

Energy Audit Report

Homeowner: Me_summer_test2

Address: Me_summer_test2

Auditors: Rudy

Contact: mdicommunityenergy@coa.edu, 802 266 0301

Date: 15 July 2024

We conducted an energy assessment of your home on 2024-05-24. This report will tell you what we did, what we found, and what we suggest for your home. These suggestions include information on incentives and financing to make improvements more affordable.



Table of Contents

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1. Summary of your Audit

1.1 Visual Inspection and Measurements

We started with a tour and visual inspection of the inside and outside of the home. We identified any visible damage to the building, moisture control strategies, major appliances, and insulation. We measured square footage and volume of the home, as well as the area of all exterior windows and doors. We used a kill-a-watt meter to measure the electricity use of some appliances. During your audit, we used a carbon monoxide meter to measure the ambient carbon monoxide levels throughout the home.

1.2 Attic

We entered the attic to check for insulation, air sealing, ventilation, and potential hazards such as mold. Additionally, we visually inspected the attic ventilation and any duct and pipework passing through the attic.

1.3 Basement

We visually inspected any appliances in the basement and noted insulation levels, moisture, rodents, and any other concerns.

```
x <- c("Heating oil")
if (x == "Heating oil") {
  print("**1.4 Combustion Appliance Safety**")
  We assessed combustion appliances that burn fossil fuels such as propane, heating oil, or kerosene
} else if (x == "Propane") {
  print("**1.4 Combustion Appliance Safety**")
  We assessed combustion appliances that burn fossil fuels such as propane, heating oil, or kerosene
} else if (x == "Kerosene") {
  print("**1.4 Combustion Appliance Safety**")
  We assessed combustion appliances that burn fossil fuels such as propane, heating oil, or kerosene
} else if (x == "Firewood"){
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  We assessed combustion appliances that burn fossil fuels such as propane, heating oil, or kerosene
} else if (x == "Pellets") {
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  We assessed combustion appliances that burn fossil fuels such as propane, heating oil, or kerosene
} else {
  print("")
}
```

```
[1] "**1.4 Combustion Appliance Safety**"
[2] "We assessed combustion appliances that burn fossil fuels such as propane, heating oil, or kerosene"
```

1.5 Blower Door / Air Leakage Test

We used a large fan in an exterior door to depressurize your house. This allows us to determine the volume of air leakage into the house and to locate bigger air leaks. To find leaks, we used an infrared camera to check for unusually hot and cold spots. We also checked the pressure differences of the rooms to help determine major air leak locations.

Home's current conditions

Build: Year 2019	Primary heating fuel: Gas
Volume: 5000 cubic feet	Secondary heating fuel:
Area: 5000 square feet	Water heating fuel:
Net wall area: 500 square feet	Window type: doublepaned
Ceiling/attic area: 2000 square feet	Window area:400 square feet
Ceiling height: 5 feet	Door type and area: no_idea, 500 square feet

Health and safety

Combustion Gas Spillage Test – PASSED (Emissions Spilled for 50 seconds)

Appliance Carbon Monoxide (CO) Test – FAILED(Detected 30parts per million)

Ambient Carbon Monoxide (CO) Test – PASSED (Detected 20 parts per million)

Combustion Appliance Draft Test – FAILED

Gas leak detection: PASSED, NA

Other Health & Safety Concerns: There were no further health and/or safety concerns that were identified at the time of your energy audit.

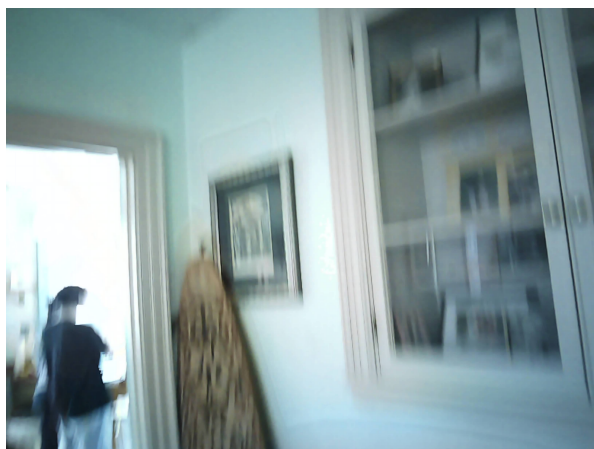
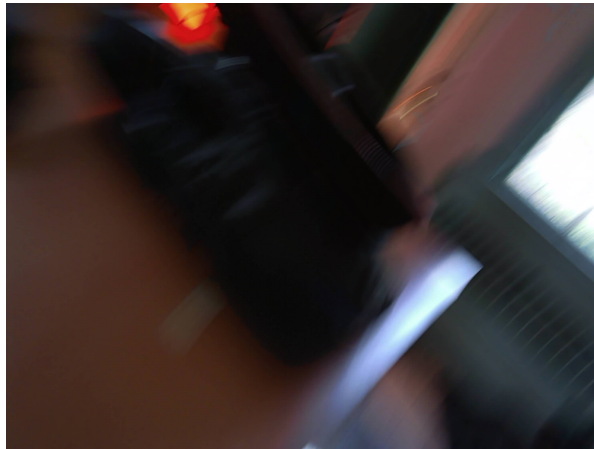
Air quality

