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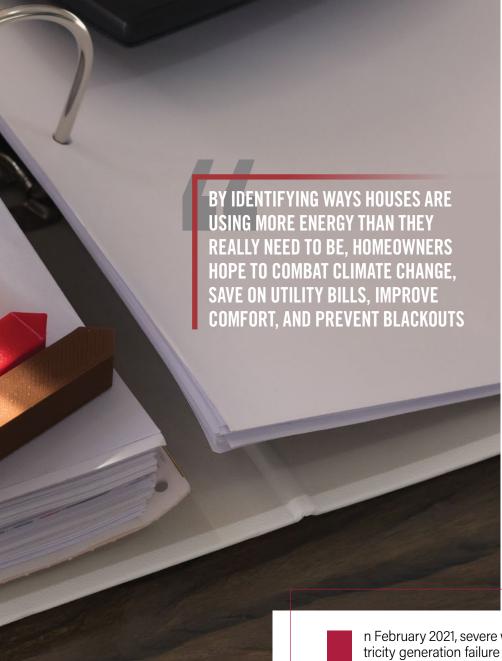


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Note: The Managing Risk column with InspectorPro Insurance provides home inspectors with tips to protect their businesses against insurance claims and examines best practices for crafting effective pre-inspection agreements.

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n February 2021, severe winter storms triggered a massive electricity generation failure in Texas, resulting in millions of homes and businesses losing power—some for several days. The magnitude of the power outages led to nationwide scrutiny.

Why wasn't the state more prepared for bad weather? Should we expect more crises like this in the future? What should governments be doing to prepare? And what can consumers do in a time of growing energy demand?

Energy efficiency, the process of using less power to do the same work, attempts to eliminate waste. By identifying ways houses are using more energy than they really need to be, homeowners hope to combat climate change, save on utility bills, improve comfort, and prevent blackouts. The way consumers pinpoint places to improve: energy audits.

WHY HOME INSPECTORS OFFER ENERGY AUDITS

Also known as energy assessments or performance testing, home energy audits evaluate properties' energy usage. By taking measurements, checking combustion safety, conducting blower door and duct tests, and making calculations, auditors can reveal important information—like how well a house seals in air and where it wastes electricity—which can then help clients lower their energy usage.

In addition to making more money—anywhere from \$300 to \$800 per inspection, depending on their experience and inspection area—the home inspectors we interviewed perform energy audits for the following reasons.

1. TO COMBAT THE WINTER SLUMP

When the housing market slows down in the winter, so do home inspections. For Mike Carson of Inspect It Right Home Inspections, LLC in Wisconsin, energy audits are perfectly suited for the lull. With the air conditioning blasting all summer, few consumers worry about energy efficiency. But when there's a chill due to heat loss, people are much more interested in thinking about home performance.

"When winter hits, Mama feels a draft. They want it fixed, and they pick up the phone," Carson said.

Larry Transue of Integrity Inspection Service in Pennsylvania and New Jersey agrees that chilly months provide a peak season for energy audits, particularly in areas that experience lower temperatures.

"If you're in a cold climate state, I would bet that there is some demand for energy audits," Transue said. "If clients are spending a lot on heating, they're definitely going to want to save money."

What's more, energy audits can be a great way to work with clients who have already hired you for a home inspection. By showcasing your expertise and marketing your audits during your inspection, you're more likely to be the first one your clients call when they're ready to invest in home improvements like energy efficiency.

2. TO LEARN MORE

In a 2018 survey of 2,400 LinkedIn professionals, researchers discovered that prioritizing learning on the job makes for a happier, more dynamic career. Such a pursuit of knowledge was exactly what led Benjamin Meredith of Building Knowledge Professional Inspection Services in Virginia to energy audits. (And is it really a surprise with that business name?)



"HOME INSPECTIONS WERE BORING ME, HONESTLY," MEREDITH SAID. "ENERGY AUDITING HELPS YOU SEE HOUSES THROUGH A DIFFERENT LENS. IT TRULY HELPS YOU SEE THE FULL PICTURE."

Carson, too, was interested in seeking a deeper understanding of building science that would bolster his skills and spark his interest.

"I love learning about the home as a system, how all the components are put together. The more you know, the better the home inspector you will be," Carson said. "Who better to look at your furnace and your ductwork than someone in the home performance industry?"

INVESTMENTS INSPECTORS MAKE

EDUCATION AND LICENSING

Most states do not require energy auditors to have a license. But some jurisdictions, like Nevada, do. Be sure to check your state and local laws to see if your area requires licensure and what you need to do to obtain licensure.

However, even if training is not required in your state, taking courses to increase your knowledge of energy efficiency and auditing is wise. By pursuing knowledge, you qualify yourself to perform better inspections, generate more credibility in the field, and mitigate potential claims. The Building Performance Institute (BPI), the Residential Energy Services Network, or RESNET, who developed the Home Energy Rating System accreditation, and the Association of Energy Engineers all provide nationally recognized certification programs.

Whatever program you decide to pursue, the inspectors we interviewed strongly recommend attending in-person courses. Through hands-on training, our interviewees felt more informed and prepared to perform audits.



EQUIPMENT

Lots of equipment may be used during a home energy audit. Below are some examples of common tools energy auditors use.

- BLOWER DOOR SYSTEMS, WHICH QUANTIFY THE AMOUNT OF AIR LEAK-AGE THROUGH SEALED DOORS AND WINDOWS, COST AROUND \$4,000 AND REQUIRE ANNUAL ACCURACY EVALUA-TIONS.
- DUCT BLASTERS, WHICH TEST DUCTS AND TIGHT ENCLOSURES FOR AIRTIGHTNESS, ALSO RUN AROUND \$4,000 AND REQUIRE ANNUAL ACCURACY EVALUATIONS.
- MANOMETERS, WHICH PROVIDE PRES-SURE GAUGES FOR BLOWER DOOR AND DUCT TESTING, COST AROUND \$1,500.
- THERMAL IMAGING INFRARED CAMERAS, WHICH EXAMINE THE HEAT GIVEN OFF BY PROPERTY SYSTEMS AND COMPONENTS, COST ANYWHERE FROM A FEW HUNDRED DOLLARS TO \$15,000, DEPENDING ON THE ACCESSORIES AND THE CAMERA'S CLARITY AND FEATURES.

