

THE HOUSE PROFESSOR

— THE HOME INSPECTION SCHOLARS —



Our focus is educating clients

The Professors Credentials



- **Energy Star Certified Inspector for Homes Version III – Priority Energy**
- **L.E.E.D. Accredited Professional – Existing Commercial Buildings – The United States Green Building Council (USGBC) through it's Leadership in Energy & Environmental Design (L.E.E.D.) Program**
- **Home Energy Rater – Residential Energy Services Network (RESNET)**
- **Certified Residential Energy Auditor – National Conference of Building Codes and Standards**
- **Certified American Society of Home Inspectors (ASHI) Member**
- **Radon Measured Operator – University of Illinois**
- **Licensed Michigan Builder**
- **Bachelor of Science Degree – Oakland University
Major – Physics and Mechanical Engineering. Minor – Electronics**
- **Graduate Studies in Engineering Economics –Lawrence Institute of Technology**
- **Certified Well & Septic Inspector – Registered Evaluator for Sewage Disposal and Water Supply Systems with the Macomb County Health Dept.**
- **Disaster Inspector – Federal Emergency Management Associations (FEMA)**
- **Refrigeration/AC Operator's License – City of Detroit, Dept. of Bldgs. & Safety Engineering**
- **Past Real Estate Agent**
- **Building Engineer for Hi-Rise Buildings and Office Parks**
- **Property Manager for over 1 million sq. ft. of commercial property**
- **Environmental Risk Assessment – ASHI**
- **Mold Assessment – Hometest and ASHI**
- **Gas Furnace Inspection Techniques – ASHI**
- **Personally performed over 10,000 pre-sale property inspections, 1,000 Macomb County Rehabilitation Inspections, 3,000 energy audits/ratings and 100 leak detection inspections**
- **Inspecting property since 1981**



GREEN BUILDING CERTIFICATION INSTITUTE

HEREBY CERTIFIES THAT

Richard Giltz

HAS ACHIEVED THE DESIGNATION OF

LEED® ACCREDITED PROFESSIONAL

BY DEMONSTRATING THE KNOWLEDGE OF GREEN BUILDING PRACTICE
REQUIRED FOR SUCCESSFUL IMPLEMENTATION OF THE LEADERSHIP IN ENERGY
AND ENVIRONMENTAL DESIGN (LEED®) GREEN BUILDING RATING SYSTEM™.



Chairman

September 27, 2008

Date Issued

S. Richard Fedrizzi, President and CEO

CERTIFICATE OF COMPLETION

THIS CERTIFICATE IS PRESENTED TO

Richard Giltz

IN RECOGNITION OF HAVING
COMPLETED THE REQUIREMENTS FOR
NATIONAL RATER CERTIFICATION AS
ESTABLISHED THE RESIDENTIAL ENERGY
SERVICES NETWORK

EFFECTIVE FOR THREE YEARS PROVIDED THE
RATER REMAINS IN GOOD STANDING WITH THE
ANNUAL REQUIREMENTS OF NATIONAL
CERTIFICATION

APRIL 1, 2010

Greg Nahn

Greg Nahn, Program Manager, Quality Control Designee

7/1/2010

Date

WISCONSIN ENERGY
CONSERVATION CORPORATION
MADISON, WISCONSIN





National Conference of States on Building Codes & Standards, Inc.
481 Carlisle Drive, Herndon, Virginia

Certificate of Achievement

Residential Energy Auditor

This is to certify that

RICHARD P. GILTZ

has successfully completed the NCSBCS Energy Auditor Certification Program Examination and, as such, has demonstrated an understanding and ability to apply professional practices and principles in undertaking residential energy audits.

A handwritten signature in dark ink that reads "Donald F. Pukerton".

Executive Director

Date December 3, 1981

10584



INCORPORATED UNDER THE LAWS OF THE STATE OF NEW YORK

American Society of Home Inspectors, Inc.

MEMBERSHIP CERTIFICATE

This is to Certify Richard Giltz is a MEMBER of
American Society of Home Inspectors, Inc.

a not-for-profit corporation incorporated under the Laws of the State of New York and is entitled to the full benefits and privileges of such membership, subject to the duties and obligations, as more fully set forth in the Corporation's By Laws, Rules and Regulations.

In Witness Whereof, The Corporation has caused this Certificate to be executed by its duly authorized officer this 1st day of November, 1990, and its corporate seal to be hereunto affixed.

Stewart M. Huey
EXECUTIVE DIRECTOR

RM Huey
PRESIDENT





The University of Illinois at Chicago
School of Public Health

MIDWEST ENVIRONMENTAL AND INDUSTRIAL HEALTH TRAINING CENTER

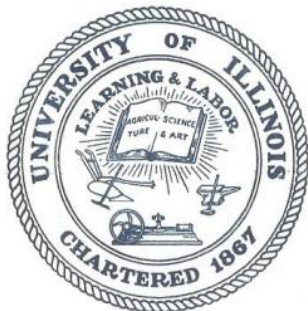
Certifies that **Richard Giltz**
374-66-9630

Has Attended the Continuing Education Course
**RADON MEASUREMENT OPERATORS
PROFICIENCY**

Date of Issuance 01/25/92
Date of Expiration

COURSE DATE: 01/23/92 TO 01/25/92

JOINTLY SPONSORED BY THE
MIDWEST UNIVERSITIES RADON CONSORTIUM



Audrey K. Gordon

Director
Outreach and Continuing Education

Jacob A. Swoly MD

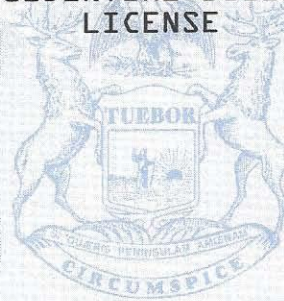
Dean
School of Public Health

RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

A1262537

RESIDENTIAL BUILDERS' AND
MAINTENANCE & ALTERATION CONTRACTORS' BOARD
RESIDENTIAL BUILDER
LICENSE



RICHARD P GILTZ
11852 DIEHL DRIVE
STERLING HEIGHTS MI 48313

PERMANENT I.D. NO.

EXPIRATION DATE

AUDIT NO.

2101195118

05/31/2014

2456359

THIS DOCUMENT IS DULY ISSUED
UNDER THE LAWS OF THE STATE
OF MICHIGAN.



Macomb County Health Department
Environmental Health Services Division



Presents this

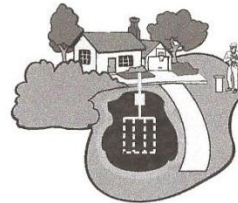
CERTIFICATE OF REGISTRATION

To

Richard Giltz

Registration Number: 02-007WS

This certifies that the above mentioned person has met the requirements and is a
Registered Evaluator as described in the
Regulations Governing On-Site Sewage Disposal
And
On-Site Water Supply System Evaluation and Maintenance
in Macomb County, Michigan.



This certificate is effective: through 1/1/2013

**CERTIFICATE
OF
COMPLETION**

Awarded to:

Richard Giltz

*For successful completion of the
FEMA/Alltech Disaster Housing
Field Inspector Trainer
Certification Course*



Parsons Brinckerhoff

A handwritten signature in black ink, reading 'Robert A. Rufo'. The signature is written in a cursive style with a horizontal line underneath it.

Robert A. Rufo

Contracts and Personnel Manager

Certificate of Completion

It is hereby noted that


Richard Giltz

attended and successfully completed the

***Mold and Healthy Home
Training Course***

February 28, 2001




**Nick D'Ambrosia, Vice President
Hometest**

Bureau Of Community Action & Economic Opportunity Certificate of Completion



is hereby granted to:

Richard Giltz

for successful completion of

Lead Safe Work Practice Training

Granted: March 23, 2011

*Robert Hults, Bruce Dittmer, Paul Gagneur
Technical Weatherization Specialists
Bureau of Community Action
and Economic Opportunity*



CERTIFICATE OF COURSE COMPLETION

This is to Certify that:

Richard Giltz

has successfully completed:

“Protecting Your Home From Radon” Correspondence Course

Completed on May 31, 2001 for 16 hours of Continuing Education Credits. Offered by:

*Western Regional Radon Training Center
at the University of Colorado at Colorado Springs*



Course Administrator

NRPP-3
16 Continuing Credits - Category I

Western Regional Radon Training Center



University of Colorado at Colorado Springs

Home Inspections



Certified Member



AS A HOMEBUYER . . SHOULD I REQUEST AN INSPECTION???

Your new-found discovery appears to be the perfect house—and at a price you can afford! You love the kitchen and bath, you're proud of the landscaping and the school system is right . . . but before you make what may be the biggest purchase of your life, spend a bit to hire an objective professional to examine the building thoroughly and report any expensive surprises. If your dream house needs major repairs, you would want to know about this before you close the deal.

WHAT YOU DON'T KNOW CAN COST YOU PLENTY!

We have conducted over 15,000 various inspections since 1981. Richard Giltz, the Owner, has been a Building Engineer for commercial property, a Property Manager, an Energy Consultant and a Real Estate Agent. He has a Bachelor's Degree in Physics and Mechanical Engineering. He holds several licenses, including a Builder's license, HERS Energy Rater & LEED-AP. It is important for you to realize that we are adhering to a strict standard of practice, established by the American Society of Home Inspectors® (ASHI®), in our inspection process. ASHI® is recognized as the elite home inspector organization and we are certified members. Among other qualifications, one must pass 7 1/2 hours of technical exams in order to become a certified member and ongoing education is mandatory in order to remain a member. There are less than 100 certified members in the State of Michigan.

PEACE OF MIND AT A LOW PRICE

CONFIDENCE in our abilities allows us to extend \$5,000.00 of liability on each inspection. (ASHI® standards of practice are the gauge for this liability.) Our rates are very competitive, ranging from \$240.00 - \$395.00 for most homes. We will spend 2-3 hours with you and your home looking at the following categories; Roofing, Structural, Electrical, Heating & Cooling, Plumbing, Basement, Exterior, Interior and Well & Septic inspections,. At the end of the inspection you will receive documentation of priority problems, approximate repair cost for major problems and we will grade your home against peer homes in each of the eight categories. A detailed typed report of all discovered concerns, with their most likely solutions, will follow.

HERE'S HOW IT WORKS

You should make sure that a clause exists in your purchase agreement that makes your offer contingent upon a professional inspection. Consult with your real estate agent and/or attorney for clause details. You should make sure all utilities will be on, appliance pilots are lit and that access to all areas of the property is made available. Have the following areas cleared of storage and personal items: around the attic access(es), furnace, hot water tank, electrical panel and sump pump. Clients find that accompanying us is a valuable learning experience, thus this is strongly encouraged.

IN ADDITION

The Inspector coming to your house is also a seasoned Energy Auditor and Environmental Inspector. He can address other concerns like: Infrared camera pictures, energy reducing audits that we guarantee will lower your next month's utility bill, radon, mold, water leak detection and "SICK HOUSE" Forensic Inspections.



American Society of Home Inspectors Member
www.houseprofessor.com
rgiltz@houseprofessor.com 586-739-1909
HERS Energy Rater, LEED AP, Mechanical Engineer,
Physicist



CHOOSING A HOME INSPECTOR

KEY QUESTIONS:

1. Is the Inspector coming to your house a properly trained professional?

The State of Michigan does not license home inspectors. Therefore, anyone can make up business cards and call themselves a "home inspector"! It's hard to believe, but many firms don't use experienced individuals with a proper background and training. Richard Giltz, Owner of HOUSEPROFESSOR, has conducted over 15,000 various inspections since 1981. He has been a Building Maintenance Engineer for commercial property, a Property Manager, an Energy Consultant and a Real Estate Agent. He has a Bachelor of Science Degree in Physics and Mechanical Engineering and holds a builder's license.

2. Are inspections performed by a certified member of the American Society of Home Inspectors® (ASHI)?

A.S.H.I. membership is based on testing, education and adherence to a standard of practice with performing an inspection. Ask if the inspector coming to your house is a certified member of A.S.H.I. There are less than 100 certified members in the State of Michigan! Richard Giltz is a certified A.S.H.I. member!

3. Will the Inspector go on the roof and into the crawlspace?

Some refuse to go onto the roof and simply use binoculars. Some inspectors will not go into crawlspaces. No roof can be accurately evaluated from the ground and a full crawlspace inspection is vital. HOUSEPROFESSOR will go onto the roof and into the crawlspace, unless unsafe or un-accessible.

4. Is the inspector a good communicator, not an alarmist?

The ability for the inspector to communicate information both verbally and in report form is crucial. HOUSEPROFESSOR is not an alarmist, we deliver the information in a calm, clear and understandable fashion.

5. Will the inspector give me cost estimates for repairs?

Many inspectors shy away or refuse to give repair costs, but isn't that vital information at this crucial time? HOUSEPROFESSOR will give you approximate do it yourself and contractor costs for repairs greater than \$1,000.

6. Will the inspector summarize, in writing at the end of the inspection, the repair priorities and evaluate/compare the home against similar aged homes?

Many inspectors will not commit in writing at the end of the inspection the repair priorities, nor will they evaluate the home against similar aged homes. This is truly the information a buyer is seeking when hiring an inspector, and is exactly what HOUSEPROFESSOR provides!

7. Will the detailed report be in a simple format that I can quickly and easily refer to?










Some companies give 300 page report books and/or a generic maintenance video tape. These report formats can be technical, confusing and deliver "canned" information that does not pertain to your home or repair needs. HOUSEPROFESSOR produces the short on the spot information described in #5 and #6 and then follows up with an emailed report that has a simple format; the discovered repair/replacement need is described, followed by the most likely solution.