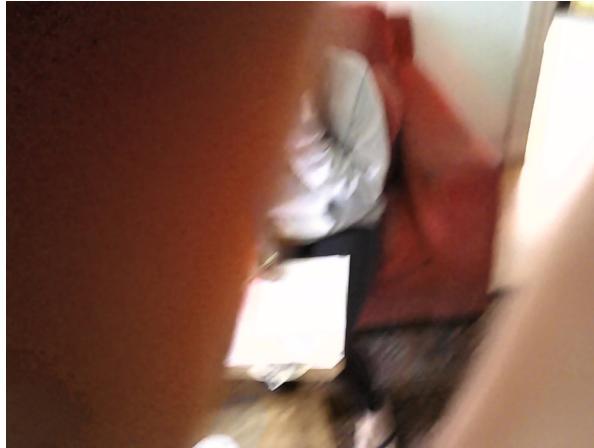
Insulation levels

HOME COMPONENT	YOUR HOME'S R-VALUES	US D.O.E. RECOMMENDED R-VALUES
Attics/Ceilings	50	60
Above Ground Walls	20	30
Basement Walls	20	19

source [U.S. Department of Energy, Pacific Northwest Laboratory](#)

Here are some picture of your insulation.

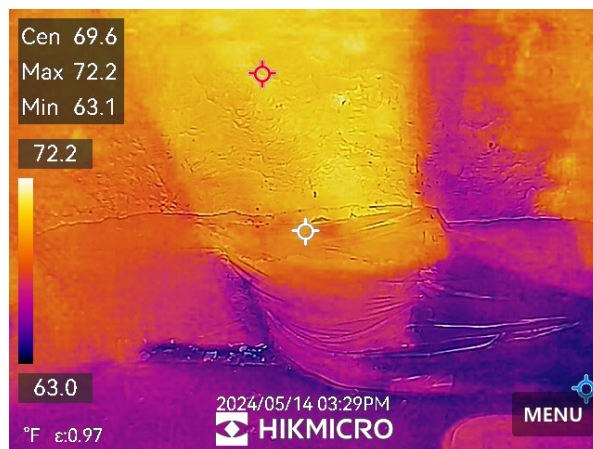




Images of the insulation pictures.

Blower Door / Air Leakage Test

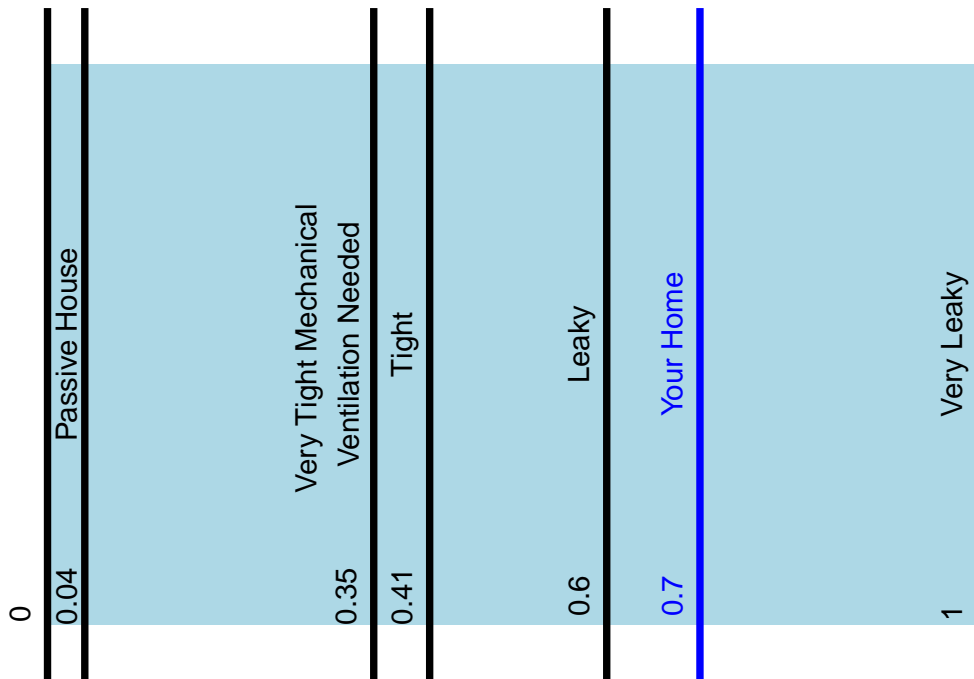
The blower door test, determined that your homes air leakage rate is 0.7 Natural Air Changes per Hour (ACH_n) (Should I explain what ACH_n is?) CFM50 was 450 with B ring used. (Include photo)