But before you jump to buy all the equipment listed above, see if there are any lending programs in your area.

Julian Benton of Halcyon Home Inspection in California borrows blower door systems and duct blasters through the Sonoma County Energy Independence Program, for which he's a qualified contractor. Through the program, Benton can borrow items for a week at a time at no cost to him.

Because it's a different type of inspection, some energy auditors invest in different reporting software, too.

LIMITING YOUR LIABILITY

Below are some suggestions for how you can safeguard your business while performing energy audits.

CONSIDER CARRYING ADDITIONAL INSURANCE.

While many home inspector insurance policies may allow inspectors to perform basic audits, such policies may not provide all the coverage you need. Depending on your state's regulations and the services you're providing with your audits, you may need to carry additional insurance.

Start by talking with your home inspector insurance provider about just what services you provide and what coverage you need. Should you find that your home inspector insurance policy doesn't adequately cover your energy audits, then you should pursue an additional policy. When looking for supplementary insurance, search for coverage for green or renewable energy raters or auditors.

Additionally, you may wish to purchase equipment coverage to protect your energy audit tools and equipment from theft and damage. Learn more from "How to protect your tools and equipment" at inspectorproinsurance.com.

SET EXPECTATIONS.

Most of your clients don't have much of an idea what an energy audit is and isn't until you tell them. For Benton, setting expectations begins before he even accepts the job. When someone calls asking for an energy audit, he asks questions to learn more about the caller's intentions and situation.

For example, if a caller complains of a high electric bill, Benton will ask if their house has gas and whether the house is heated with gas. Based on the caller's responses, Benton may recommend against an energy audit and propose a better alternative, like an electricity usage monitor.

By reviewing what you look for, what you don't, and how you'll conduct your inspection, your clients will be less likely to accuse you of missing something outside of your audit's scope.

Additionally, reminding your clients what's realistic will make them less likely to file claims without merit. For example, if Carson has a client express interest in an energy audit because of ice dams on their house, Carson is sure to explain that, while energy efficiency can reduce dams, it likely won't eliminate them.

However, it's not enough to just have a conversation. Your clients must understand what you're saying. Breaking it down into layperson's terms will help your clients grasp difficult concepts.

"Home performance is a whole different language. Learn the terminology, then learn how to explain it in such a way that people can understand," Carson said.

"THE MORE THEY UNDERSTAND ABOUT THEIR HOME, THE LESS LIKELY THEY'RE GOING TO CALL YOU WITH A COMPLAINT."

BE CAREFUL WITH YOUR CALCULATIONS.

No one wants to waste energy. But having too tight a property can create its own slew of problems.

"You have to figure out and calculate how much air a home needs to breathe to function properly so you're not creating indoor air hazards, such as back drafting water heaters or adversely affecting bath fans and furnaces," Carson said. "You really have to be detail-oriented and pay attention to just the little things—especially the ventilation requirements. Slow down and take your proper measurements."

Steve Nations of Nations Home Inspections & Energy Ratings in Illinois has witnessed the dangers of poor calculations firsthand. After Nations performed an energy audit (with good calculations) for a client adding an addition to their house, the client asked a contractor to install a heat recovery ventilator. The ventilator was supposed to come on twice a day and run for six hours at a time.

After the contractor installed the unit, the adults and three children living in the home were sick all winter long. It was only after Nations returned to the property in the spring to do an additional audit that they found out why. The contractor had set the ventilator to come on twice a day but, when it did, it stayed on for just one minute at a time. Instead of running for 12 hours a day, the ventilator was on for two minutes a day. The house was too tight, and the family wasn't getting enough fresh air.

Luckily, Nations discovered the issue on his second visit. The contractor returned to fix the ventilator, and the family can breathe much easier.

KNOW GUIDELINES AND REGULATIONS.

As an energy auditor, you may be called upon to certify that properties comply with state guidelines or qualify for state or federally funded incentives. Should you claim that your client meets such requirements and be wrong, you could receive a claim for any transactions or rewards that didn't occur.

To avoid such claims, make sure you know and understand the guidelines and regulations to which you are inspecting. And never certify compliance unless you're sure of it. Furthermore, to prove compliance on the day of your inspection, make sure to document your findings—ideally, by photograph.

DON'T MAKE PROMISES YOU CAN'T KEEP.

When reporting on how your client can improve their property's efficiency, it may be tempting to promise a certain level of improvement. For example, you may tell a homeowner that, if they replaced their insulation, they could save 25% on their utility bills. But, if your client only saves 18%, they may come back to you with the bill to replace the insulation, plus the assertion that you should pay for the savings they never saw.

AVOID ABSOLUTES, WARRANTIES, AND GUARANTEES. IF CLIENTS WANT A NUMBER TO INDICATE THEIR POTEN-TIAL SAVINGS, SET EXPECTATIONS BY **EXPLAINING THAT YOUR NUMBERS** ARE ONLY EDUCATED GUESSES AND IT'S IMPOSSIBLE TO KNOW JUST HOW MUCH THEY'LL SAVE UNTIL THEY MAKE THE RECOMMENDED ADJUSTMENTS.

By tempering expectations and qualifying predictions, you avoid overpromising.

ENERGY AUDITS AND HOME INSPECTIONS

Looking to combat the winter slump? Want to learn more about building science?

