

Essential Guide To Energy Audits

Everything You Need to Know About Energy Audits

Whether you are a new home owner or you have been living in your home for years, you may be wondering if an energy audit is something you should be considering. If this is the case this is the book for you.

What Is An Energy Audit?

Worried your hard earned cash is escaping out the cracks of your windows along with all your heat?

If you have recently purchased a home or are interested in finding out how energy efficient your current home is, you may want to look into getting a home energy audit. When looking into energy audits, Louisville KY residents must first find a reputable auditor. A professional in



Home MD Inspection Services IIc HomeMD.com (502) 290-3935 the field will come to your home and perform a full "energy audit" which entails carefully looking over your home from top to bottom to find any areas where energy may be leaking away your hard earned dollars.

It is estimated that poorly sealed walls, roofs, and duct work can cause from 5 to 30 percent heat loss during the coldest months of the year. With energy audits in Louisville KY homeowners can find these leaks and winterize their homes to prevent future heat loss. A little time spent insulating and sealing open areas in your home can save you quite a few dollars over the span of two or three years.



Here is how an energy audit works:

A professional home energy rater will be sent to your home and they are trained to inspect construction techniques and measure a home's efficient performance.

There are two ways a home energy rater can help builders choose energy efficient features for their Energy Star home. The 1st way is when



an energy rater simulates the home's energy use with a computer program. The software will tell the rater what appliances or upgrades will meet the Energy Start performance guidelines.

The 2nd way is called the builder option package. The energy rater and builder work together to prepare a set of climate-specific construction regulations by following the EPA guidelines. This ensures new homes being built based on these guidelines will consistently meet the Energy Star requirements.

Regardless of whether the house is being built or is already built, the energy rater will always perform an on-site test of the home. They often use a blower door test, which tests how much your house is leaking and a duck blaster test, which tests how much your ducts are leaking. These tests and the results are to make sure your home is consistent with the Energy Star guidelines.

They will also analyze how your furnace, air conditioning units, and appliances use energy and if they are as efficient as they could be. They will also check your home's insulation, windows and various other places around the foundation where energy can be lost through inadequate seals or poor insulation. When getting a professional energy audit, Louisville KY residents must understand that the older their home is, the worse the audit could be.

After the information is analyzed the auditor will provide you with a complete report on your homes strengths and weaknesses. The report will include how energy efficient each appliance is and what can be done to improve poor ratings. In some cases, the fix may be as easy as changing a seal on a refrigerator or as difficult as possibly replacing a faulty furnace.

When considering a professional energy audit in Louisville KY, homeowners should find a reputable auditor with a proven track record of being efficient as well as informative. A complete report will help you to correct as many of the problems as you can before bad weather sets in. Getting a home energy audit every 5 to 7 years can help keep





What is the Difference Between an Energy Audit and Energy Analysis?

There are many important tasks to keep in mind when purchasing a new home.

One of the most important things to do is have the new home inspected. Something that not every home inspector will do is an energy analysis to help determine if energy is being wasted. We are the best company for performing (energy audits Louisville KY) energy audits in Louisville, Kentucky and the surrounding area.

An energy audit is a more focused inspection of a house, using specialized equipment to find out where energy is escaping so a new homeowner can determine if a home is in good condition and ready for new residents.

An energy analysis can make a difference in how that first electric or gas bill is viewed; is it an expected and realistic bill, or is it a shock. By conducting an energy analysis, we can help make that determination. Sometimes windows or the foundation of a house are practically sieves that allow air to escape and to keep a home from becoming comfortable. By conducting an energy analysis a homeowner not only knows what to expect from utility bills, but they also have more power to negotiate. A home might seem to be reasonably priced, but an energy analysis might prove that paying for the mortgage and utility bills will be impossible. A new homeowner might also have an opportunity to add insulation, better windows, a new roof before moving in to save the mess and hassle of making those corrections while already living in a house.

By having home inspectors perform energy audits in Louisville KY, you can also find out if the appliances in the house are energy efficient. If you purchase a home that comes with Energy Star appliances, we offer the RecallChek program. This program analyzes the pre-existing energy efficient appliance to make sure they are still working properly and efficiently. This will give you a better understanding of how efficient your new home really is. We have well over 100,000 pieces of recall information on items that might be able to be replaced or have parts replaced to make those appliances more energy efficient in the future. Just because the realtor tells you the appliances are energy efficient, it doesn't mean they still save energy efficiently and it is best to double check.





Homeowners and realtors alike will find the information we can provide to be invaluable to find out how energy efficient a home can be. The average homeowner spends over \$1900 a year on energy. An energy audit performed by us can save 30% of that cost, or nearly \$600 a year.

