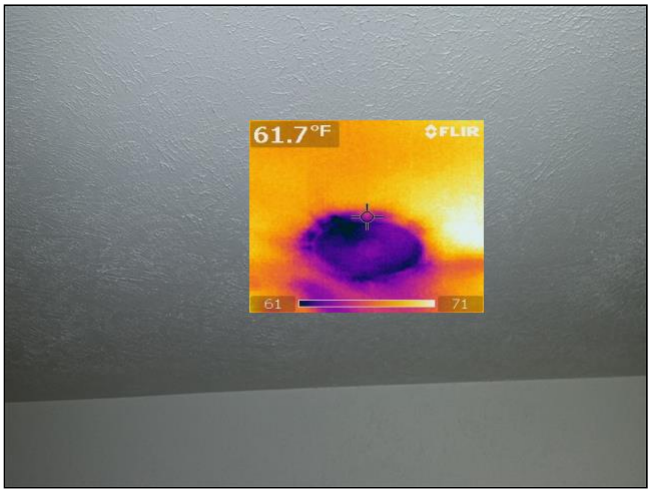
2.3 Item 1(Picture)



2.3 Item 2(Picture)

(2) **Ceiling penetrations:** seal the recessed light fixtures and speakers where they penetrate the ceilings at the upper level in the home. The majority of the leakage present is occurring around the edge of the fixtures, in the space between the drywall and the edge of the cans. This gap needs to be sealed. For the lights, seal around the edges with the trim and bulb are removed from inside the home, with an appropriate fire rated caulking. The better alternative is to seal all these light fixtures in the attic, around the edges of the cans, adjacent to the drywall, where access is available in the attic.

2.3 Item 3(Picture)

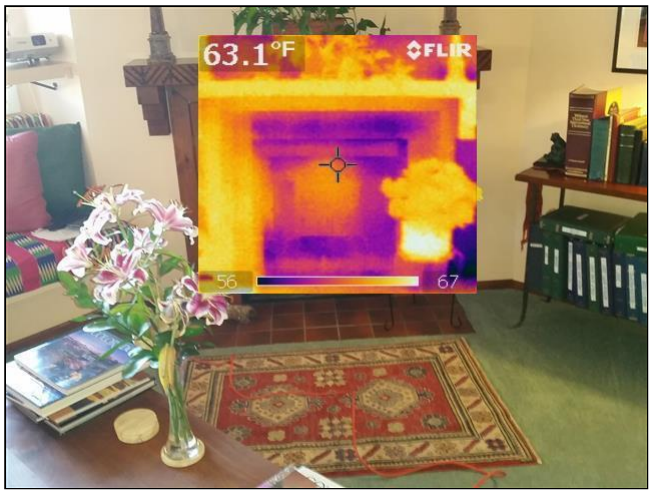


2.3 Item 4(Picture)

(3) **Bathroom vent fan:** the master bath vent fan does not have any damper installed to prevent outside air from entering or from heat escaping, or the damper is not working well. Consider the following device, to prevent drafts through the vent fan; http://www.batticdoor.com/bathfandraftblocker.html

2.3 Item 5(Picture)

(4) Consider installing a glass front door on the fireplace, to help reduce heat loss and air leakage from the flue of the fireplace.