8. Will the cost of the inspection be reasonable?

A professional inspection will vary from \$230 to \$495 for most homes, so shop around but DO NOT compromise quality. HOUSEPROFESSOR Inspections are fairly priced, ranging from \$240 to \$395 for most homes. Call us for an exact quote.

9. Will the inspection company take on some real liability for missing something they should not have? Must I sign a limit of liability clause and what is the limit?

Ask these questions and demand clear answers! Almost all inspection companies take on no liability or only up to the price of the inspection. This is grossly inadequate and all involved deserve better! This is why HOUSEPROFESSOR extends \$5,000 of liability on each inspection it performs.

HOUSE PROFESSOR					
Yes	No	Yes	No	Yes	No
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Contact HOUSEPROFESSOR for any further questions or would like to book that Home Inspection - (586) 739-1909





How does the Professor grade your home?

EXTERIOR ----->	+ A -	+ B -	+ C -	+ D -	E ----->	MAJOR / MINOR----->	REPAIR / COSMETIC
ELECTRICAL	+ A -	+ B -	+ C -	+ D -	E	MAJOR / MINOR	REPAIR
STRUCTURE	+ A -	+ B -	+ C -	+ D -	E	MAJOR / MINOR	COMPLEX / SIMPLE
BASEMENT CRAWL/SLAB	+ A -	+ B -	+ C -	+ D -	E	SEEPAGE / MOISTURE	REPAIR / MAINTENANCE
PLUMBING	+ A -	+ B -	+ C -	+ D -	E	MAJOR / MINOR	REPAIR / MAINTENANCE
HEATING/AIR CONDITIONING	+ A -	+ B -	+ C -	+ D -	E	MAJOR / MINOR	REPAIR / MAINTENANCE / AGED EQUIP.
INTERIOR	+ A -	+ B -	+ C -	+ D -	E	MAJOR / MINOR	REPAIR / COSMETIC

MAIN POINTS OF CONCERN *see below

QUALITIES OF THE HOUSE

Walk Thru Checklist

PRE-SETTLEMENT WALK-THRU GUIDE & CHECK LIST

Date: _____ Time: _____ Performed By: _____ Witness: _____

Operational? Abnormal? Notes

The Inspecting Company will not entertain any claims or complaints, which would have been discovered during this "Walk-Thru", from those who fail to perform this vital inspection. This inspection will take less than 30 minutes to complete.

A pre-settlement survey is most advisable when purchasing a home because many things can change between the time you have your professional home inspection and the time of your "closing" and/or "possession". Example:

1. A disgruntled tenant or owner may deliberately damage the property.
2. Weather damages may occur. Weather changes may occur which produce signs of a problem, where no evidence suggested it before.
3. Mechanical systems may fail.
4. Items or appliances you thought were conveyed with the house no longer exist or are exchanged for different ones.
5. Vandalism is prone with vacant property.
6. Move-out damage can occur.

Take this opportunity to operate those things which were practical prohibitions during the professional home inspection. Example:

1. Air conditioners or heat pumps not previously operated due to temperature.
2. Those items found defective during the professional inspection that the seller agreed to repair.
3. Those areas inaccessible due to furniture, stored items or other reasons during the professional inspection. (Floor under rugs; attics without access hatches, blocked access hatches or no safe flooring; crawlspaces without access holes or not accessed previously due to high moisture levels, etc... **Read the "Restrictions during the inspection" and the "Disclaimed Items" sections of your professional inspection report. You will then know which areas to concentrate your efforts.**)
4. Roofing, yard areas, sidewalks, drives, etc...previously covered with snow, ice or leaves.
5. Swimming pool and related equipment not previously checked due to temperature.

If you have any non-comprehension about the need of this inspection or how to perform it, ask your inspector. Never tamper with things you do not understand! If you would like this Inspection Company to perform this "Walk-Thru" for you, we can do so for \$125.00.

Operational: Using homeowner controls, does this equipment/system operate or appear functional?
Abnormal: Using all of your senses, is anything different from when your professional inspector inspected the system; any unusual noises, smells, visual distortions/damage, warmer of cooler than normal?

*Notes: First, go to Plumbing #1 to turn all water on **during** this "Walk-Thru".

Exterior:	<u>Operational?</u>	<u>Abnormal?</u>	<u>Notes</u>
1. Roofing/flashing damaged: visual check from the ground for blown-off or unsecured shingles/flashing.	_____	_____	_____
2. Gutter and downspout system unsecured/damaged: visual check from the ground for damaged or missing parts.	_____	_____	_____
3. Deck/porch/rail rot, unsecured or damaged: if these areas were previously snow/leaf covered then give a visual check.	_____	_____	_____
4. Sidewalks/stoops, drives, etc....Same as above.	_____	_____	_____
5. Garage door operation/opener/remotes: Does door operate?	_____	_____	_____
Electrical:			
1. Lights working? Try out light switches while passing by them.	_____	_____	_____
Basement/Crawlspace:			
1. Water entry signs: Look around the inside perimeter for water/dampness.	_____	_____	_____
2. Sump pump operation: If the pump is activated by a float switch then lift up the float, the pump should come on.	_____	_____	_____

Plumbing:

1. Turn on all water faucets: perform all other Check List items on this "Walk-Thru Guide", then look under sinks and check drain pipes in the basement/garage for leaks? Also, check open floor drains for any water back-up! _____
2. Does water come out of faucets adequately? _____
3. Drainage slow/stopped: Does water flow down sink/tub drains? _____

Heating and Cooling:

1. Furnace/boiler operating? Turn up the thermostat. _____
 - a. Hot air coming out of the registers? Baseboards getting warm? _____
 - b. Strange sounds coming from furnace/boiler? _____
2. AC compressor/temp ok? If outside temp. has been above 55F for the last 24 hrs. then turn on the AC at the thermostat. _____
 - a. Is cool air coming out of registers? _____
 - b. Is the compressor outside noisy or sections covered with ice? _____
3. Electronic air cleaners: Some of these units have test buttons. Push the test button when the furnace blower is running. Do you hear a "snap" noise? You should. _____

Interior:

1. Wall/ceiling stains/damages: Look for roof leak stains while walking through rooms. _____
2. Leakage signs under kitchen/baths: Look for stains on the ceilings below these rooms. _____
3. Flooring and carpet damaged/stained: Damage/stains you have not seen before? _____

Readings: (If needed for transfer of ownership)

1. Gas meter. _____
2. Water meter. _____
3. Electric meter. _____
4. Oil tank. _____

Summary of Abnormal Concerns:

1. Follow-up with your realtor/attorney to discuss abnormal concerns.
2. Follow-up with trade professionals to troubleshoot/inspect any abnormal concerns.

Follow-up Notes:



586-739-1909



Smashed heat transfer fins air conditioner



Settled steps creates high step rising



Brick Siding separating from structure

Exterior view



Interior view



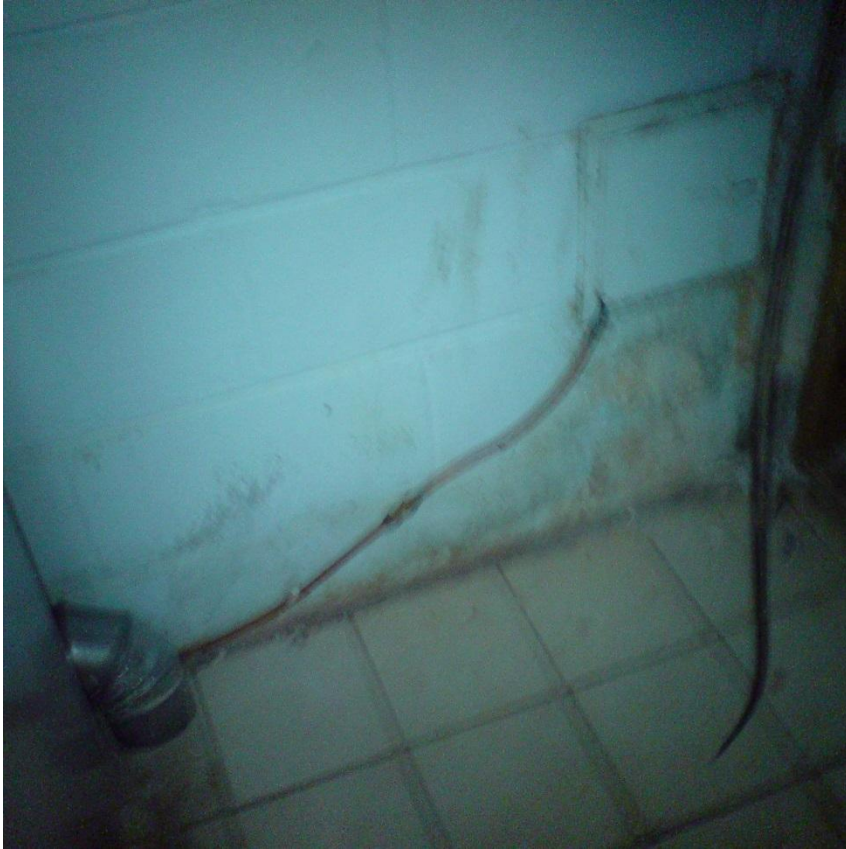
Persistent pest entry



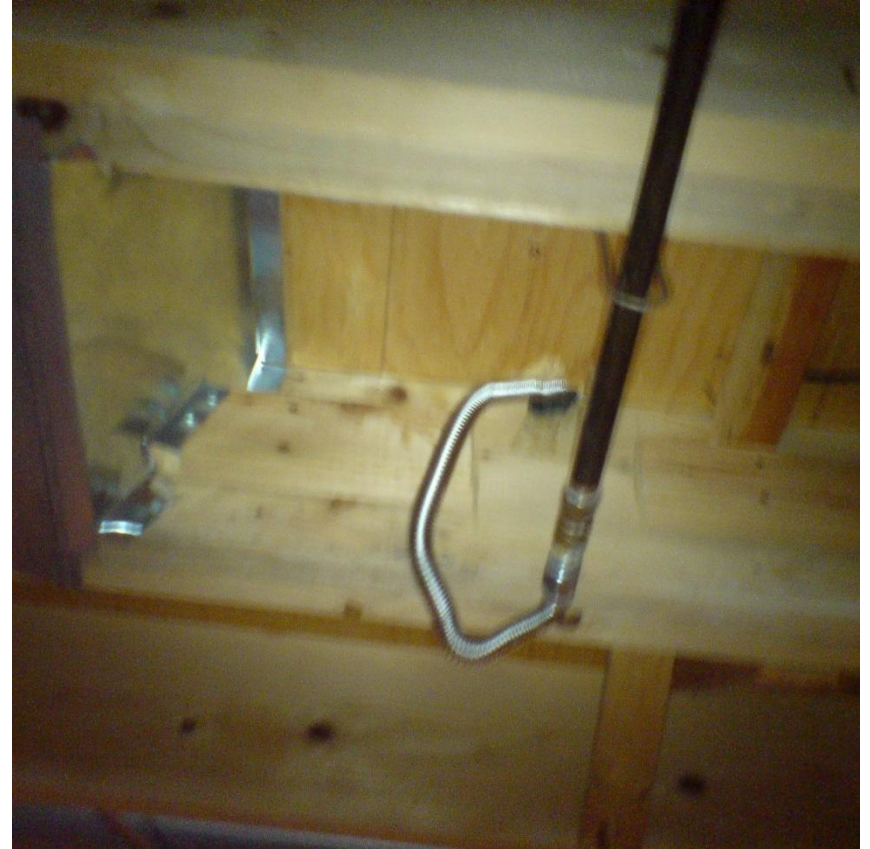
No flashing where shingles meet siding



Vulnerable copper gas tubing going thru fireplace cleanout chute to gas logs



Unapproved flex pipe routed through floor



Unprotected Knob and Tube wiring connections not inside of a junction box



Excessive cuts in floor joists



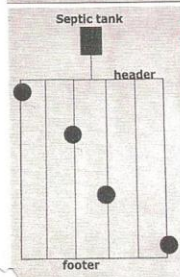
WELL & SEPTIC

The law changed August 1,
2002 for Macomb county

HOUSEPROFessor
"The Home Inspection Scholars"

Your certified
well and septic
evaluator for
Macomb county

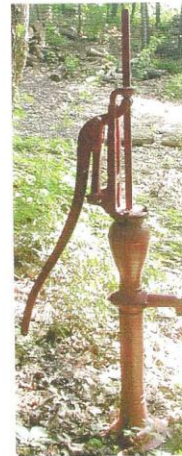
Example of proper spacing for drainfield borings