That makes our service an expense that is more of a no-brainer than an option! We can come in and find out how energy efficient any home is, whether it is 100 years old, or whether it is brand new. The money that we can save our customers in decreased energy bills makes our service a must.

My Home is Brand New. Do I really Need an energy audit?

Congratulations on your new home. Whether you had it custom built or purchased your first home, you're excited to make it your own. There are plenty of things you've done prior to your purchase or build to make sure your home is safe, and you probably have a checklist of things you want to get done from covering outlets to protect children to purchasing new curtains. If saving money is important to you, an energy audit should be on that list.

A home inspection company in Louisville, KY can perform an assessment that involves checking for inefficient areas in your home. For example, a blower door checks for air leakage around doors, which can lead to poor air conditioning and heating. A similar blower detects leaks in your ventilation system, which may cause your HVAC to work harder than a system that is properly sealed. Professional auditors may use infrared cameras and other tools to locate areas where your home is leaking money as well as air.

Home MD Inspection Services IIc HomeMD.com (502) 290-3935

"Do Brand New Homes Really Need an Energy Audit?"

Even though you may have purchased a brand new home, you can still benefit from assessing the energy efficiency of that new home. An energy audit can determine if your new home was built to stand up against the environment and location your home was built in. The results will also tell you if your home was built to follow the Energy Star guidelines.





Just because your home was recently built doesn't mean it is perfectly efficient.

An energy audit will take the surprise out of heating costs and wasted energy. Energy assessment points out the weaknesses in your home's design or device usage. You can then take the steps to remedy the problem to prevent your utility bills from skyrocketing. Sealing your ducts and doors are common ways to fix the leaks that your brand-new home may have.

Energy audits provide unexpected benefits, too. You may be able to keep your home warmer in winter and cooler in summer, but you might also locate leaks through which dust and dirt are entering your home. You don't want to have to clean your brand-new home every day or let dust ruin your home or possessions, and closing up those leaks may help your air conditioning system operate more efficiently, too.

Another benefit of buying a new home is it may come with energy star rated appliances! Although this is helpful since you don't have to purchase new appliances, you want to make sure the appliances are working efficiently. HomeMD offers a RecallChek program that tests the efficiency of the energy star appliances that came with the home. You can rest assured that your new appliances are working correctly







10 Ways to Get an Energy Efficient Home

Energy efficiency is not only about saving you money on your utility bills, but also about doing your part to use fewer natural resources. With the climate in Louisville, KY, there are plenty of strategies you can use to affect the energy efficiency of your home.

Here are some of the best ways to have a more energy efficient home.

- 1. Switch to compact fluorescent light bulbs throughout your home, which use much less energy than incandescent bulbs. In addition, turn off lights when they are not in use. Although may be difficult for some people, try using small Post-it notes for a few weeks reminding yourself to turn off the lights every time you leave a room.
- 2. Add insulation in your attic and walls to help maintain your indoor temperature with less energy use. This one step can give you a much more energy efficient home.
- 3. Install a programmable thermostat and set it to decrease the load on your air conditioner and furnace overnight and when you are not at home.
- 4. Plant large trees around your home to help shade it from summer heat. You can also install the outdoor portion of your air conditioner in the shade to help reduce the temperature of the air around it and reduce the amount of energy required to cool your home.
- 5. Turn down the temperature on your hot water heater so you are not paying to heat the water hotter than you need it to be. In addition, ensure that your hot water heater is sized appropriately for your home, or consider an on-demand water heater.
- 6. Seal your windows and doors to prevent heat loss. But wait, how do you know which doors or windows are loosing the most heat? Simple, by having a professional energy audit done, you will be shown exactly where the most energy is being lost in your home. Just think, if you only have to seal 5 windows out of 20, you are saving lots of time and money.
- 7. Reduce your hot water use by washing clothing in cold or warm water rather than hot and only running full loads in the washing machine and dishwasher. If you really want to drastically make a difference, you can turn off the water while you are soaping up in the shower. That is what





we call dedicated home energy saver!

- 8. Replace older appliances with models that have top-notch Energy Star ratings. This is especially important with large appliances that pull a lot of energy. If you have Energy Star rated appliances already, but you are not sure if they still work efficiently you can have a RecallChek done. RecallChek is a consumer appliance reporting system that tests all of your appliances. You then receive a report informing you of how efficient your appliances are.
- 9. Turn off and unplug computers and other electronics when they are not in use. You can use a smart power strip to turn off computer peripherals when you shut down your computer. This tip also works for unplugging all appliances when not in use. You don't have to go crazy and have every single electric item unplugged, but you can find appliances that aren't used on a daily basis.