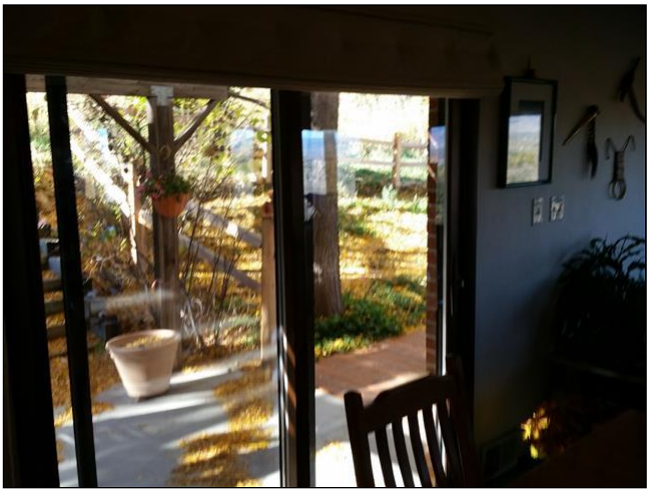


2.3 Item 6(Picture)

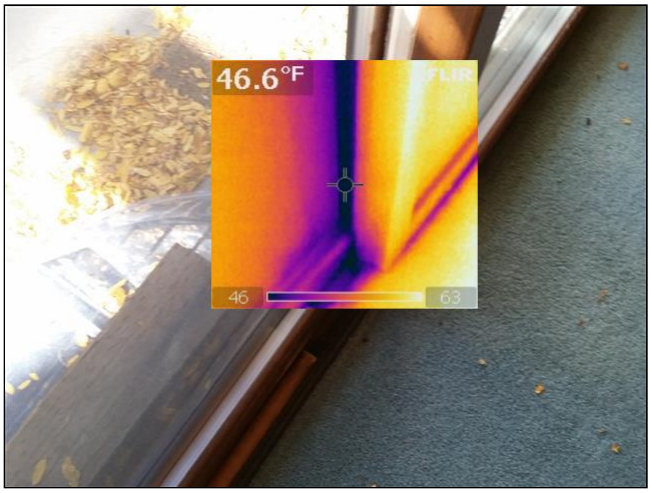
2.4 DOORS

High Priority Energy Recommendation

Significant air leakage is occurring at the center stile of the dining room sliding glass door. This door may need repairs, to properly close and seal. A door professional should evaluate and advise on repair/replacement options.



2.4 Item 1(Picture)



2.4 Item 2(Picture)

2.5 DUCT SEALING

Inspected - No Actions Recommended

3. Windows and Doors

DESCRIPTION:

Window Types:

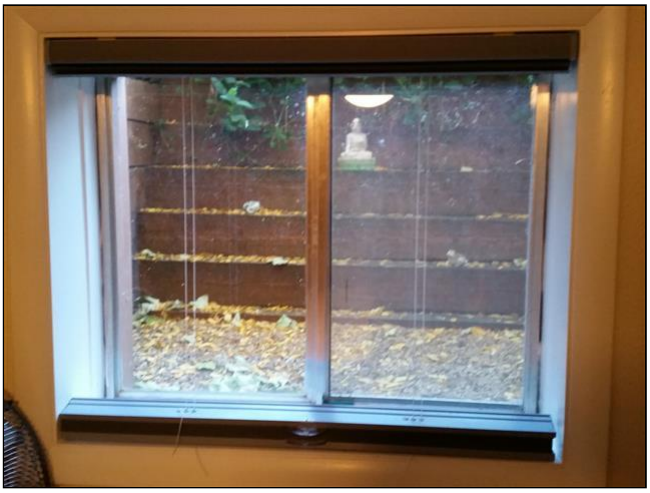
Sliders
Casement
Single pane
Thermal/Insulated

OBSERVATIONS & RECOMMENDATIONS

3.0 WINDOWS

Moderate Priority Energy Recommendation

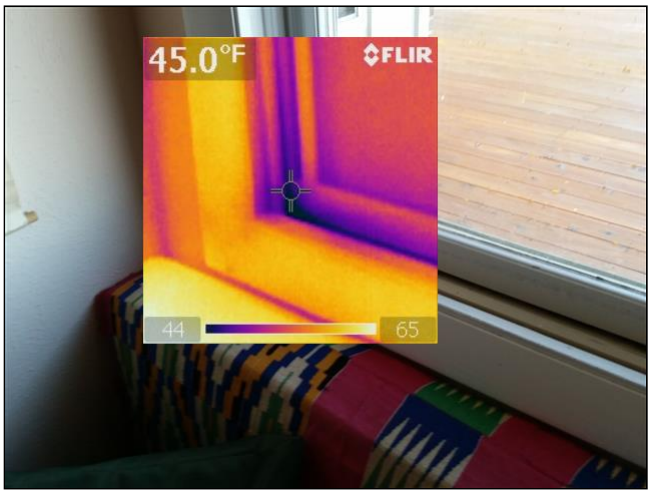
(1) **New Windows:** Several of the windows in your home are single pane or are an older, thin double pane style. There is considerable air leakage occurring at many of these windows, and several do not latch well. I would recommend that you consider replacing the older windows in the future. The following article has a section on windows, and discusses repair versus replacement; https://rmi.org/images/PDFs/HEBs/E04-11_HEB1_Building.pdf