Questions



(586)739-1909-Phone
(586)737-2800- Fax
www.houseprofessor.com

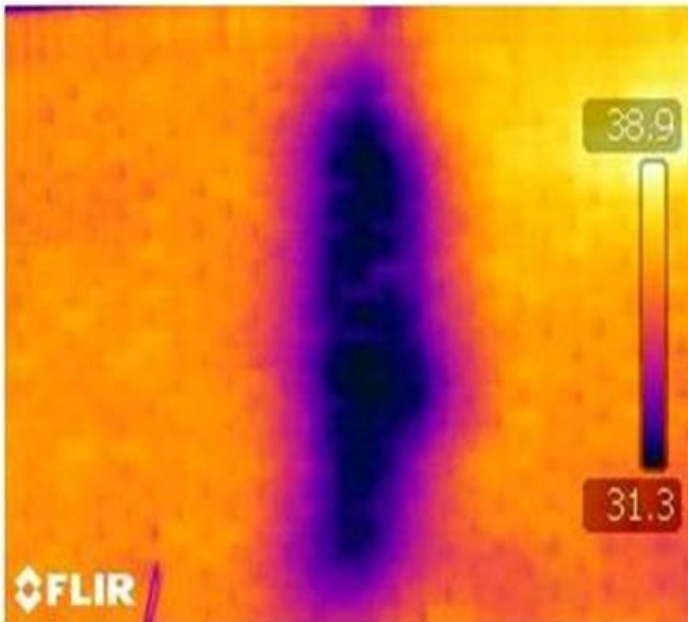


Leak Detection

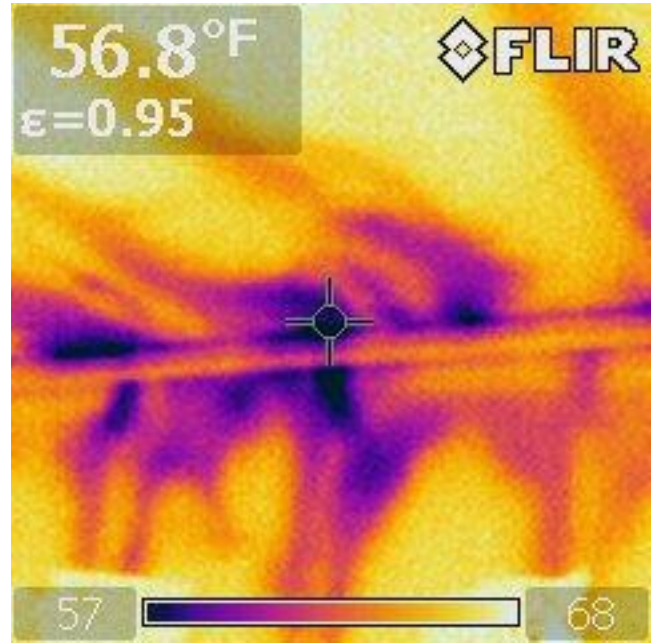
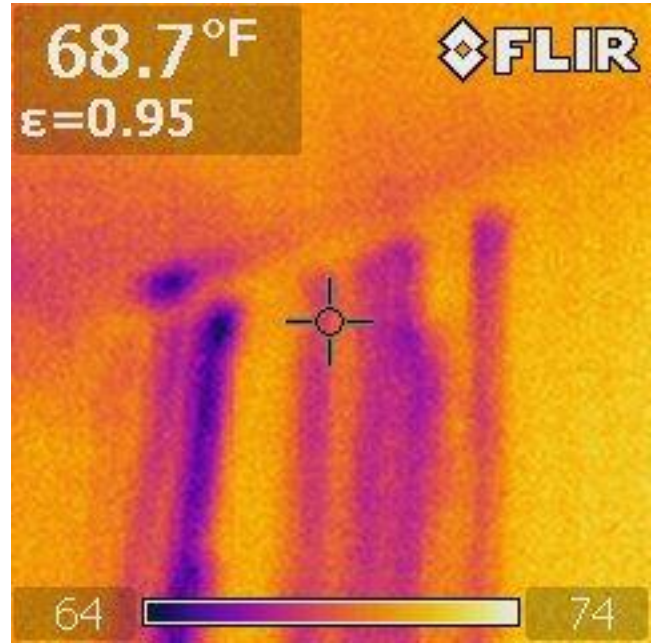


Water intrusion inside of this wall cavity could only be discovered with the IR camera

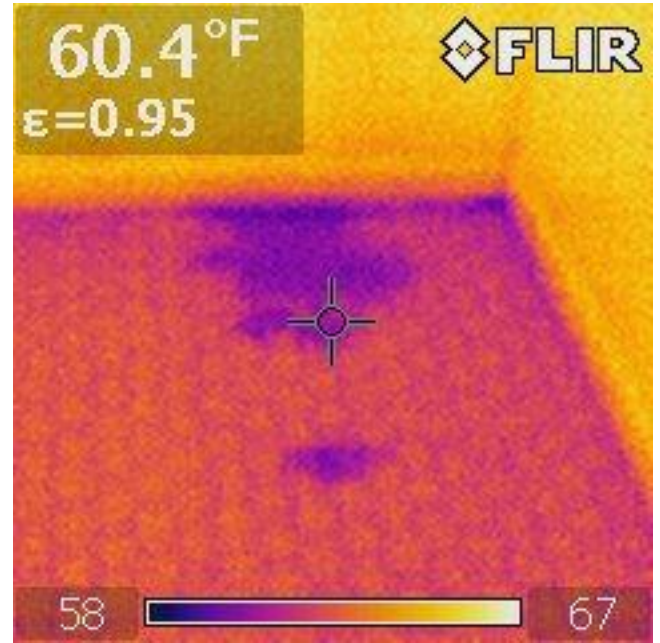
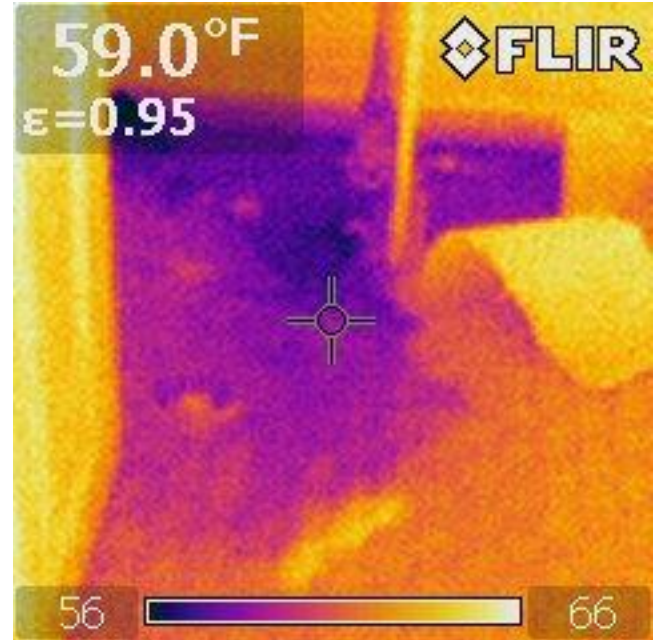
- Cold / damaged insulation inside this brick wall



Water leakage progressively getting worse during a Flood test



Water leak under basement carpet



Environmental Inspections



Asbestos

Vermiculite insulation with asbestos



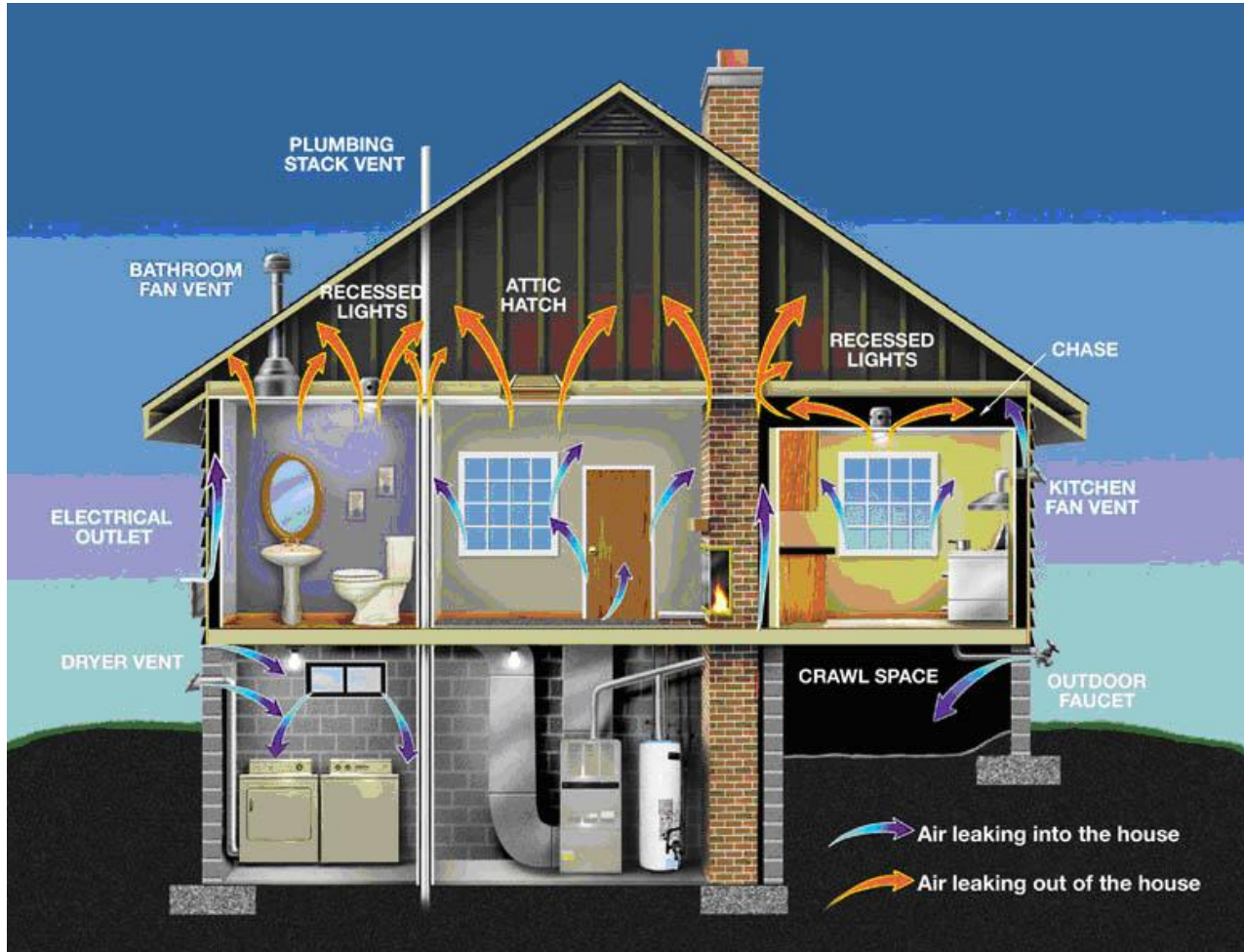
Friable asbestos around duct



Mold growth due to pool equipment leaking



Energy Audit





Utility Bills Gone Wild!

Last Winter's Gas Bill, Wow! Wait Until July's Air Conditioning Bill Arrives!

We are certified Energy Auditors, Certified Home Energy Raters, Licensed Builders and Mechanical Engineers. We will determine which measures will lower your utility bills, by how much and the "payback time" to recoup your cost for performing a specific measure.

Save on next month's utility bill... guaranteed!

The Energy Auditor/Rater coming to your house is also a seasoned & Certified Home Inspector, therefore, he can address: House components like roofing, structure, electrical, hvac, plumbing, basement / crawlspace, private wells & septic inspections, water leak detection. Also, environmental concerns like: radon, mold, carbon monoxide & "SICK HOUSE" Forensic Inspections



The HOUSEPROFESSOR

"The Home Inspection Scholars"

(586) 739-1909

www.houseprofessor.com

Performed over 15,000 inspections since 1981





The ENERGY CONSERVATORY

DIAGNOSTIC TOOLS TO MEASURE BUILDING PERFORMANCE

Minneapolis Blower Door

Anatomy of the Minneapolis Blower Door

Lightweight, Durable Door Frame and Panel

- This innovative design is the result of years of refinements based on the experience of thousands of users. There is no easier way to seal a Blower Door fan into a door opening.
- Snap-together aluminum frame comes in a compact case and sets up in seconds.
- Precision cam lever mechanism securely clamps the nylon panel into the door opening.

DG-700 Pressure and Flow Gauge

- Specifically designed for airtightness testing with specialized measurement functions. One of the best all around pressure measuring gauges on the market.
- Channel A measures the change in building pressure.
- Channel B measures air flow from the Blower Door fan.
- DG-700 can be connected to a laptop computer for automated testing.

Fan Speed Controller

- Precision control of fan speed throughout the entire range.
- Compatible with Cruise Control feature and automated testing.

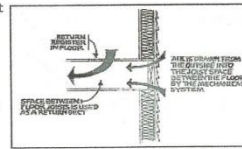
Powerful, Calibrated Fan

- The Minneapolis Blower Door comes with Rings A and B to measure a wide range of airtightness conditions. Optional Rings C, D and E extend the low range of the Blower Door fan.
- Flow Sensor at the entrance to the fan assures precision readings from 11 CFM to 6300 CFM.



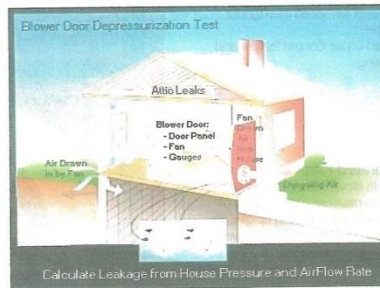
know that the most important leaks in a house are the hard to find leaks in the attic, crawlspace, attached garage and other framing connections. These hidden leaks are responsible for most of the air leakage in typical houses, and are often the cause of performance and durability problems.

And whether a house is tight or loose, nothing will cause it to deteriorate faster than moisture migration and condensation in attics, ceiling and other building cavities. Vapor barriers will stop moisture diffusion, but most moisture problems in buildings are a result of uncontrolled air leakage through the building envelope. And the way most vapor barriers are installed, they do little or nothing to stop uncontrolled air leakage. In many buildings, moisture problems are made worse by the common use of hot tubs, whirlpools and saunas.