If you answered "yes" to either of these questions, perhaps it's time for your company to offer home energy audits.





Rick Bunzel is the principal inspector with Pacific Crest Inspections and an ASHI-certified Inspector. He holds a BA in business marketing, and he previously chaired the marketing and public relations committees for a national home inspection organization. He is on the board of directors for Western Washington ASHI. He has been an inspector for 20-plus years. Visit his website at paccrestinspections.com.



ver the 20 years I have been a home inspector I have accumulated a few tools in addition to what I carry in my tool belt. Many of the tools don't get used on most inspections, but when the occasion comes up, it's nice to have the right tool to verify an observation.



In no particular order, here are my choices for some of the best advanced tools a home inspector can have:

For some reason, this was one of the first meters I purchased. I think my first home inspection instructor had a deal on these and was selling them to students. Not knowing any better, many of us bought them and would break them out on every inspection. These detectors would alert for propane, natural gas, gasoline, and engine exhaust. I learned pretty quickly that your nose is a pretty good indicator of natural gas or propane, and the TIF was handy for finding the source of the leak. So today it stays in the

Similar to the Protimeter, but it doesn't have the option of the long probes. It has an LCD display plus a color bar graph to show the degree of moisture. It is a little big for my tool belt, so it rides in the tool bag until I need to do some serious investigating.

SNIFIT CARBON MONOXIDE ANALYZER.

I have found a few cracked heat exchangers as well as some faulty burners in furnaces.

HOSE BIB PRESSURE GAUGE.

Nice to have when you are documenting why the shower barely has a trickle to it.

FLIR.

I was motivated to get a FLIR camera when a competitor started pushing it as a competitive difference. When real estate agents started asking, I decided it was time. I purchased the FLIR E4 mainly because of the MSX feature. MSX utilizes two cameras and gives you a better idea of what is being captured. I took a bunch of classes to understand how to utilize it, but I'm not interested in selling thermography as a separate service. I just don't see the demand in my area. I do use it to look for water leaks, missing insulation, and radiant floor heat.

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101 SCREWDRIVER BIT SET.

Torg, square, hex, and tamper-proof screws are the bane of our existence. That hatch that you must get into has some weird fastener and that calls for breaking out the bit set to match up the bits to the fastener(s). Although sometimes I feel like calling an area inaccessible, my pride says get it open.

BINOCULARS.

I have a set of Nikon 25 power binoculars. Great for roofs or examining the chimney on a steeply pitched roof.

ULTRASONIC TAPE MEASURE.

Great for quickly determining distances beyond my 25-foot tape measure. It's mostly used by customers and real estate agents rather than myself.

TUNING HAMMER.

This is a small hammer I carry mostly for sounding logs. I inspect log cabins on a regular basis, and the best way to see if a log is sound is to tap on it.

LASER LEVEL.

This is a two-foot level with a laser. It's great for checking out foundations and floors.

LOG LIGHTER.

Older gas appliances may not have a sparker, so this comes out for those.

DJI DRONE.

I wrote about my Spark previously for the *Reporter*. I had an engine go bad, and I realized that I depended on it more than I thought. As I get older, I am more careful about getting on the steep roofs. The Spark allows me to look on all sides of the roof regardless of pitch and uneven ground.

Read about more favorite, if somewhat unexpected, tools for the job from our survey of ASHI home inspectors on the next page.

EXPECT THE UNEXPECTED

By Laura Rote, ASHI Editor





KEN MOON, COLORADO HOME INSPECTORS, COLORADO SPRINGS

"A plain, 97-cent Walmart kitchen knife. It's the best tool for scraping out the screwhead slots on old electric panels that have been heavily painted."

IVAN RODRIGUEZ, **ACCURATE INSPECTIONS OF ATLANTA**

"I'm a longtime ASHI member and have been inspecting since the late '80s. One of my favorite pastimes is bow hunting, which brings me to my interesting tool—an arrow with a field tip on it.

Most any arrow will work, but I prefer the slim carbon fiber variety. I use it to test something that, sadly, many inspectors overlook or don't give a second thought to if they weren't hired for a pre-concrete inspection; I use it to check for proper footings.

Many times I have found decks and patios that have structures above that are lacking proper footings. I stick the arrow in at an angle a few inches from the base, and if the arrow sinks easily below the support post, then obviously it is lacking the required footings for the load above! It's incredible how many times I have seen patios on newly built homes with sunroom structures above lacking footings!





Arrow going below the concrete that is Arrow hitting the footings for a deck post. only a few inches.

JAMESON MALGERI, ANOTHER LEVEL INSPECTION, GLOUCESTER, MA

"Four tools I bring that are a little unusual are:

A selfie stick (at least six feet). I have a drone and ladders, but it's amazing how often a six-foot selfie stick can help you see areas you need to get at. Simply add a cell phone mount, and you can take a little video of the roof or other areas. If you can get to the top floor you can probably get to the roof with a six-footer.

A mirror. A fellow ASHI member taught me how a mirror can be put under a boiler, down the ash dump, or next to the draft hood to identify issues.

A camping broom. We all make messes from time to time, and a small camping broom shows you care about people's homes.

Lastly, a laser level. Great for your photos to visually see areas significantly out of level. Doesn't take long to set up.

MATTHEW STEGER, WIN HOME INSPECTION, LANCASTER, PA

"Besides my head being the most important tool, I find that my B&D cordless screwdriver is my favorite. Sure beats taking the screws off and back on manually when you have two or three breaker panels or plumbing access panels. A real time-saver."

ANTHONY P. KELLY, PROSPECT INSPECTION SERVICES, NORTHERN VIRGINIA AND DC AREA

"One-inch glass marble. Clients often seem to be convinced that a floor is sloping, or bulging, or otherwise not flat. The one-inch marble will confirm or correct their concerns, without a debate."