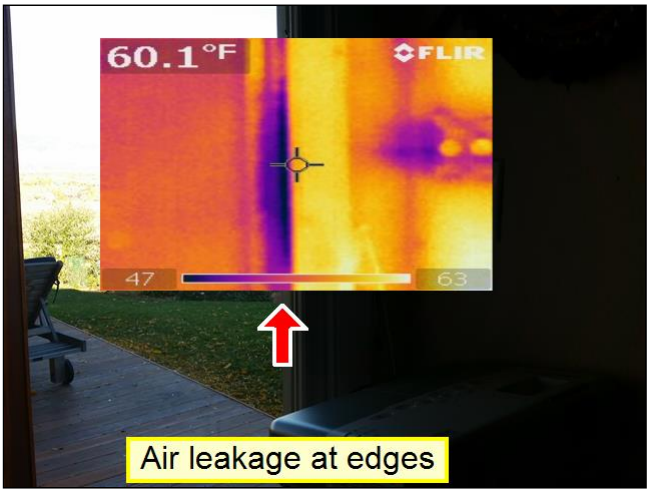
3.0 Item 1(Picture)

3.0 Item 2(Picture)

3.0 Item 3(Picture)



3.0 Item 4(Picture)



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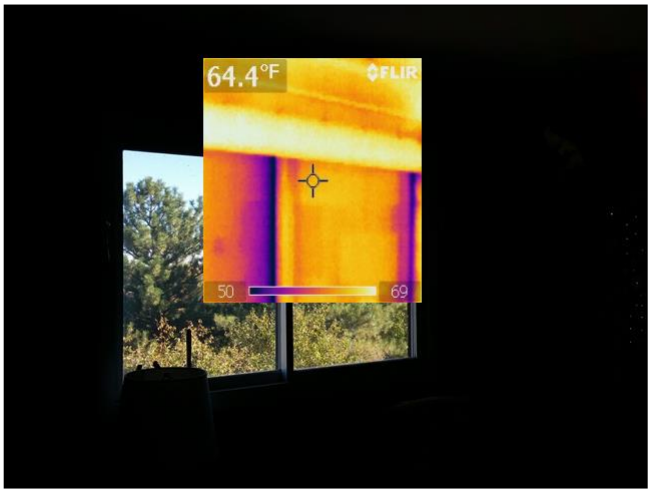
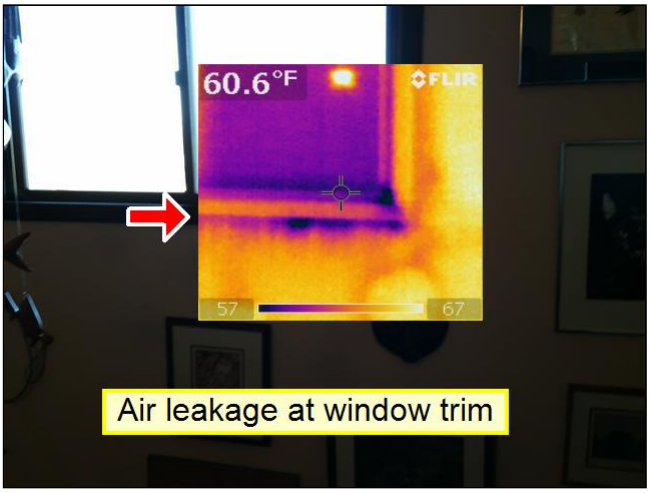
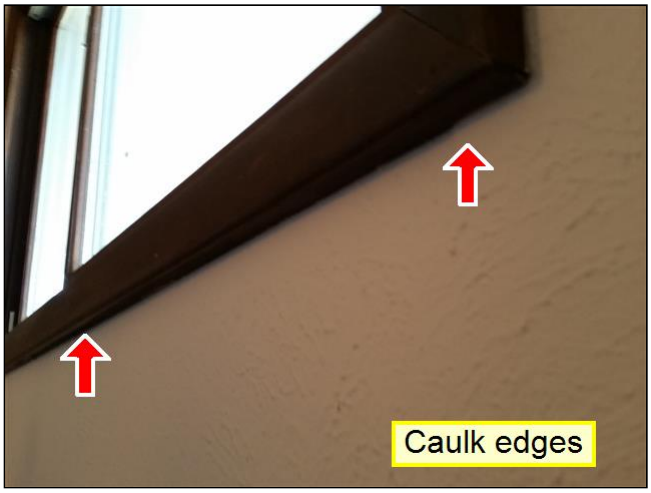