Measuring Building Airtightness

The easiest way to measure building airtightness is with a diagnostic tool called a Blower Door. The Blower Door consists of a powerful, calibrated fan that is temporarily sealed into an exterior doorway. The fan blows air out of the house to create a slight pressure difference between inside and outside. This pressure difference forces air through all holes and penetrations in the building envelope. Blower Door tests are typically performed at a pressure difference of 50 Pa (0.2 inches of water column).



By simultaneously measuring the air flow through the fan and its effect on the air pressure in the building, the Blower Door system measures the airtightness of the entire building envelope. The tighter the building (e.g. fewer holes), the less air you need from the Blower Door fan to create a change in building pressure.

A depressurized area, known as a low-pressure area, has less dense air. Acting alone or in combination, exhaust devices can depressurize a zone containing a combustion appliance, possibly causing a back-draft or flame roll-out. Flame roll-out is a common cause of house fires.

Blower-Door Testing

Blower Door Testing is used to quantify and locate air leakage by using a calibrated fan to depressurize a house.



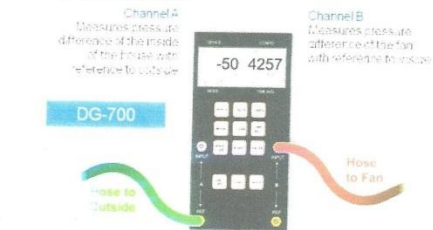
Blower-door testing provides a

diagnostic assessment of the air leakage of a house.

CAUTION: Always inspect for asbestos before conducting a blower-door test.

Measuring pressure difference:

- Air leakage measured by the blower door is proportional to the size of the holes in the house between inside and outside
- Can conduct blower tests before and after air-sealing work to determine the effectiveness of our work
- Can use blower door testing to tell us which houses have the most potential for energy savings through air sealing
- We don't measure total pressure, but the pressure difference between one space and another
- Always one pressure with reference to (WRT) another
- Sometimes we measure pressures under controlled, artificial conditions, sometimes under normal operating conditions



The most common, standard metric for measuring a home's air leakage is negative 50 Pascals of house pressure (abbreviated CFM50). CFM50 is the air flow rate in cubic feet per minute required to create a change in house pressure of 50 Pascals. When the blower door depressurizes the home, the air is being

FIREPLACE PLUG

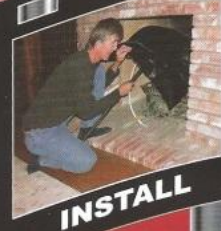
ENERGY SAVER - WEATHER STRIP



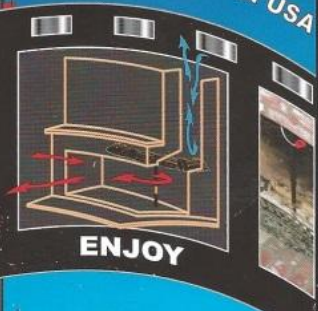
ASSEMBLE



INFLATE



INSTALL



ENJOY



PROUDLY MADE IN USA

CAUTION
NO FIRE

- REMOVABLE/REUSEABLE
- REDUCE A.C. LOSS
- REDUCE HEAT LOSS
- REDUCE NOISE
- SAVE \$300+ PER YEAR

FIREPLACES ARE A MAJOR SOURCE OF ENERGY LOSSES FROM HOME HEATING AND AIR CONDITIONING. SEAL YOUR UNUSED FIREPLACE WITH A FIREPLACE PLUG.

18" DIAMETER



METAL FIREBOXES
ROUND DAMPERS

18" X 38"



BRICK FIREBOXES
RECTANGULAR
DAMPERS

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- Well and septic inspections
- Mold, radon, carbon monoxide, lead & asbestos testing
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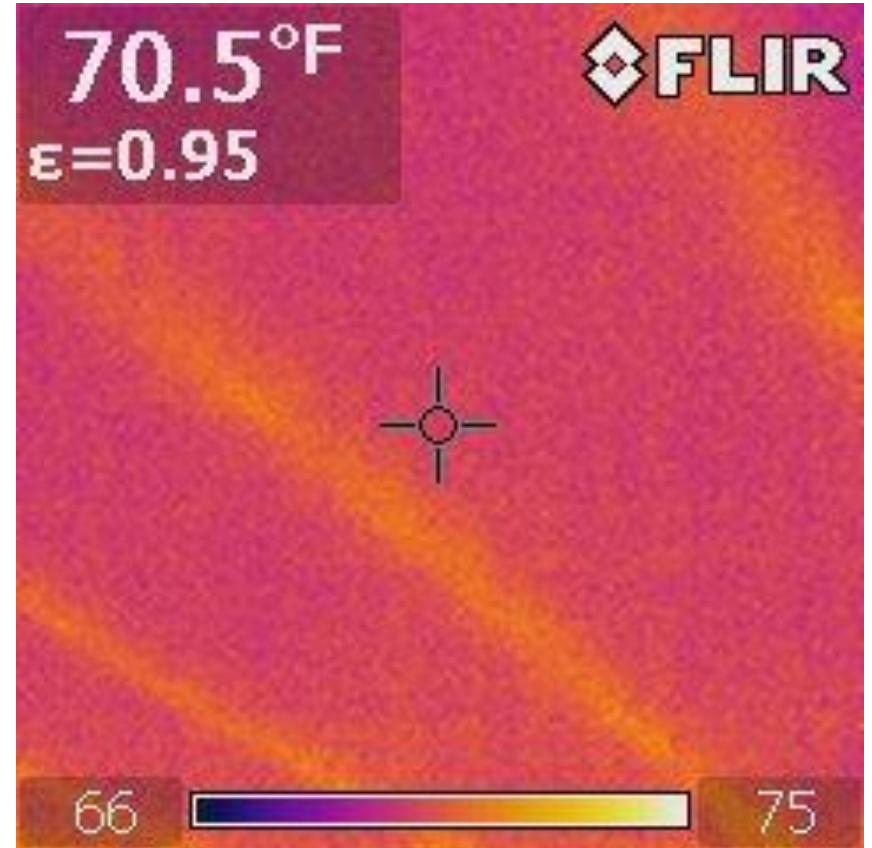
THE HOUSEPROFESSOR
— THE HOME INSPECTION SCHOLARS —

Richard Giltz
Owner / Inspector

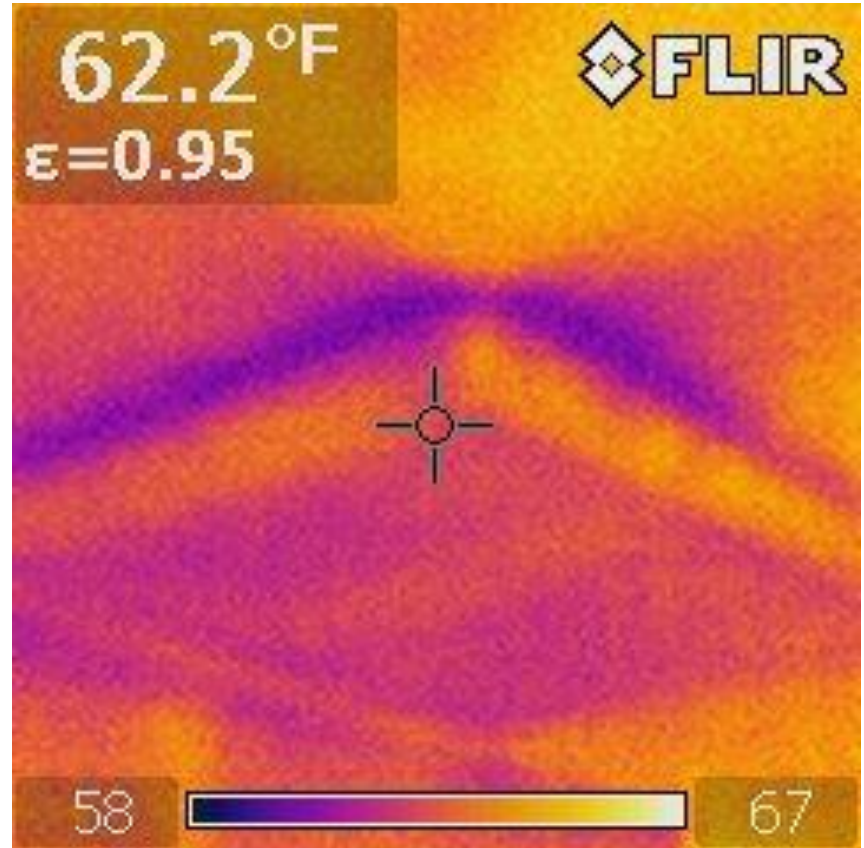
11852 Diehl Drive
Sterling Heights, MI 48313
586-739-1909
rgiltz@houseprofessor.com
www.houseprofessor.com

Our focus is educating clients

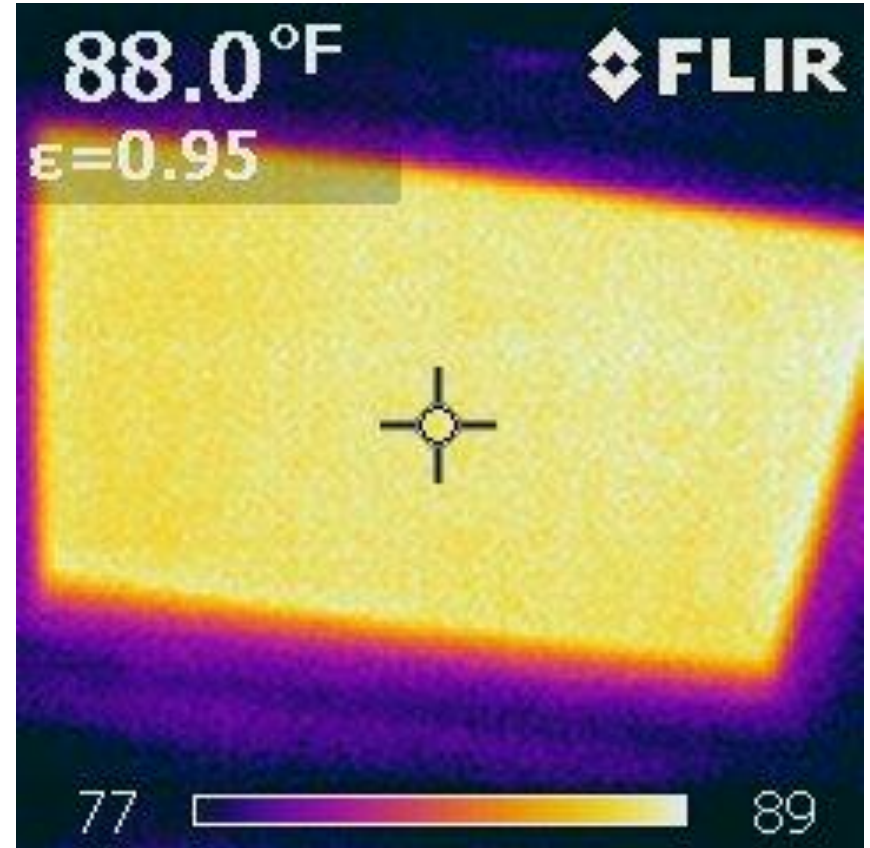
No ceiling insulation between ceiling joists



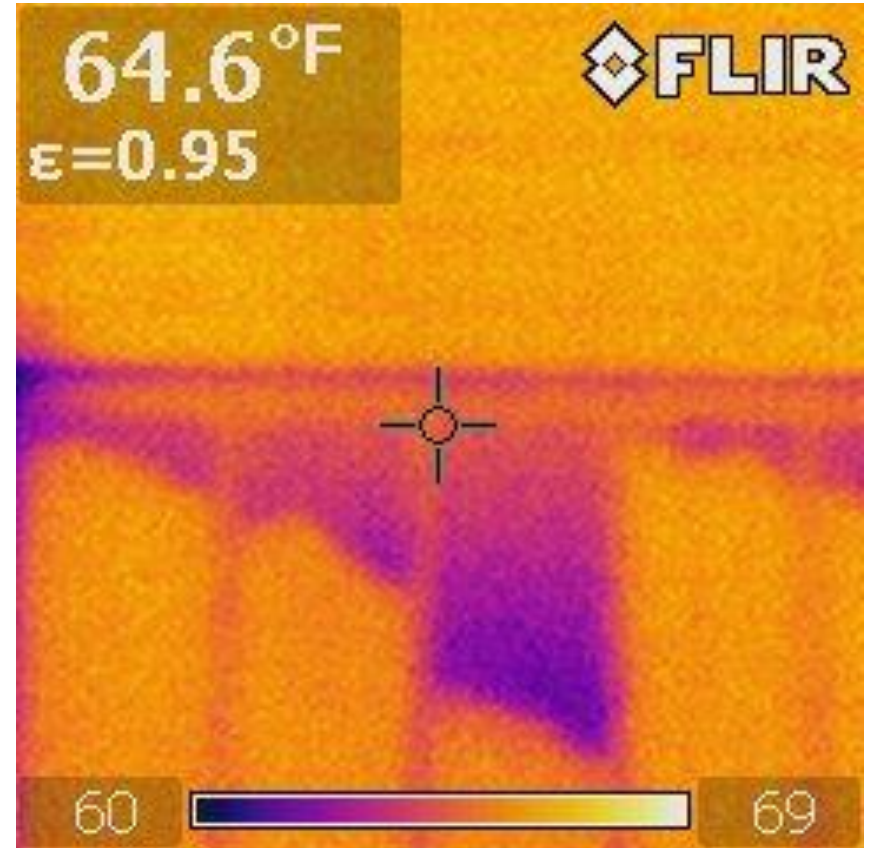
Un-weather stripped whole house fan unit allows cold air infiltration