TERRY HELLER, RESIDENTIAL PROPERTY INSPECTIONS. **GREATER BALTIMORE**

"A wire clothes hanger. Almost impossible to test some sump pumps without one."

DARCY HERMAN, FIRST CHOICE HOME INSPECTIONS, JAMESTOWN, ND

"When trying to reach smoke detectors to test, some buttons are out of reach. I solved that problem by carrying a short wooden dowel. I can easily push the test button this way without having a step or ladder with me. A simple solution to a quirky problem while in the field."

DARREN ANDERSON, ANDERSON HOME INSPECTION, TAMPA BAY, FL

"This is my favorite tool by far. It is never far away from me. I made a cushioned leather seat for comfort/typing and when reviewing with the client. (I never sit on other people's furniture.) The leather outside pouch holds the client folder, a towel, some basic pliers, screws, etc., hand cleaner/ soap, sanitizer, and moisture meter. The inside pouch is a tool belt pouch with a small drill and torpedo level. This two-foot ladder is perfect for seeing over items just out of reach and for typing without having to stand the entire time. Plus, it's just high enough to reach most filter ports. I also strapped a spare flashlight/holder just in case my other one fails."









PAUL ANDREASSEN, ANDREASSEN ASSOCIATES, MALDEN-ON-HUDSON, NY

"Magnet with extension to pick up screws dropped from taking electric panel covers off. Often they fall in a trough, sump pump, or worst of all kitty litter."

ENERGY-EFFICIENT HVAC WHAT TO LOOK FOR WH

By Sam Myers, Building Scientist at Retrotec





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EN YOU'RE INSPECTING



or home buyers, energy efficiency is an important factor when searching for a new house. It's not easy to visually inspect a home to determine if it is energy-efficient without doing some additional

We can look at the previous utility bills, but energy usage may not match from one occupant to the next. For example, what if a family of five moves in after a single person moves out? The energy consumption patterns will likely be considerably different from one to the next.

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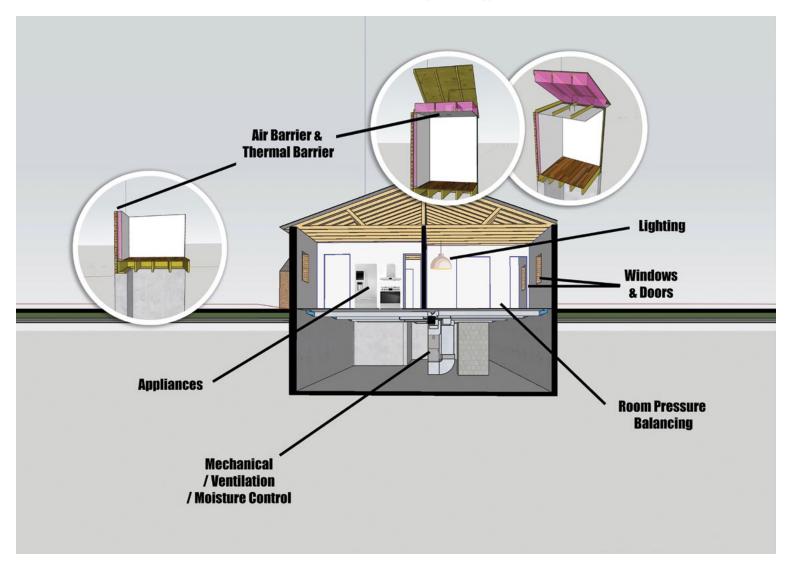
There are also some behavioral patterns that can cause energy consumption to differ between occupants, such as the amount of time occupants spend at home, how energy conscious the occupants are, and how the occupants set and adjust the thermostat. The HVAC system is usually the largest energy-consuming appliance in the home. Space heating and cooling makes up approximately half of the energy consumed in the typical American household, making energy-efficient HVAC a high priority for homeowners and renters.

THE HOUSE AS A SYSTEM

The homes we live in behave similarly to the human body: Everything is connected. If one item is changed, it can affect another item somewhere else. This is where the "House As A System" ideology comes into play.

Within our homes we have insulation in our walls, glazing in our windows and doors, the HVAC system, one or more forms of ventilation, heat generated by occupants, appliances and lighting, and air infiltration and exfiltration occurring through the building envelope. All of these items, among others, contribute to the energy efficiency of the home. Each component must work together with the rest as a system to allow the home to operate at its most optimum efficiency.

The relationship between the HVAC system and the building envelope is one function of the home that is often overlooked. This outer skin of the building is what defines inside from outside and is where both the air barrier and thermal barrier (insulation) are located. This creates the container that houses the air conditioned by the HVAC system. If the building envelope is leaky or has poorly installed insulation, the HVAC system will have to work harder to keep the occupants comfortable, thus using more energy.



HVAC EQUIPMENT SIZING

Each house generates its own heating and cooling load. This load is the amount of energy that must be offset by the HVAC system to keep the home at a desirable temperature and humidity level. Mechanical contractors and HVAC system designers calculate the load by doing a Manual J load calculation. This is calculated with software approved by the Air Conditioning Contractors of America (ACCA). The contractor inputs specific information about the home—including its location, orientation, windows, doors, insulation, air infiltration, duct location, leakage, R-values, shading from surrounding objects, porches and overhangs, and any internal heat gains from occupants and appliances.



A blower door test being conducted to determine envelope leakage.

One of the most common energy consumption issues we see in existing homes is HVAC equipment that is oversized. This typically happens when a contractor neglects to do a load calculation or does it incorrectly.

Oversized equipment causes short cycling, where the indoor temperature reaches the thermostat setpoint too fast. This causes the system to start and stop more frequently, which uses more energy and shortens the lifespan of the equipment. Short cycling also prevents the air conditioning equipment from removing moisture from the air. In more humid climates during warmer months, this leads to comfort issues. When this happens the air feels warmer, meaning occupants will set the thermostat to a lower temperature, thus using more energy.