3.0 Item 6(Picture)

(2) **Window Trim-Moulding Edge Leakage:** there is air leakage occurring around the edges of the window trim in several areas throughout the home. Caulk and seal along these edges, to prevent air leakage or heat loss.



3.0 Item 7(Picture)



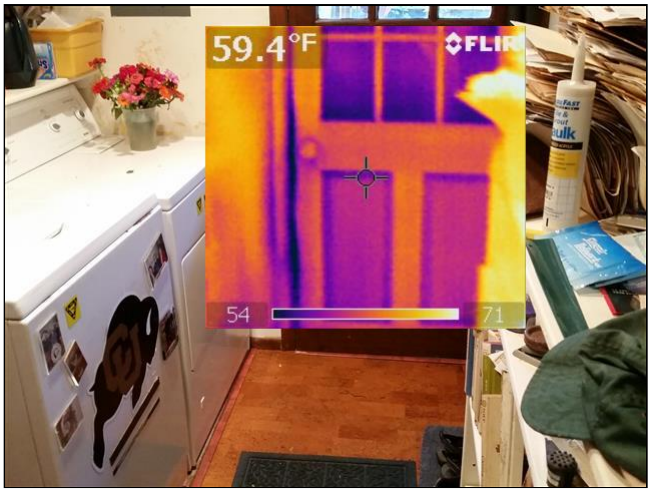
3.0 Item 8(Picture)

3.1 DOORS

Moderate Priority Energy Recommendation

Door Replacement: Consider replacing the rear entry door with a steel or fiberglass, insulated core door. This door is of poor insulating quality, and is likely allowing cold air to conduct into the home.

3.1 Item 1(Picture)



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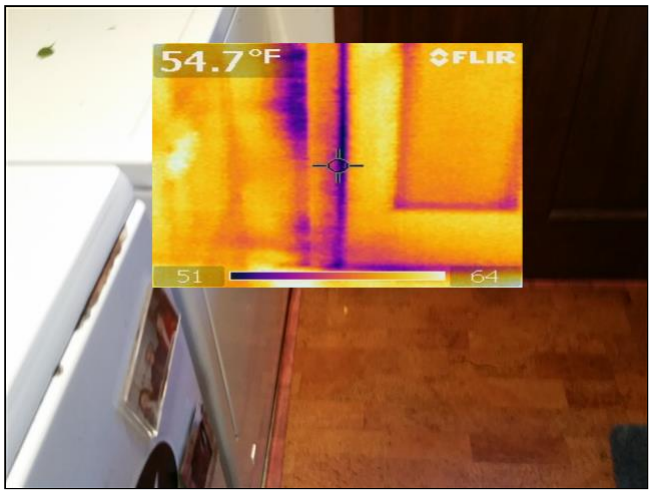


3.1 Item 3(Picture)

4. Heating System

The following components were observed and inspected. A description of the area materials and styles is included, and any observations and/or recommendations are listed.

DESCRIPTION:

Primary Heating System:
Forced Air

Energy Source:
Natural gas

Number of Heat Systems (excluding wood):
One

Approximate Age:
6-10 years old

Types of Fireplaces:
Solid Fuel

OBSERVATIONS & RECOMMENDATIONS

4.0 HEATING EQUIPMENT

Moderate Priority Energy Recommendation

Furnace - Service Check-up Recommended: The furnace is operating well at this time. I recommend having a service check up done to tune up the furnace and optimize performance, every 2-3 years. Ensure the burner assemblies are cleaned, as well as the other items normally performed. If you are considering replacing the furnace, I recommend you consider a high-efficiency condensing furnace. For information on replacement options, visit the following EnergySTAR website: http://www.energystar.gov/index.cfm?c=heat_cool.pr_checklist_consumers

4.0 Item 1(Picture)

4.1 THERMOSTAT

Inspected - No Actions Recommended

4.2 DISTRIBUTION SYSTEMS (including ducts, registers, returns, filters)

Inspected - No Actions Recommended

5. Cooling System

The following components were observed and inspected. A description of the area materials and styles is included, and any observations and/or recommendations are listed.