Some examples are toasters, blenders, microwaves, DVD players, phone chargers, and hair dryers.

10. Follow the steps to fix areas pointed out in your energy audit. As a professional energy audit company in Louisville KY, our results offer tips and guidances about your homes problem areas. This is a great way to make your home more energy efficient and save you money! There are several ways you can start saving money on your energy bills and improving your home's energy efficiency. It will take time, but once you get in the habit of shutting off lights or unplugging appliances, you will see a difference in the money spent on home energy costs!







After the Energy Audit, What are the Next Steps?

When all is said a done, an energy audit gives home owners an opportunity to have an energy efficient home by implementing new energy saving strategies, improving appliances, and preventing wasting energy. Hiring a professional home inspection company ensures that the job is done the right way the first time, saving people money and frustration. For home inspections in Louisville KY, HomeMD offers an easy way to schedule a range of tests online and help guide homeowners and real estate agents in identifying the problems and what to do about them.

Those wondering how to make home energy efficient sometimes try to assess manners for themselves. While some minor problems can be solved using do-it-yourself resources and guidebooks, a complete home inspection requires professional experience and a strong background both in knowing what odds and ends go missed to the untrained eye and how to solve them.

For Louisville KY home inspections, HomeMD can provide quick services with a detailed analysis that the home inspector will carefully go over with the homeowner or real estate agent. Problems with appliances, home structure and construction, electrical and plumbing systems and other household equipment will be identified. Whether looking to buy, sell or improve a home, this information is critical in assessing how to make home energy efficient.

Home MD Inspection Services IIc HomeMD.com (502) 290-3935 HomeMD offers Energy Audits along with home inspections in Louis-ville KY. This special test follows the criteria of Energy Star, the government-backed guidelines for energy efficiency. Homes that receive an Energy Star have been thoroughly inspected by a professional home inspector and meet all of the organization's testing requirements. For house buyers, the Energy Star becomes a symbol of security that the home is energy efficient. For sellers, the Energy Star helps propel the house on the market and ease any worries from potential buyers.



Let's say you perform an energy audit on your home and the assessment comes back with several areas to improve, such as heating and cooling. You may ask yourself, "Where do I begin?". It can be overwhelming trying to figure out how to improve your home's energy efficiency.



Here are some tips to get you started:

Change your air filter regularly: By keeping this clean you aren't restricting air flow, which makes the system work efficiently saving energy. Also if you allow for dust and dirt to build up, you can damage the system leading to a costly repair. Never mind the damage to your health with all the dirty air you are breathing!
Tune up your heating and cooling systems each year: With a little maintenance, it will keep them running efficiently.
Seal the heating and cooling ducts: If the energy audit results show you are loosing air in these ducts, be sure to seal them. Not sure how to seal ducts? Here is a duct sealing brochure from Energy Star!
Set water heater temperatures to 120F or lower: This can save you money and energy. Also if your water heater is older, there are options to insulate the outside of the heater and the pipes.
Going on vacation?: Turn off electric water heater or turn down gas water heater while gone.
Check your windows: Energy audits are specific enough to pin point which windows are loosing air. If you have a few windows that are loosing significant energy, it may be best to replace them. You can do this by hiring a local contractor to help you determine which windows will work best for your needs. Another option is sealing the

Home MD Inspection Services Ilc HomeMD.com (502) 290-3935

The best way to find out specific details and recommendations about your home's energy efficiency is to have a professional energy audit done. This detailed report will tell you everything you need to know about your home and what areas you need to fix. In order to be fully prepared for the colder months ahead, an energy audit is your best option!

windows for the winter to keep energy in.







Hidden Benefits of Energy Efficient Appliances

The topic of energy efficient appliances has been a popular basis of discussion in the media last decade. However, many homeowners still do not fully understand the hidden benefits -- and savings -- of these fantastic devices! One of the biggest reasons to switch to energy efficient appliances is the most simple.



Home MD Inspection Services IIc HomeMD.com (502) 290-3935 These machines often run on 30%-50% less energy. Not only does this help the environment, it also saves homeowners on their monthly utility costs. In addition, these types of appliances are also said to be constructed of longer lasting materials than regular appliances. A durable appliance will run better for longer, saving homeowners the hassle and expense of replacing the unit more quickly.

These types of appliances also have additional benefits that the normal versions do not.