One of the most overlooked components in the HVAC load calculation process is air infiltration through the building envelope. For the calculation to be as accurate as possible, a blower door test should be conducted to measure air infiltration.

When a technician runs a blower door test, a pressure of 50 Pascals (Pa) is induced inside the home using a calibrated fan. A high-precision manometer calculates the leakage at that pressure as the blower door fan is running. It is typically reported as a flow rate of cubic feet per minute at 50 Pa (CFM50) or air changes per hour at 50 Pa (ACH 50). If a blower door test is not conducted, the contractor or designer guesses what the infiltration will be, which can often cause the load calculation to be inaccurate. This inaccuracy can be anywhere between 20 to 70%.

DUCT DESIGN AND INSTALLATION

In many cases, the same software used to calculate the load of a home can also be used to design the ductwork. This duct design should be based on ACCA's Manual D.

A duct system that is poorly designed or installed can lead to an array of issues that can increase energy consumption. Inefficient duct systems restrict the airflow and increase the static pressure inside the system. A duct system's static pressure works similarly to blood pressure: We don't want it too high, or it can cause problems.

High static pressure can place additional strain on the blower as it works to move conditioned air to each part of the home. Some examples of system designs that restrict and reduce airflow lack a trunkline on the supply side of the air handler. Instead, some systems have supply ducts branching from a short plenum. This can reduce the velocity of the air immediately after it leaves the air handler. The use of junction boxes to split duct runs also restricts air flow. Instead, we like to see a wye used to maintain laminar flow.

The quality of the duct system installation is equally important to having an efficient design. Ideally, we want duct systems to be as airtight as possible. Leaky ducts can lead to high energy bills, especially when all or some of the ductwork is outside of the conditioned space. These areas include vented attics, basements, and crawl spaces. The best method for sealing ductwork is with a paintable mastic or with automated duct sealing devices like Aeroseal. Tapes are not the best option, as their sealing capabilities are limited and tend to fail as temperature and humidity levels fluctuate over time.



A duct system being tested for leakage.

Duct leakage can also induce a positive or negative pressure on the house when the duct system is outside of the conditioned space. If the return side of the system is leaky, it will pressurize the house. If the supply side is leaky, it will depressurize the house, which amplifies leakage through cracks and holes in the building envelope.

Duct tightness can be tested with a duct tester kit. This kit includes a calibrated fan and high-precision manometer that connects to the duct system. During the test, a pressure of 25 Pa is induced inside the duct system and the leakage is measured at that pressure. Leakage is recorded as a percentage of the floor area served by the HVAC system.

When flex ducts are used, it is best to keep them as straight as possible without any dips when suspended from trusses, rafters, or floor joints. U-turns should also be avoided to maintain airflow. Ducts shouldn't be crimped or compressed when installed in confined spaces.

BALANCED AIR FLOW AND ROOM PRESSURES

The load calculation software can also determine the amount of air each room in a home should be supplied with. We check this in the field by using a flow hood and high precision manometer. The flow hood reads how much CFM of air is being supplied to the room or returned to the air handler. We want this to be as close as possible to the flows calculated by the software.



We use the high-precision manometer to see how positive or negative a room is with respect to the main body of the house. Not only does this help diagnose comfort issues, but it also helps determine energy losses. For example, if we have a home with a bedroom with a significant difference in pressure when compared to the rest of the house, it can push conditioned air outside through leaks in the building envelope if it is positive, or pull outside air into the room if it is negative.



A high-precision manometer reading room pressure.

HVAC EQUIPMENT TYPES

After ACCA Manual J and D are conducted to determine the load and design the duct system, Manual S is used by the HVAC technician to select the correct system to install.

There are several types of air conditioners, heat pumps, and furnaces used to condition the air in residential buildings. For air conditioners and heat pumps in cooling mode, the Seasonal Energy Efficiency Ratio (SEER) is used to determine how efficient the equipment is. For heat pumps in heating mode, the Heating Seasonal Performance Factor (HSPF) is used. For furnaces, the Annualized Fuel Utilization Efficiency (AFUE) factor is used.

Less efficient furnaces are atmospherically vented (natural draft) while high-efficiency systems are power-vented. For each type of rating, the higher these numbers are, the more efficient the equipment will be.

Air conditioners and heat pumps can be single-stage, twostage, or multi-stage. This means the blower fan runs at one speed, two speeds, or multiple speeds. Most systems we see in the field are single-stage. One common issue we see with these systems is fan speed. There are several speeds the HVAC technician can select. The proper speed will allow the system to operate at a healthy static pressure and provide proper flow to each room. Testing the total system airflow of the blower fan along with the static pressure can help determine the proper fan speed. In many cases, the fan speed is left at the factory setting, which is often incorrect for the house the system is serving, especially if the system is oversized.



A blower door system used to test total system airflow at a main return.

Two-stage and multi-stage systems are more efficient since they can automatically adjust the amount of energy they consume as the load changes throughout the year. These are not as common as single-stage systems because they are more expensive. There are also inverter heat pumps, which are the most efficient. They can run at any speed to reach and maintain a desired temperature.

As the load changes throughout the year, these systems can adjust at a higher resolution as needed. Inverter systems can also be ductless, which uses even less energy since there is no load from ductwork. However, some inverter systems tend to struggle to remove moisture from the air. In more humid climates, these systems often work best when paired with a whole-house dehumidifier for optimum comfort.

There are many factors to consider when determining the energy efficiency of a heating and cooling system. Just because energy-efficient equipment is installed doesn't always mean the occupant will receive a low utility bill. There must be a proper duct design and installation, and the home's building envelope must also do its part to keep the system running efficiently. Fortunately, there are methods available to test the HVAC system efficiency with a few diagnostic tools, and these testing processes have become much faster and easier as technology has advanced over the years.