NA

Your Building on the scale

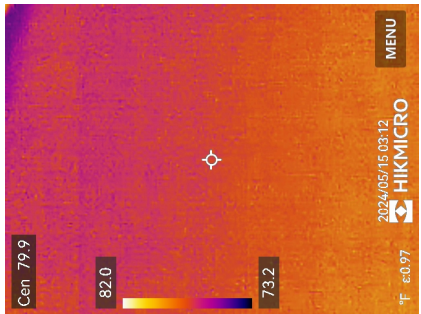
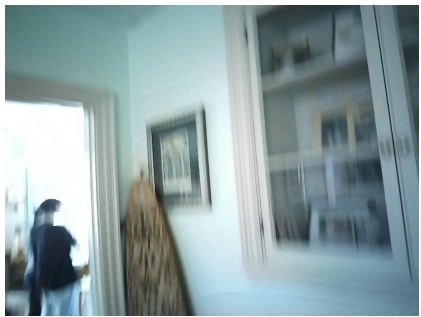
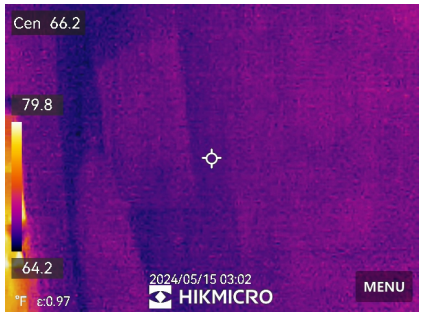
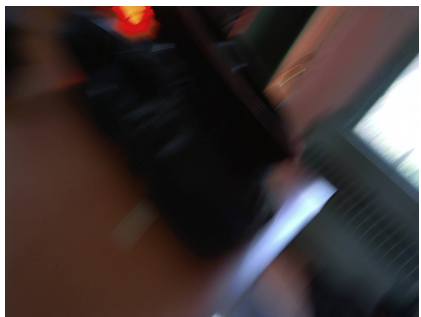
This scale shows how is your building compare to air leakage standards. Where being closer to zero providing with the best energy saving.

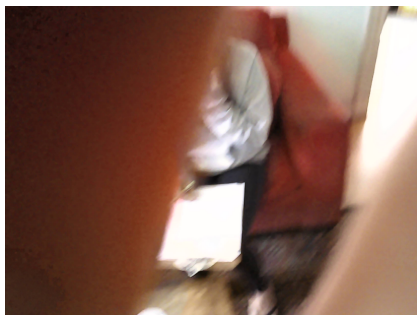


The blower door test and visual inspection detected the following areas for moderate to severe air leakage:

(This would be pictures)







Heating and Cooling Systems

(Image of heating system) Your home is currently heated with an Gas Your current heating system has the following efficiency and output ratings:

- Heating efficiency = 20
- Annual Fuel Utilization Efficiency (AFUE)(need a new column here)
- Heating output = 2000 Btu/hr.

Your home is cooled with (need new column for cooling type) r code here. (I need conditional rendering here) The size, construction, and energy consuming features of your home have all been factored into the calculation of the heating and cooling loads for your home:

- Heating load = 3000 Btu/hr
- Cooling load = 1.5×10^4 Btu/hr

It is important to make sure that a new heating/cooling system is designed to meet the heating and cooling loads of your home. And please keep in mind that any changes to your home (i.e. – air sealing, insulating, etc...) will ultimately decrease your heating load and can lead to saving money on a new heating system by enabling you to purchase a system with a lower energy output.

Buildings Electricity use

Energy Bill analysis