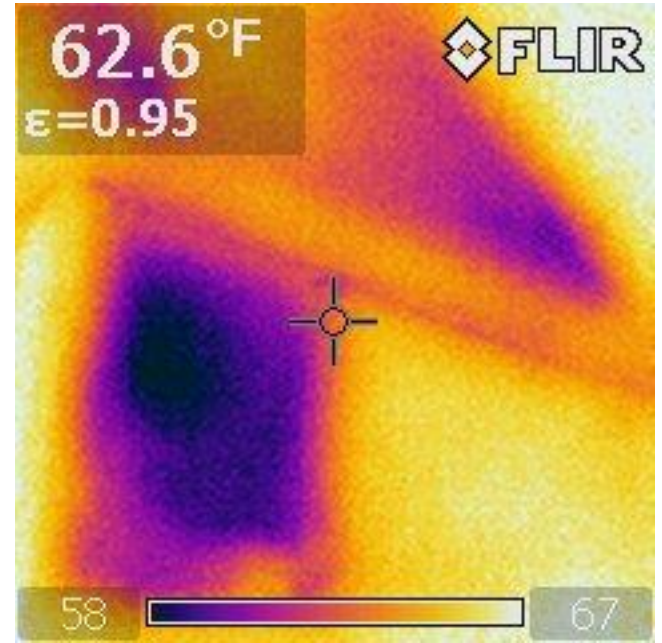
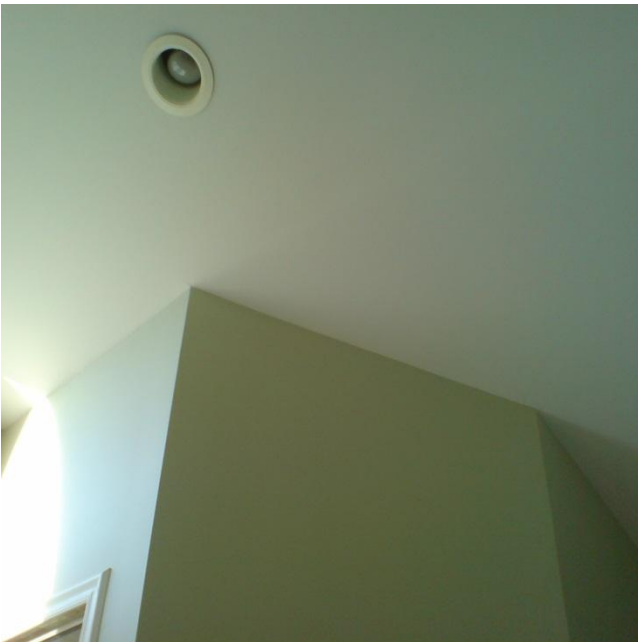
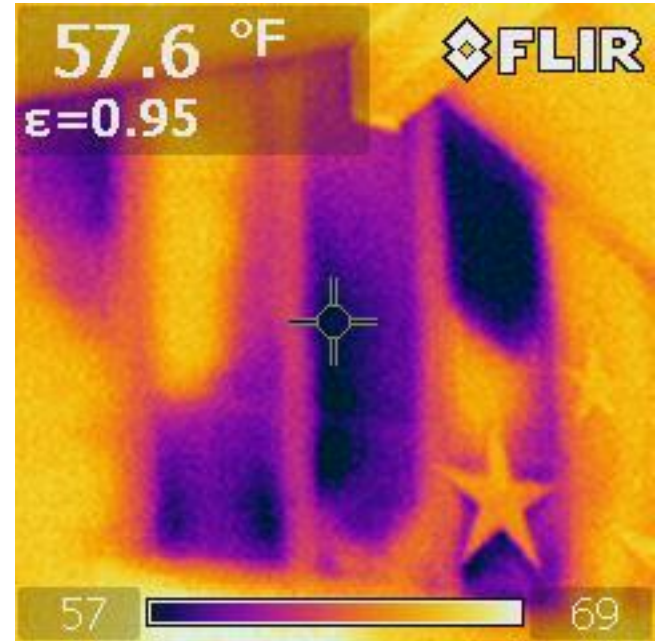
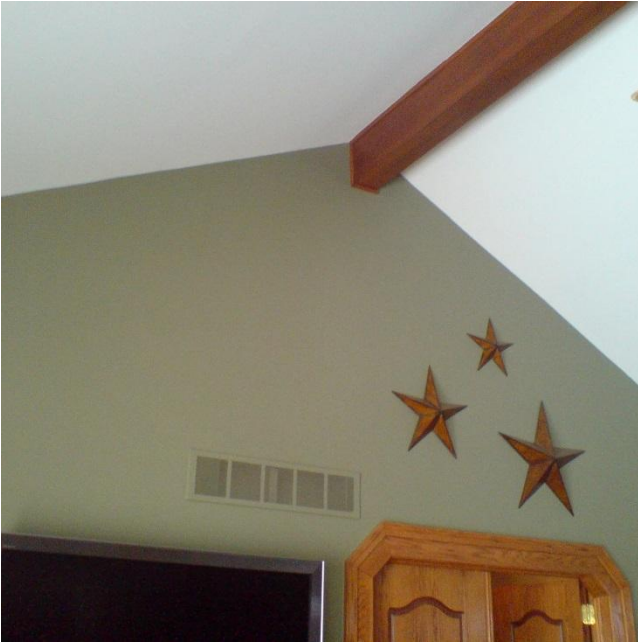
Un-insulated and un-weather stripped attic hatch allows attic heat gain into the living quarters on a hot day. This will over work your AC unit!



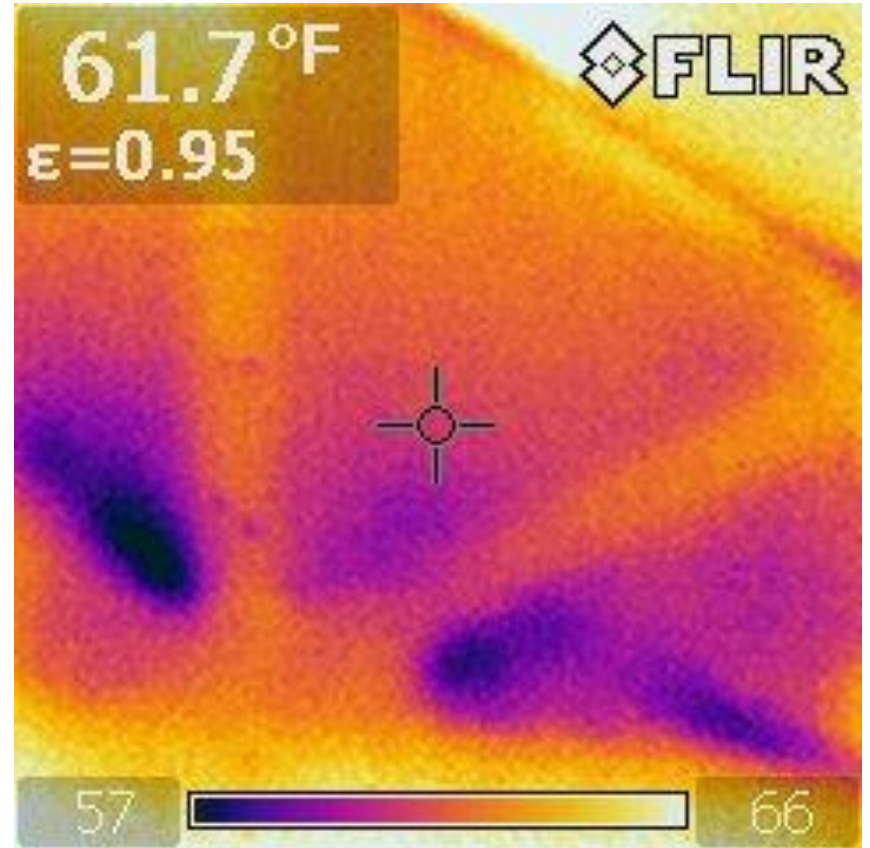
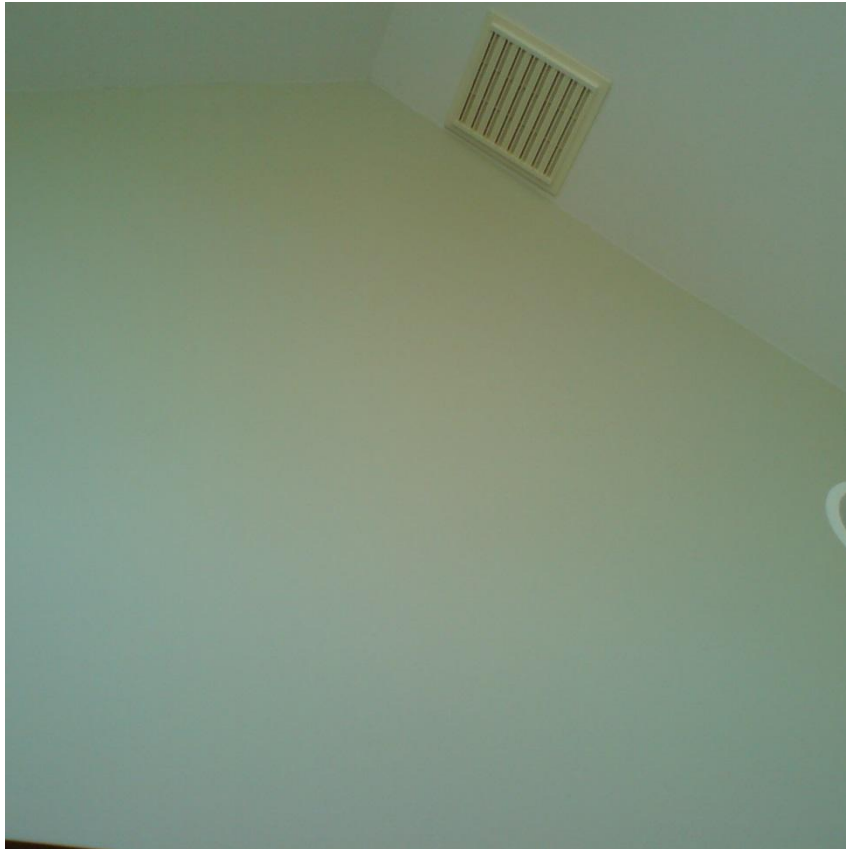
Settled wall cavity insulation causing a heat loss



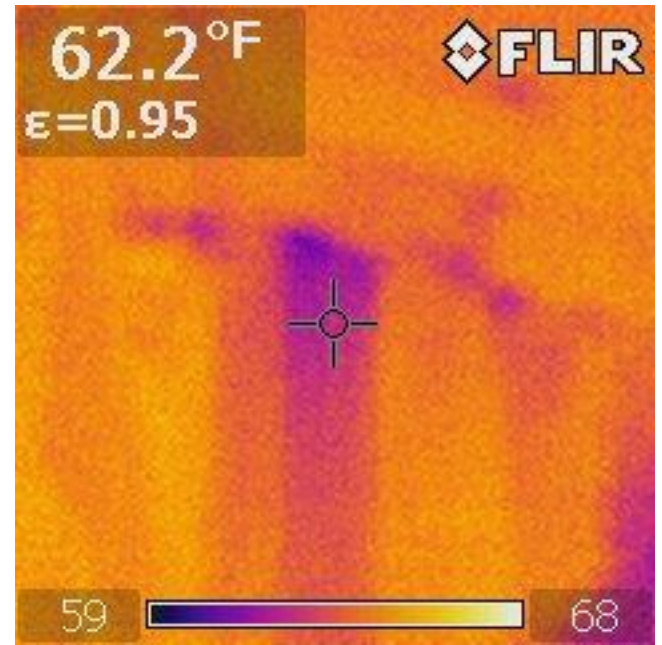
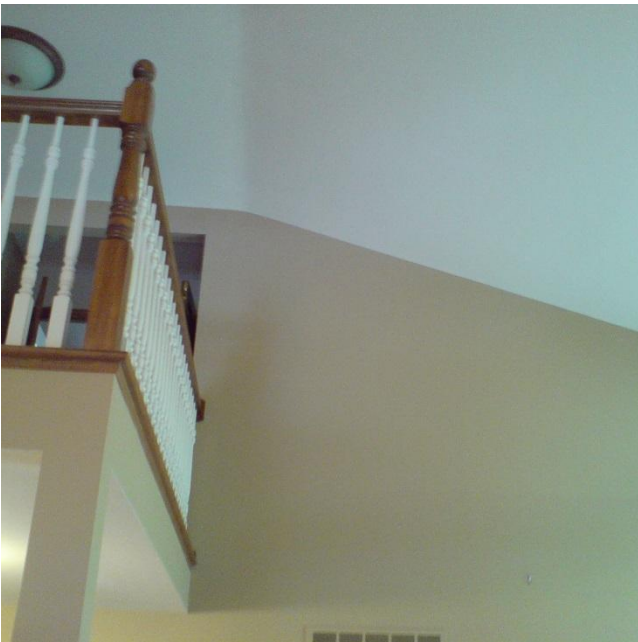
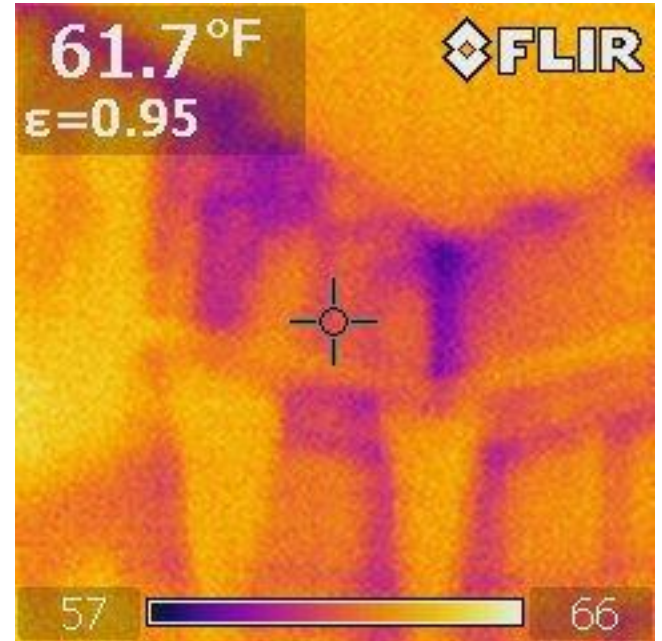
Missing or fallen wall insulation