Let's dive into the several benefits of owning an Energy Star clothing washing machine. To start, these washing machines come in both top-loading and front-loading models. One visual aspect of the top-loading washer you will notice is that they do not have a central agitator. There is a reason for this, just like the name "agitator" suggests, it will damage your clothes over time. The purpose of the agitator is to pull and rub on the clothes to "clean" them, but this can cause tearing and pulls in the fabric. By removing the agitator, your clothes are now gently flipped and spun through streams of water. Now you don't have to worry about your expensive, delicate clothing being ripped to shreds in your washer!





5 Ways Energy Star Saves You Money

- Streams of water replace filling the tub reducing water waste from 23 gallons to 15 gallons in each load. That saves 8 gallons of water each time!
- 2. High spin speeds are 3 times faster to extract more water, which means less drying time
- 3. Energy Star clothes washers WILL save you on average \$30 a year on utility bills
- 4. Removed central agitator creates more space for large items, such as comforters, and bigger loads saving you time and water
- 5. Gentle wash cycles in most Energy Star models allow you to wash wool, silk, and hand washables

What about drying your Energy Star washed clothing? As we all try to save money on utility bills, it would make sense to pair an Energy Star washer with an Energy Star dryer. Unfortunately, Energy Star does not label dryers because there isn't a big enough difference in energy use between models. They do recommend purchasing a dryer that includes a moisture sensor feature. This feature can tell how much moisture your clothing has and will automatically shut off once the clothes are dry.

Home MD Inspection Services IIc HomeMD.com (502) 290-3935 Another convenient appliance that makes daily kitchen chores a breeze is the energy inefficient dishwasher.

If you have an older dishwasher, made before 1994, you are paying an extra \$40 a year in utility bills. Buying a new Energy Star dishwasher will save you money and energy!

New Energy Star dishwashers save on average 1,300 gallons of

Innovative dish racks are designed to situate the dishes for optimal

	Older dishwashers waste 10 gallons of water per cycle
SCHEDULE NOW	New Soil Sensors test how dirty the dishes are and adjust the water pressure/amount accordingly
	☐ Efficient jets use less energy to spray water and clean the dishes

cleaning

water over their lifetime.



Energy Star offers several other home appliances, electronics, heating/cooling products, lights and fans, and products for home plumbing. Be sure to check out energystar.gov to receive tips on how to purchase products for your home that will save you money! By purchasing Energy Star appliances you not only save money on utility bills, but there are also many added tax benefits of adding energy efficient models to a home.

Check with a local accountant to be sure of the benefits in your area, but most save taxpayers a few hundred dollars in rebates the year they are purchased.

But what if a home was purchased with existing energy efficient appliances? Is there a way to check if any energy efficient appliances recall have happened? And is the unit still working efficiently after a few years?

At HomeMD, we are also an authorized RecallChek dealer. What this means is that we check any pre-existing energy efficient appliances within the home to see if they are still working as well as they should. By doing so, the homeowner can be confident that their energy bills are as low as possible with the existing equipment inside their residence. This process can also help them determine which units are in need of repair and/or replacement.







What is the True Cost to Heating Your Home?

When you first look at a home, it's hard to know how much it will cost to heat that home. You may be able consider the house's building materials and its square footage to get a rough guess of your heating costs. However, the truth is that there is a huge variance in the cost to heat homes of the same size, and the factors that affect the cost may not be apparent at first glance. Running the heater for a specific amount of time will have vastly different impacts on the temperature inside, depending on a wide range of factors.

What you really want to know when you're looking at a house is whether it is an energy efficient home. Then you know that the money you put into operating the heating system will be well spent because your system will use energy efficiently and your home will keep



the heat indoors rather than losing it to the outside environment. Based on professional energy audits Louisville KY homeowners can determine how efficient the home is and what the true cost to heat it will be.

Home MD Inspection Services IIc HomeMD.com (502) 290-3935 There are several points of energy loss that need to be measured to determine whether you're looking at an energy efficient home. First, the heating system itself needs to be examined. Older furnaces can waste up to 1/3 of the energy they consume, whereas newer systems actually capture 90 percent of the energy they consume as heat for the home. Second, heat escapes around windows and doors and through the glass on many windows as well. Although you can use curtains to cut loss, newer windows and doors are even better. Lastly, heat escapes through the walls and roof, particularly if they aren't well insulated. Adding more insulation can protect against much of this heat loss.



The energy audits Louisville KY residents get can help save hundreds of dollars per year on heating costs by identifying where energy is going. Based on these calculations, homeowners learn what they can do to modify a home in ways that help prevent heat loss in the future. Even if you're not looking at an energy efficient home right now, there are always things you can do to make a home more energy efficient for the winters to come.