Closing out my first year, I can say that while I'm very happy with how things have gone, I can't help but reflect on both the things that have gone well and the things that have not. No matter what type of experience you have working for someone else, I think it's always both challenging and interesting really doing things on your own. I wanted to write this article to help any inspectors out there who may be starting new companies themselves.

Here are seven tips I have for starting your own home inspection business.



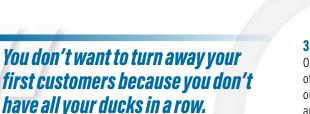
1. PLAN AHEAD.

One thing you realize quickly is that starting your own business has a lot of moving parts, many of which you may not have anticipated. I learned that trying to anticipate challenges in advance is really important.

You need to have a plan for getting your company set up legally and have your software, insurance, inspection agreement, website, logo, and name prepared, as well as know how people will contact you and a million other details.

You also must plan on having the correct order of operations. For example, you need to have an inspection agreement prior to getting insurance, and you may want a functioning website to direct people to before doing any advertisements.

I recommend that you consult an attorney, an insurance agent, a software company, web developer, and any other experts to walk through each process with you so you have a timeline of when you need to do what. You don't want to turn away your first customers because you don't have all your ducks in a row.





2. STICK TO WHAT YOU KNOW.

I think all inspectors working for someone else may think about how they would do things differently if it were their own company. This is an exciting part of starting your own company, but I would advise you to continue to do what you are comfortable with, at least in the beginning.

All the new tasks you take on will be challenging enough, and some things I wanted to do differently ended up presenting their own challenges. You may think another method is best, but there may be a very good reason why things are not done that way. I would say don't be afraid to mix things up later, once your business has stabilized.



3. LEVERAGE YOUR LOCAL PRESENCE.

One thing I was amazed by was how much weight being part of a local community gives to your business. If you put yourself out there locally, people love supporting someone in their own area. Some clients also may target an inspector close to their potential property. Competing over the internet with every other company is a hopeless battle, especially when you're new. Focus on getting out there in person and making real connections in the community.

Don't be afraid to share your experiences or ask for help and advice. Asking others for help has enabled me to build some of these relationships with inspectors, which I really appreciate.



4. SPEND YOUR ADVERTISING MONEY FOR THE LONG HAUL.

I invested initially on many platforms where clients were making a buying decision. It turned out almost everything I spent was a complete waste, as other companies were either underbidding me or so well established I couldn't compete.

The best investments I made were in website development, SEO, networking grounds, and local community exposures. Now that I have more of an infrastructure, when I do advertise to clients making a buying decision, it actually works!



5. ASK FOR HELP.

People who I would previously network with had a different attitude when I was out on my own. When people know you need help, they are much more likely to assist you. I think it's OK to be transparent and let people know you need them. You can be an excellent inspector but an inexperienced business owner at the same time.

And showing appreciation goes a long way. When someone makes even a small effort to help you, go way out of your way to say thanks. It helps people understand they are making a big impact on your livelihood.



6. LEVERAGE YOUR PEERS.

Almost everything I know about how to be successful at running an inspection business I have learned from my ASHI peers or from my prior boss.

ASHI is a great community of inspectors who are not afraid to share and help one another. Part of my desire to give back (including writing this article) is because I am so grateful for the help I have received. Don't be afraid to share your experiences or ask for help and advice. Asking others for help has enabled me to build some of these relationships with inspectors, which I really appreciate.



7. DON'T PUT TOO MUCH PRESSURE ON YOURSELF.

It seems like every time I find myself in a stretch of slow days, I spend them stressing out, but before you know it, they're over.

Providing your own livelihood is extremely stressful and it takes patience. Set expectations appropriately with your loved ones and try to listen to your own realistic expectations. You know growing a business will take time, and it's better to use any extra time you have initially in a productive manner.

These are just some of the lessons I have learned or am still trying to learn at this point in my career. I can't say what my business will look like in 10 years, but I can tell you I am learning a lot and have been greatly appreciative of this experience. We work in an industry where we get to really help people and provide a valuable service.

I hope to continue to build my business for many years and greatly appreciate what being an ASHI member has done to assist with that.



The building itself dates back to 1986, and it's showing its age—with considerable cost of maintenance. By moving, ASHI can invest that savings into more member programs. Plus, the ability for remote work continues to contribute to increased productivity and talent recruitment, while future state-of-the-art offices with shared reception areas and conference rooms are more perks to look forward to. ASHI will ultimately move to a more modern workplace, and the team is currently looking for flexible, rentable workspace options.

"By not focusing on the maintenance and upkeep of an aging building that is too big for a modern hybrid workforce, ASHI can move into a right-sized building,"

said ASHI Executive Director James Thomas.

"This move will allow ASHI staff to continue to focus on members' needs and prioritize the projects that will impact them. ASHI can continue to hire talented individuals from around the country while finding a smaller space for those who will work from the office to do their job successfully. By not spending time and resources on facility management, the team can invest in education projects and other member-facing priorities."

The new space will also be more energy-efficient, and its configuration will allow for independent workspaces while affording opportunities for collaboration. All the current printing needs for badges and other materials will happen on-site more effectively as ASHI moves away from focusing on printed materials.

"By being forced to work in a hybrid environment for the past year-and-a-half, we quickly determined that this was feasible with today's technology," Thomas said. "We came to this solution as we saw ASHI continue to operate without difficulty. Everyone came together during this time to make this possible. As we saw what we could do, we knew that it was the right time to sell this current building and move into a more modern approach regarding workspace and allocation of our resources."