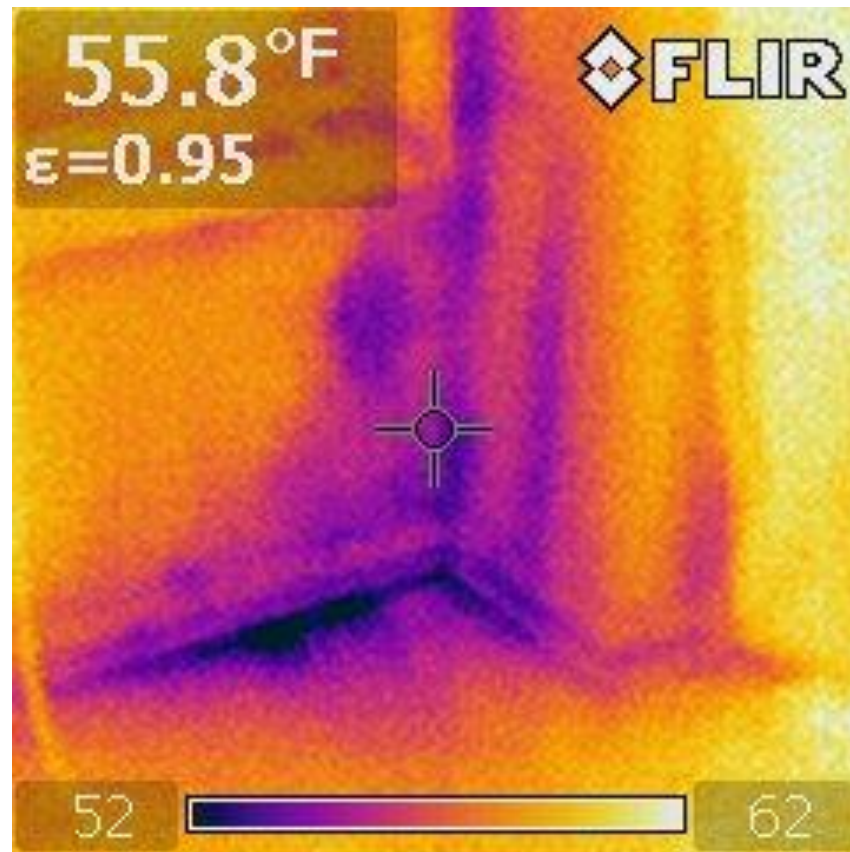
Pulled away insulation at cathedral wall



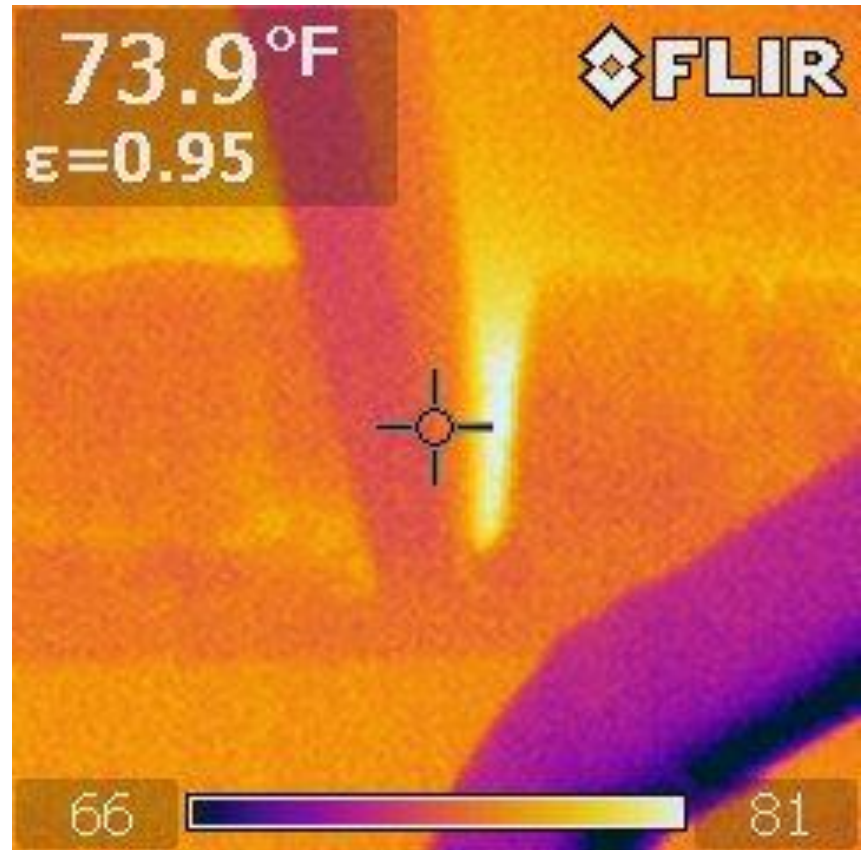
Poorly insulated wall cavity



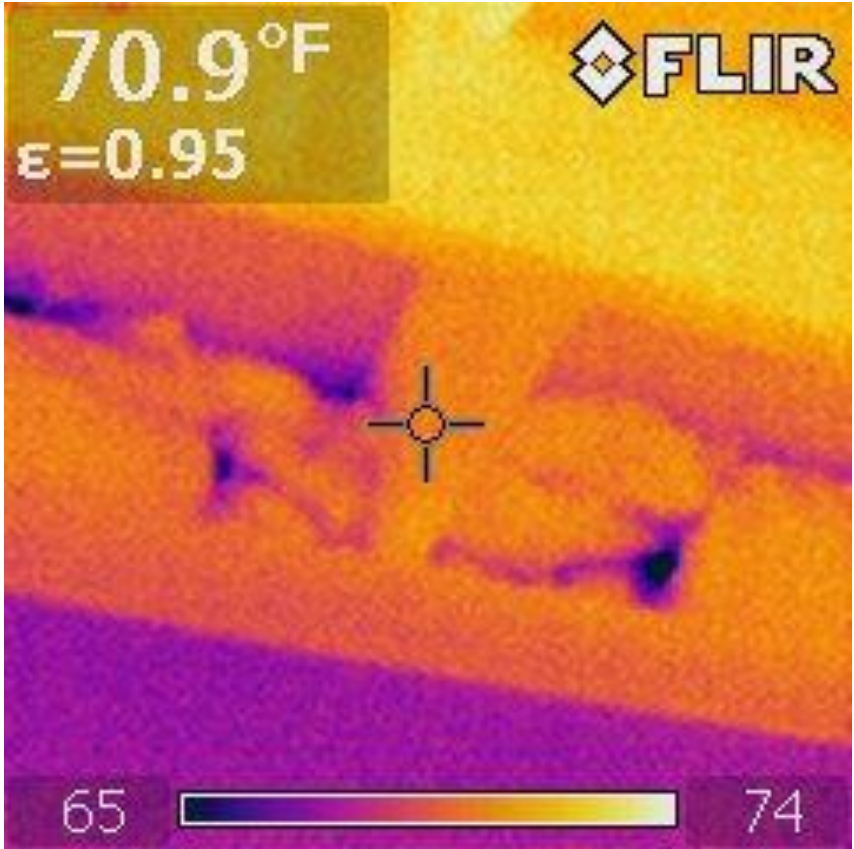
Cold air infiltrating into a 1st floor lower wall due to an unsealed rim joist below it in the basement



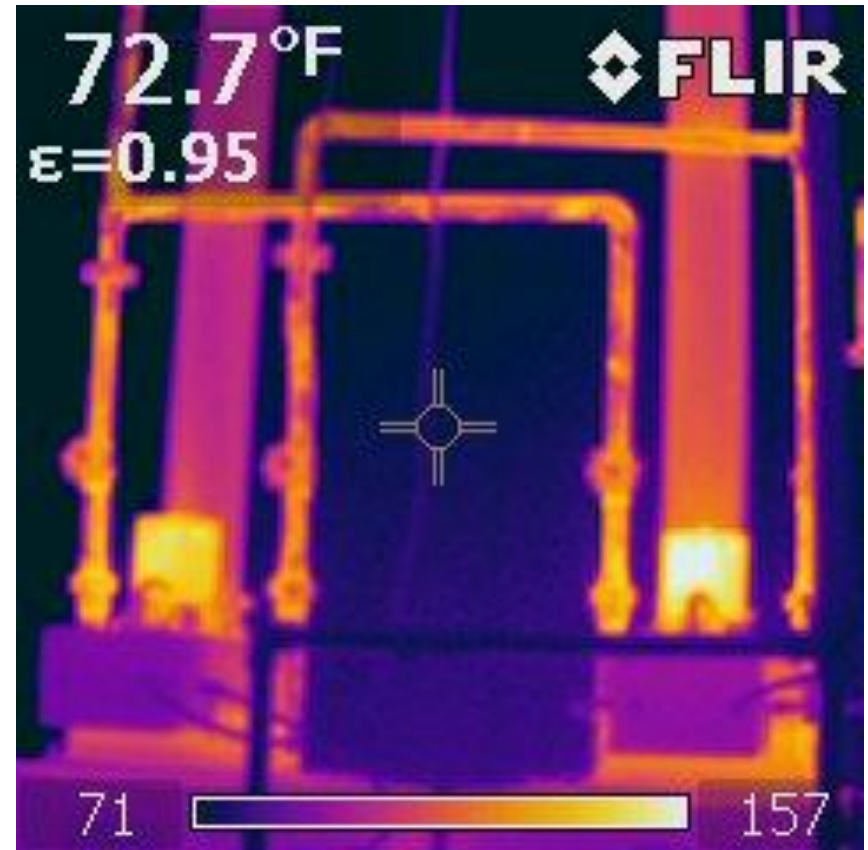
Vertical gap in rim joist installation allows heat gain in summer



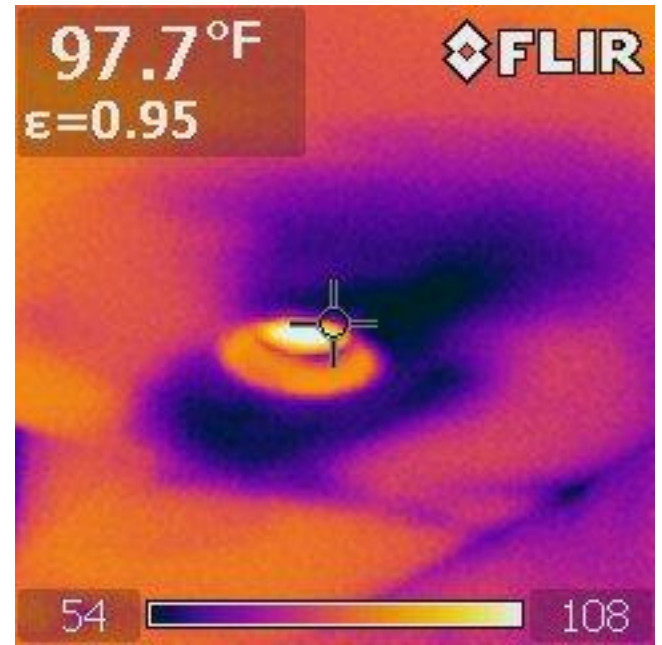
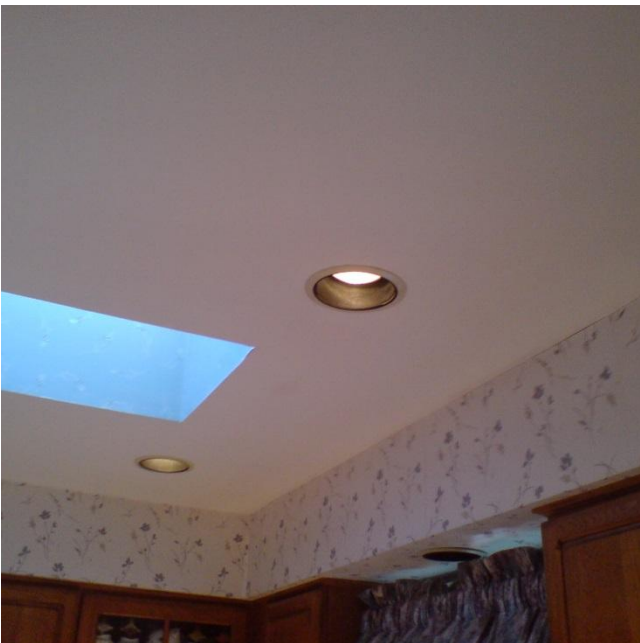
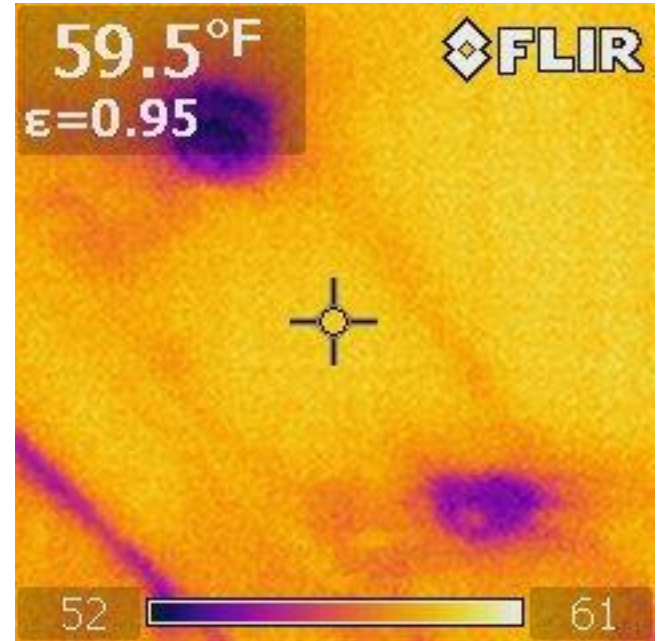
Improperly installed rim joist insulation causing conduction heat loss