DESCRIPTION:

Equpment type:	Energy Source:	Number of AC Only Units:
Evaporative Cooler (Swamp-cooler)	Electricity	One

OBSERVATIONS & RECOMMENDATIONS

5.0 COOLING AND AIR HANDLER EQUIPMENT

Moderate Priority Energy Recommendation

The cooling unit is an evaporative cooler. No concerns are noted from an efficiency standpoint. Consider installing a cover over the outside unit on the roof in the wintertime, to limit air leakage through the ceiling ducts and out through the unit.

5.1 DISTRIBUTION SYSTEMS (including ducts air filters, registers, and fans)

Inspected - No Actions Recommended

HVAC equipment can fail at any time without warning. Regular service is important for efficient operation and to achieve maximum life from equipment; most manufacturers recommend annual service.

6. Hot Water and Plumbing System

The following components were observed and inspected. A description of the area materials and styles is included, and any observations and/or recommendations are listed.

DESCRIPTION:

Water Distribution (inside home):
Copper

Water Heater Power Source:
Natural Gas

Water Heater Capacity:
40 Gallon

Approximate Age:
<5 years old

OBSERVATIONS & RECOMMENDATIONS

6.0 HOT WATER SYSTEMS, CONTROLS, CHIMNEYS, FLUES AND VENTS

Low Priority Energy Recommendation

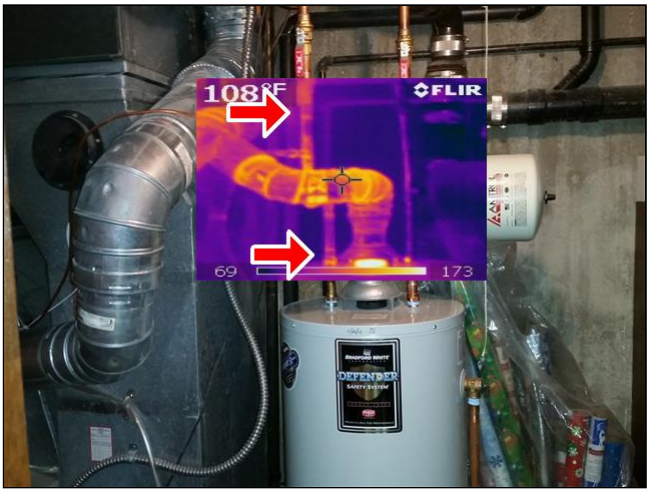
Your water heater is currently in good condition, and appears to be operating properly. However, other options exist for efficiently heating water in your home. If you consider replacing your water heater, the following article provides a good overview of alternative options available;
https://www.energystar.gov/index.cfm?c=water_heat.pr_help_me

6.0 Item 1(Picture)

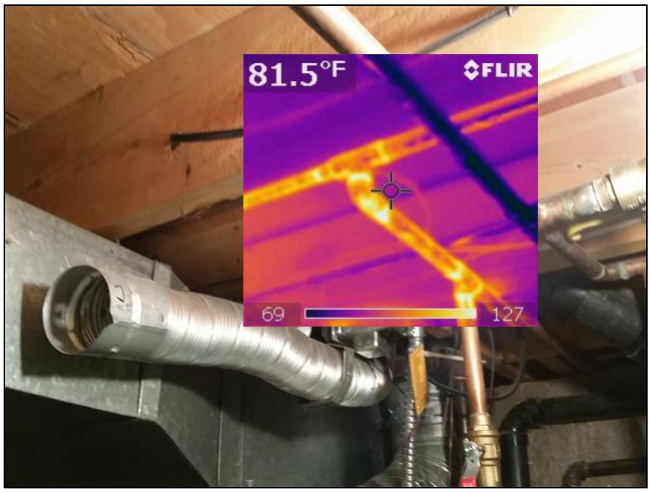
6.1 WATER SUPPLY AND DISTRIBUTION SYSTEMS

Moderate Priority Energy Recommendation

Hot Water Piping: Insulate accessible hot water piping coming from the water heater with low cost foam wrap insulating material. This should be done for the first 6 feet of both hot and cold piping off the water heater, and wherever possible on the hot line.