As the staff moved into a remote work situation that started now more than 18 months ago, ASHI leadership had no idea how quickly everyone would adapt and adjust to the new environment. They started following a model they'd begun a few years ago, allowing the team to work from home as needed, considering Chicago's unpredictable weather. "We didn't want to have snow days limit our ability to work," Thomas recalled. "We started to investigate collaborative software, remote phones, etc., as part of that process.

Based on that familiarity with the setup, we could jump into the current situation without too much difficulty. Some of our members' needs require ASHI staff to go into the office to handle certain items, but most of the team continues to work from home. The staff was fantastic about embracing what would work best to meet the needs of our membership and adjusted accordingly."

Many companies—including Google, Microsoft, JPMorgan, and Zillow—have expanded their work-from-home programs during the pandemic.

Seven of 19 (at the time of this reporting) ASHI employees currently do not live in the Chicago area, and remote work allows flexibility to recruit better talent at a potentially lower cost, Thomas Said.

According to a recent study from the Pew Research Center, more than half of employed adults who say that their job responsibilities can mostly be done from home (54%) say that, if they had a choice, they'd want to work from home all or most of the time when the coronavirus pandemic is over. A third reported that they'd want to work from home some of the time, while 11% reported that they'd want to do this rarely or never. Some 46% of those who rarely or never teleworked before the coronavirus outbreak said they'd want to work from home all or most of the time when the pandemic is over.



PRESENTING THE 2022 ASHI LEADERSHIP CANDIDATES

QUALIFIED CANDIDATES

SLATED OFFICERS

STEVE CROSS — SECRETARY BRONSON ANDERSON — TREASURER LISA ALAJAJIAN GIROUX — PRESIDENT ELECT

SLATED DIRECTORS

ROB CLAUS — DIRECTOR ROBERT GUYER — DIRECTOR

SLATED CERTIFICATION COMMITTEE

(NOMINATED BY THE NOMINATING COMMITTEE)

DAVID TURNER

WALTER WINBUSH

NON-SLATED CERTIFICATION COMMITTEE

RICHARD GRAFF LIONEL THOMAS

ASHI STANDS OUT AS AN ASSOCIATION BECAUSE IT IS LED BY ITS MEMBERS, FOR ITS MEMBERS

Pulling leaders from within the membership allows ASHI leadership to fully understand the concerns and wishes of the members they represent. The nominating committee has selected the slate of candidates who are excited to bring their years of experience and unique perspectives to the association and to guide the future of ASHI.

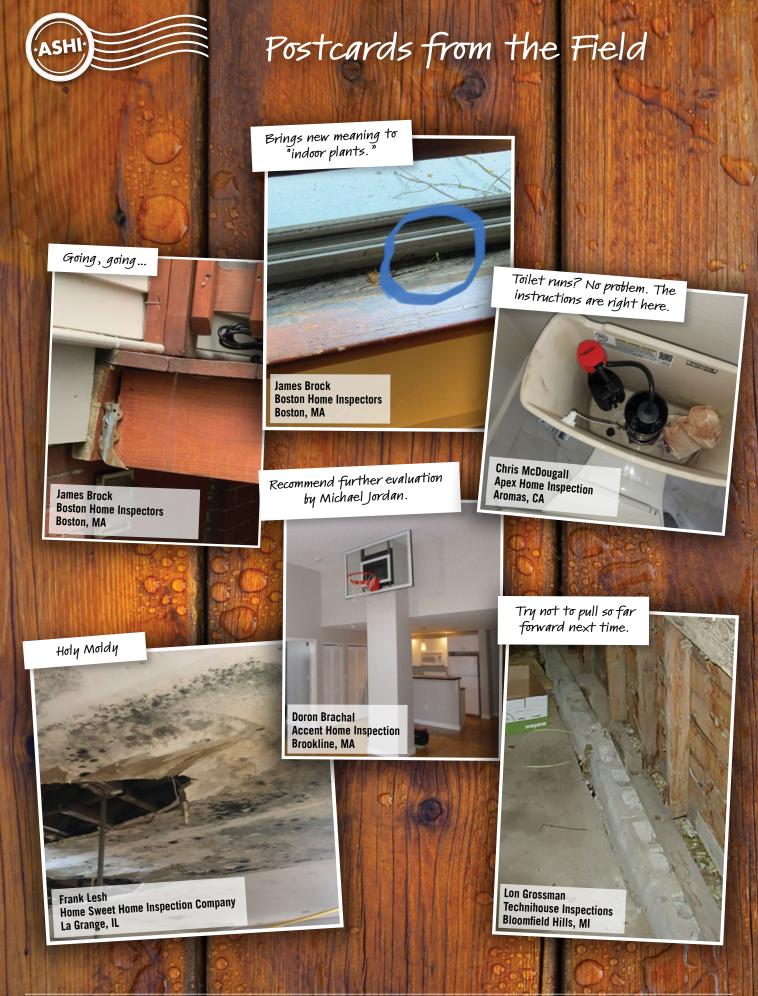
Elections will run from September 15, 2021 to October 31 at 5 pm CST. Per bylaw 2.2, ASHI has three classes of members qualified to vote: ASHI Inspector, Certified Inspector, and Retired Member.