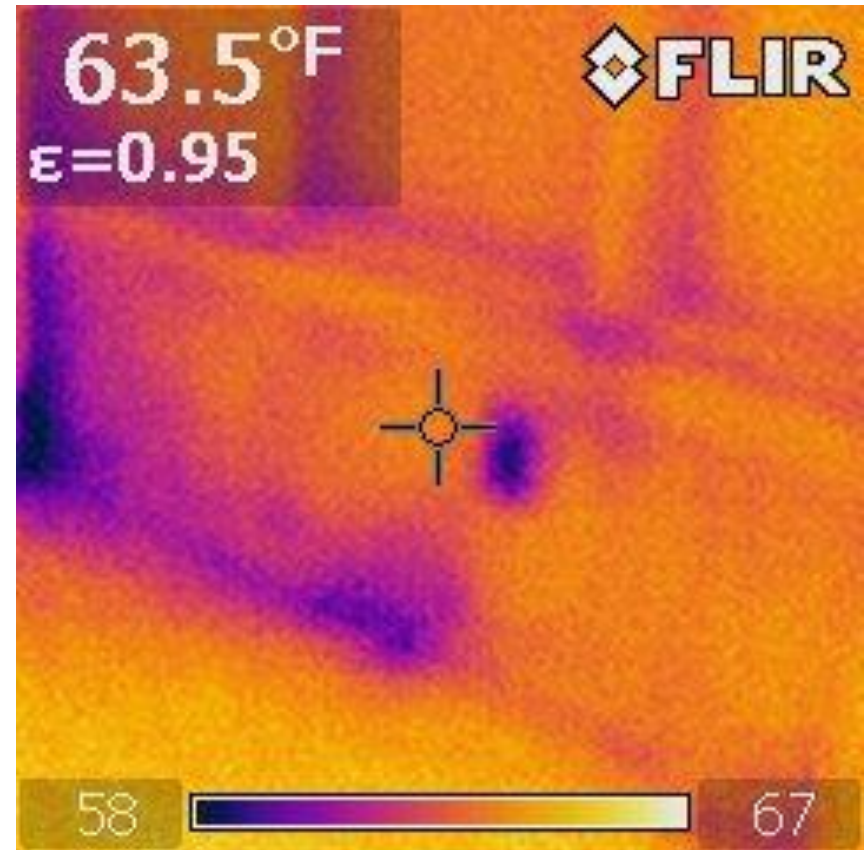
No insulation around water pipes above the hot water tank will allow constant heat to be drawn out of the tank. This will cause more burner on time and thus , higher energy costs.



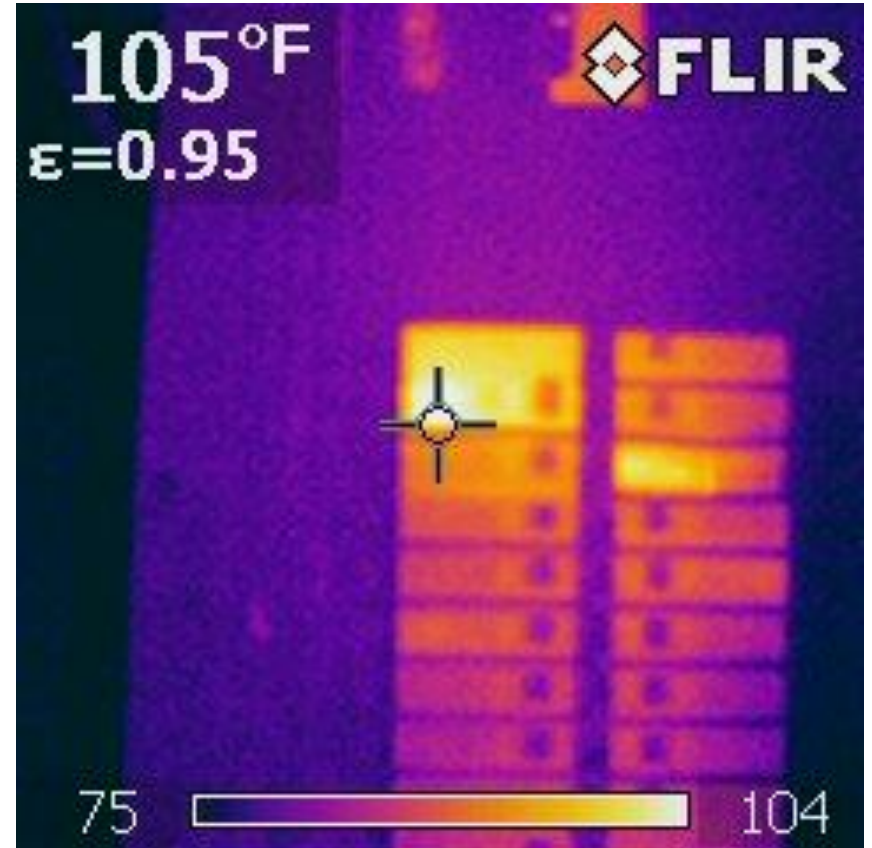
Heat loss due to poorly insulated recessed light fixtures



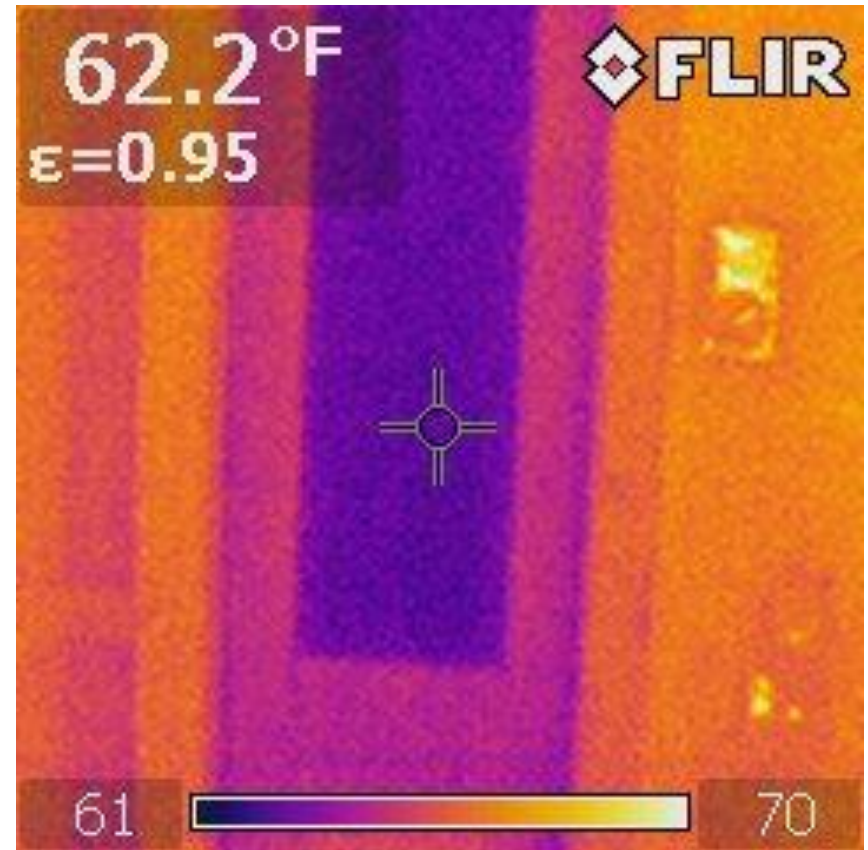
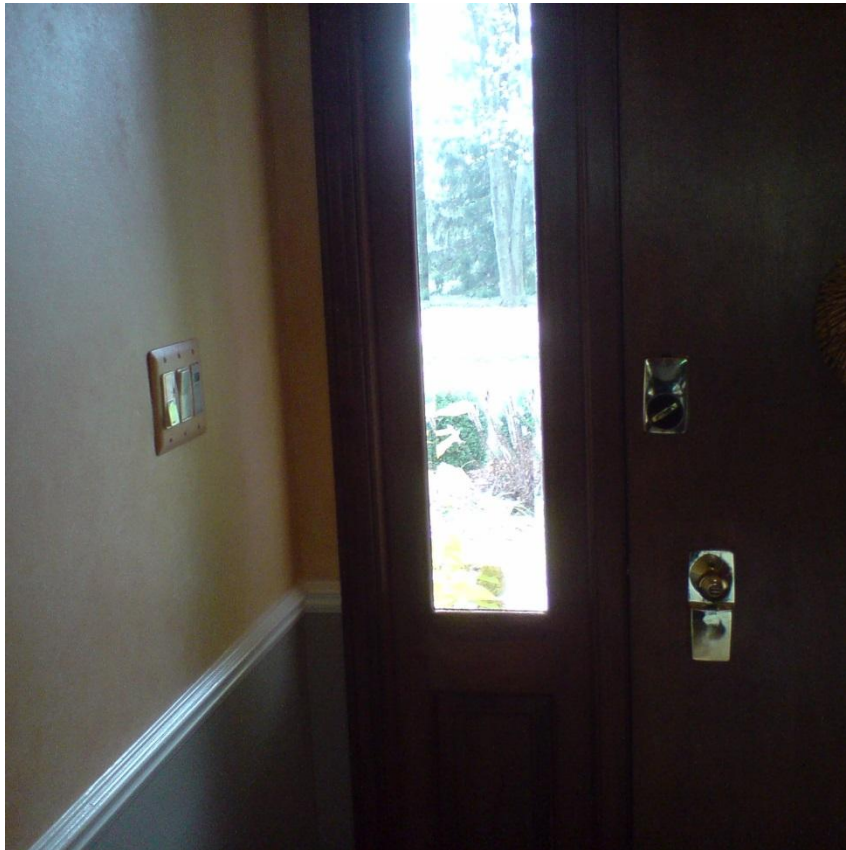
Heat loss and cold air infiltration at electrical wall outlet