6.1 Item 1(Picture)



6.1 Item 2(Picture)

6.2 TEMPERATURE OF HOT WATER (nominal setting = 120 F)

Inspected - No Actions Recommended

7. Lighting and Electrical System

The following components were observed and inspected. A description of the area materials and styles is included, and any observations and/or recommendations are listed.

OBSERVATIONS & RECOMMENDATIONS

7.0 ENERGY EFFICIENT LIGHTING

High Priority Energy Recommendation

Energy Efficient Lighting: Install more LED's or CFL's in non-dimmed light fixtures. LED and CFL bulbs consume 1/4 the power of incandescent lights, and often last up to 10 times longer. This will help to reduce your overall electric use. For more information visit; http://www.energystar.gov/products/certified-products/detail/light-bulbs

7.0 Item 1(Picture)

7.0 Item 2(Picture)

7.1 FIXTURES, SWITCHES & CONNECTED DEVICES

Inspected - No Actions Recommended

8. Appliance Review

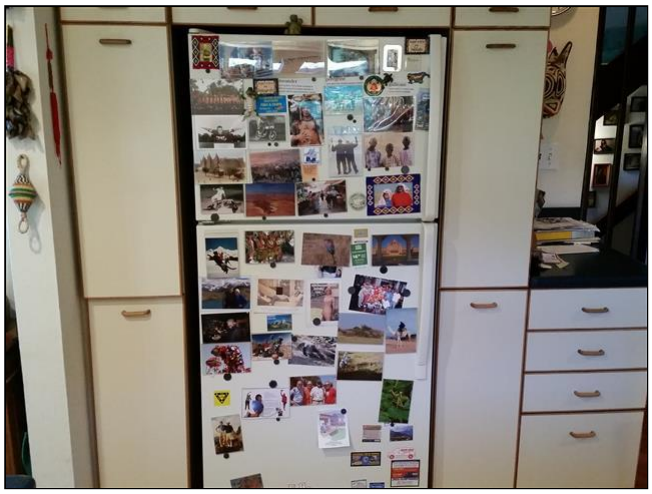
The following components were observed and inspected. A description of the area materials and styles is included, and any observations and/or recommendations are listed.

OBSERVATIONS & RECOMMENDATIONS

8.0 REFRIGERATOR/FREEZER

Moderate Priority Energy Recommendation

Refrigerator: Your refrigerator power consumption is estimated at approximately 665 kWh per year. This is about 2-3 times what a newer Energy Star refrigerator would consume. Consider replacement at this time. As a maintenance item, regularly clean the refrigerator condenser coils beneath or behind the unit to ensure optimum efficiency is gained from your current unit. For more info: http://www.energystar.gov/index.cfm?c=refrig.pr_refrigerators



8.0 Item 1(Picture)

8.1 CLOTHES WASHER/DRYER

Moderate Priority Energy Recommendation

Washer/Dryer: Your washer/dryer units are older and likely consume more electricity and water than newer, energy efficient units. Consider replacing with Energy Star rated units when possible. Visit; http://www.energystar.gov/index.cfm?c=clotheswash.pr_clothes_washers

8.1 Item 1(Picture)

8.2 DISHWASHER

Inspected - No Actions Recommended

9. Renewable Energy Options

OBSERVATIONS & RECOMMENDATIONS

9.0 PHOTO-VOLTAIC SOLAR INFORMATION

Renewable Energy Options

Photo-Voltaic Solar Info: Once the high priority energy efficient improvements noted in this report are implemented, you should consider the installation of Photo-Voltaic Solar Panels. There are rebates and tax credits available to help reduce the up-front costs. PV systems represent the best opportunity to offset your electric use and consumption, and are an excellent means of reducing your net energy use. For additional information on this technology visit: http://www1.eere.energy.gov/solar/pv_consumers.html

Thank you for utilizing our services – we appreciate your confidence in Scott Home Inspection.

Should any questions about this report arise, please do not hesitate to contact us for assistance or an explanation.

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