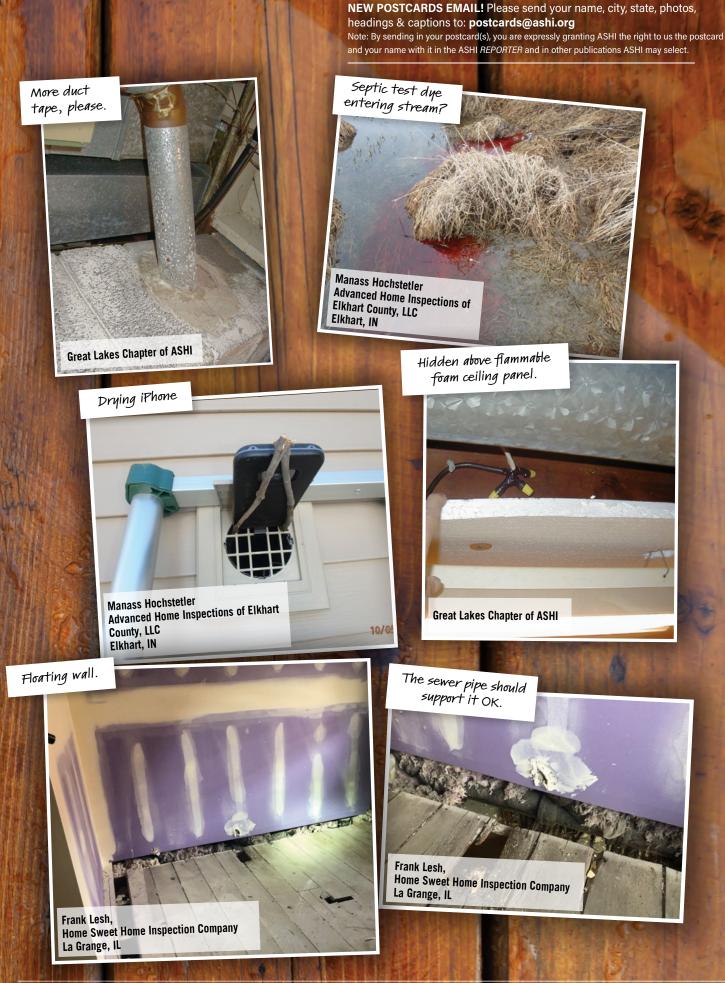
View the qualified candidates and review their nominations by visiting the ASHI website and following Members > ASHI Governance > 2022 ASHI Election.



access the nomination form on the ASHI website by following

About > Awards > Philip C. Monahan Award.





OCTOBER ANNIVERSARIES



FORTY-FIVE YEARS

NormanBecker, P.E.

TWENTY-FIVE YEARS

Imani Fowler Inspections Group Midwest, Inc.

Christopher A. Hosie Allen Engineered Inspections

Andrew Kraus Kraus Group, Inc. - Inspection Services

Scott Patterson Trace Home Inspections

John Roman BPG Inspection LLC

David Teare BPG Inspection LLC

TWENTY YEARS

Will Duncan Advantage Inspection Service, Inc

Jeff L. Gainey Gainey Home Services

Deryck Gruber Guardian Home Inspection Services, LLC

Robert W Huntley RW Huntley Home Inspection, LLC

Ray Remsnyder Alpha Home Inspection Co. LLC.

Chris Willig Lancaster Home Inspections, Inc

FIFTEEN YEARS

Decebal Adamescu HomeSpector Inc.

Gary A. Gazda Home Sure Home Inspection Services Inc.

Dan Sandweg Inspections Complete, LLC

Wally Shank Mid Penn Home Inspections

Ceaser A. Stravinski Jr. ChattahoocheeValley Home Inspections

TEN YEARS

Brad Long Quality Home Inspections

Ari Marantz Trained Eye Home Inspection Ltd.

Brian Paull
Premier Inspection & Consulting
LLC

John (Ian) G Rae Amerispec Home Inspection Service

David Reynolds Canadian Residential Inspection Services Red Deer

Keith Sherstobetoff Periscope Home Inspection inc.

JD Smeigh

Strategic Enterprises, LLC

FIVE YEARS

Tim G. Ames Sound Structure Home Inspection

Jonathan Boyd Boyd Home Inspections, Inc.

Matthew Brown

Edward H. Clowes Dynamic Home Inspection Inc.

Ken D'Alexander Jr. Complete Property Inspections

Thomas Dempsey Shamrock Building Inspection Consultants LLC

Scott Easter HBS Property Inspections, LLC

Jeffery A. Fletcher Fletcher Inspections

Nick Frey Daybreak Home Inspections, Inc.

Matthew Fritz Alpha Home Inspection Co. LLC.

Fidel F. Gonzales Reliant Inspection Service Corp.

Josiah Hammond Top Inspectors

Vaughn Hill LunsPro Home Inspections

Paul Holmes Varsity Home Inspections

Con Keefer

Keefer Building Company, LLC

Charles Neil Kinser Kinsers Home Solutions

Carl Liberman NW Washington Home Inspections LLC

Jameson Malgeri Another Level Home Inspection

Brian P. McDonald McDonald Home Inspections

James A. Porter Access Home Inspections

Pat Russell All In One Home Inspections

Jack Semones Pelorus Inspection and Environmental Resource Grp

Jeffrey K. Summerlin Summerlin Home Inspection

CHAPTER EVENTS & EDUCATION

ASHI CHAPTER FALL SEMINAR

The ASHI Suncoast Chapter is excited to have their Fall Seminar Live OCTOBER 29-30. 2021 —

Hampton Inn in Oldsmar Florida.

There will be education on 4 Point Wind Mitigation, Stucco and Electrical.

For more information and to register for the event please visit: ashisuncoast.com or reach out to Neal Fuller at nealfuller60@gmail.com

DR. JOE LSTIBUREK

Come see (in person) the world's preeminent expert on building science.

NOVEMBER 6TH, 2021.

All day conference to be held in S.E. Michigan.

IF YOU DON'T KNOW JOE:

https://en.wikipedia.org/wiki/Joseph_Lstiburek

For more info, contact: greatlakeschapter.training@gmail.com



FEATURED SPEAKERS

MICHAEL CASEY

MIKE CONLEY

BRUCE BARKER

DIRK VAN REENEN

THOMAS FEIZA

MICHAEL BRYAN

DAVID RUSHTON

SHANNON CORY

MICHAEL ROWAN

MARK PARLEE

BRIAN EISENMAN

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