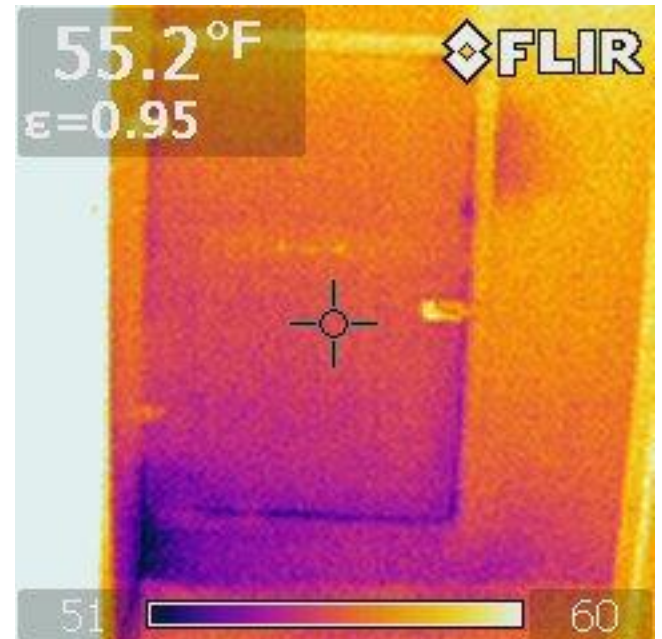
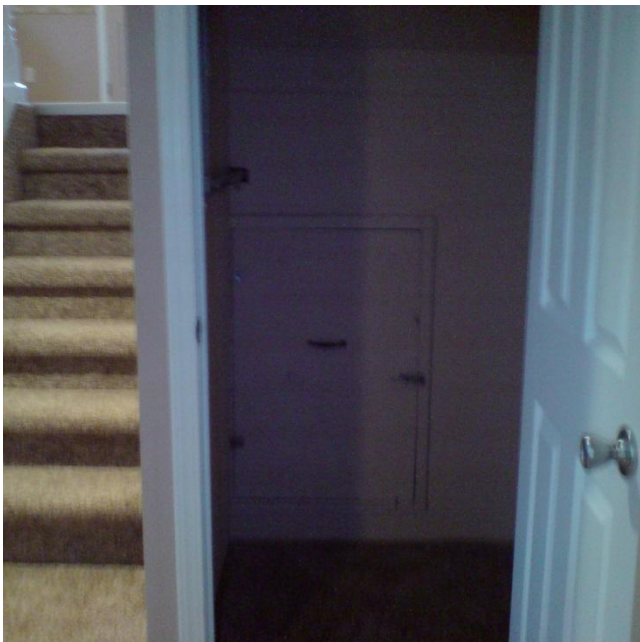
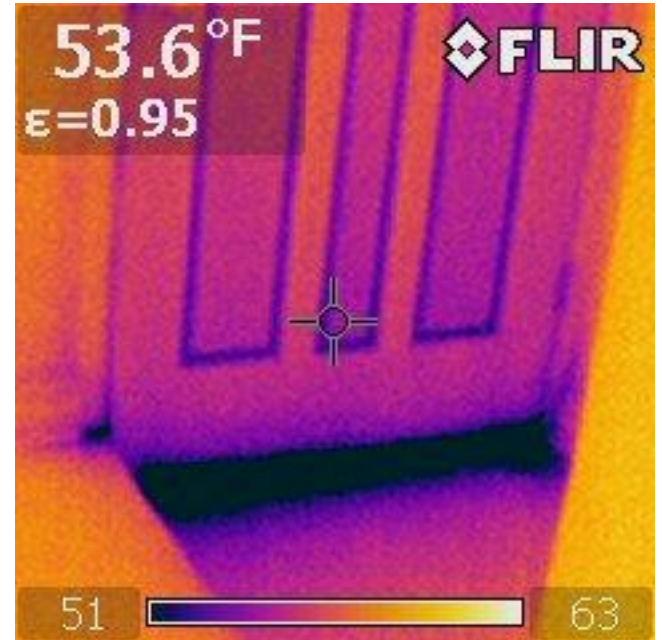
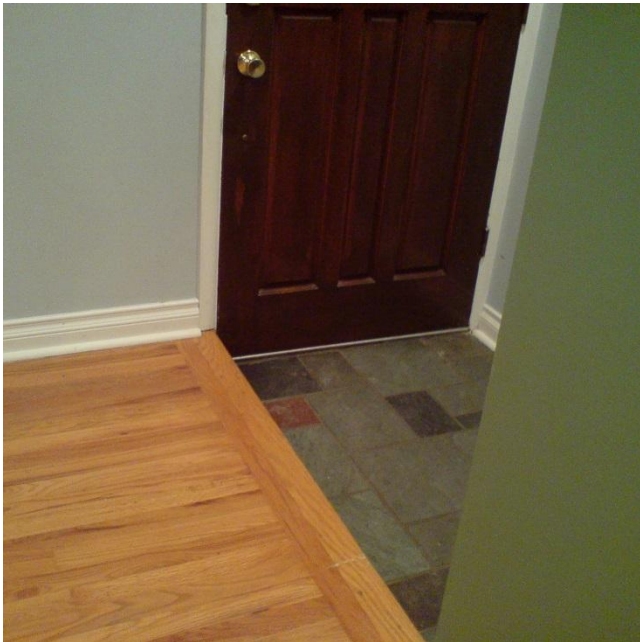
Excessive heat (105°F) emanating from a defective breaker



Excessive glass within an entry door causes heat loss



Cold air infiltration at entry door sweep & crawl space access



Ghosting

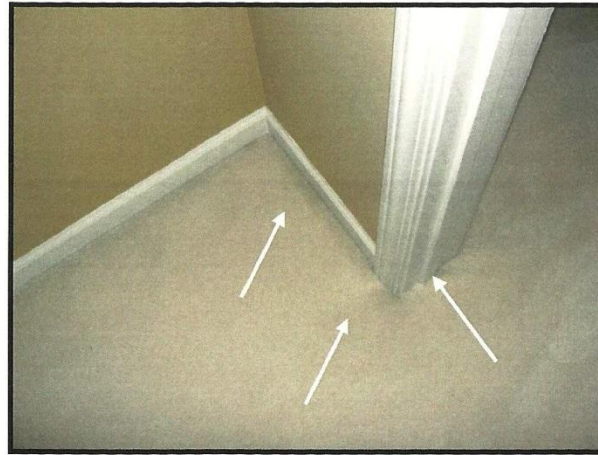
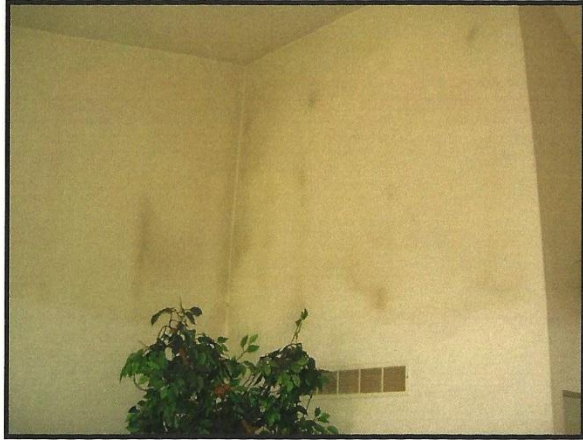


Ghosting

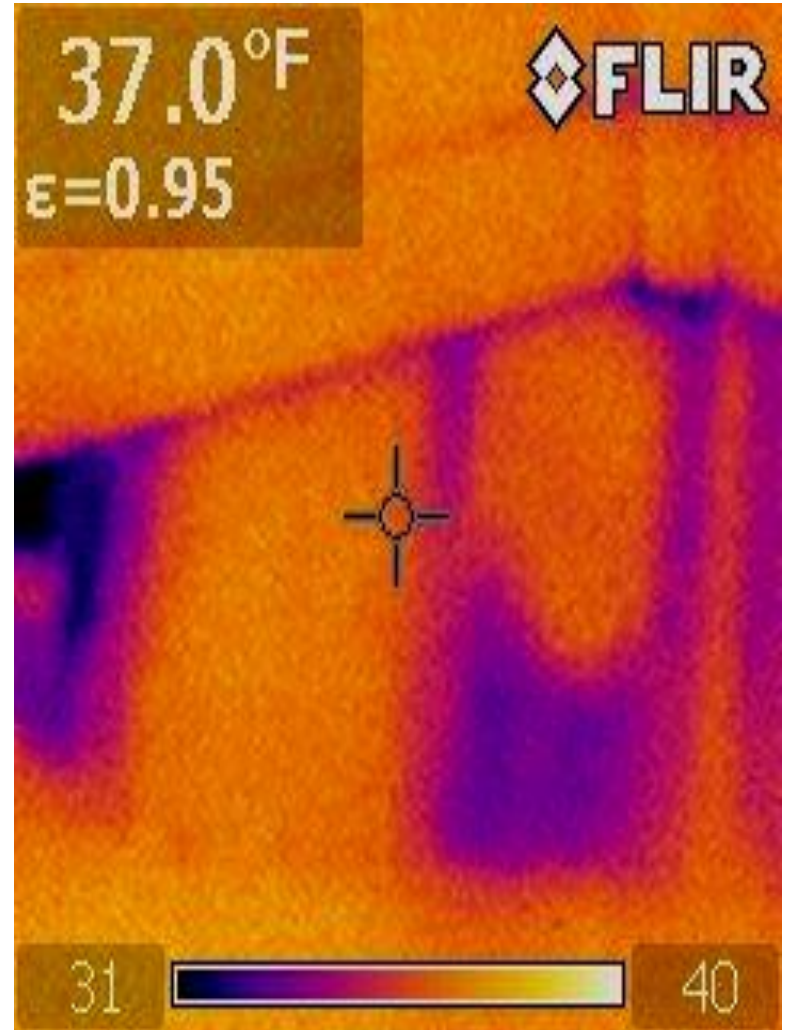
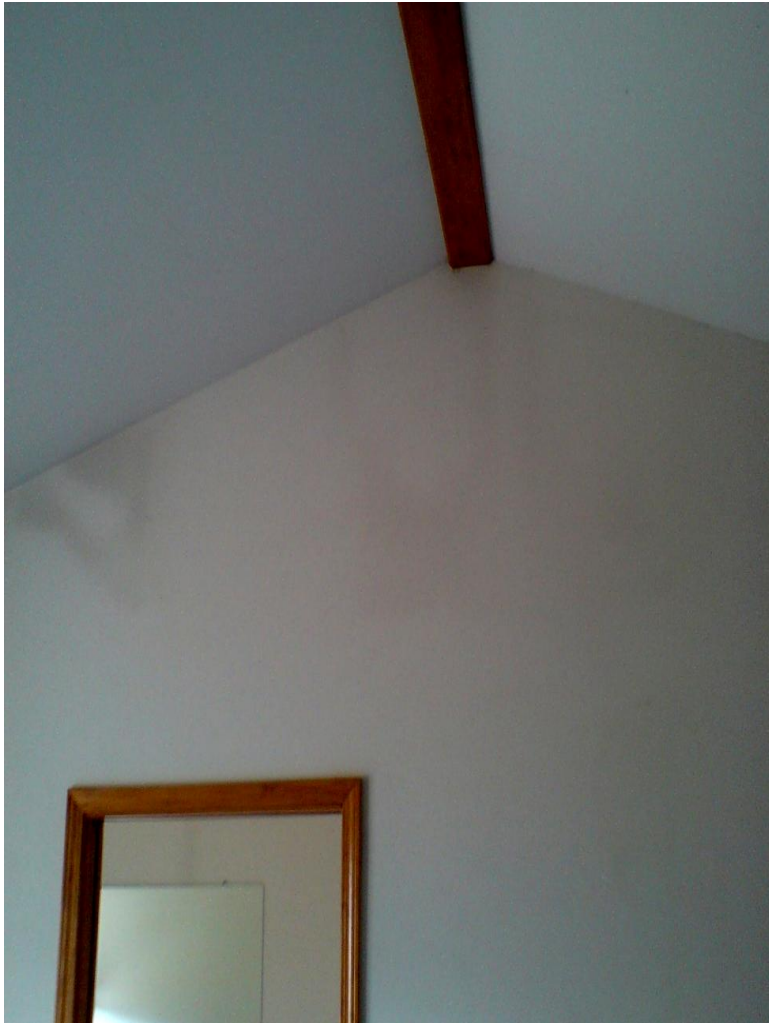
Dark vertical shadow-like lines on walls & ceilings and at the perimeter of carpet along outside walls. This condition is caused by two, three or more of the following: inadequate or missing insulation at these locations, inadequate or missing exterior caulk that allows excessive air infiltration to these areas, too high of humidity in the air produces interior condensation at these colder than typical areas, candle soot production, the wrong size/missing/dirty air filter and the lack of sufficient combustion air needed for a fireplace/gas furnace/gas hot water/gas dryer. This last condition puts the home into a negative pressure condition which can bring unsafe exhaust products into the living quarters. With that comes “combustion-by-products”, “soot”, that will deposit on these areas. When “ghosting” is observed, action should be quickly taken to assure occupancy safety.

Corrective Action: A detailed forensic inspection of the property by a qualified inspector – this inspection would include Infrared camera inspection, air infiltration diagnostics via a “Blower Door”, detailed safety testing of the furnace/-dryer/fireplace/hot water tank, the potential need to install an air equalization unit.

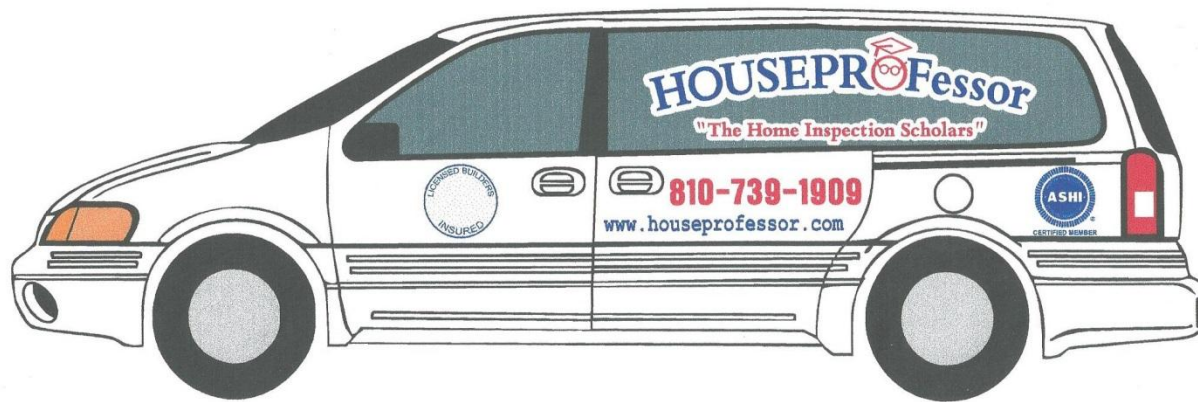
Ghosting



Ghosting



The HouseProfessor fleet



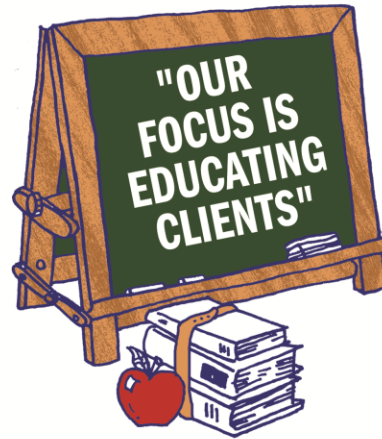
**AS A HOME BUYER...
SHOULD I REQUEST AN INSPECTION?**

Your new-found discovery appears to be the perfect house – and at a price that you can afford! You love the kitchen and the bathroom, you are proud of the landscaping and the school system is right.... But before you make what may be the biggest purchase of your life, hire an objective professional to examine the building thoroughly and report any expensive surprises. If your dream house needs major repairs, you want to know about them before you close the deal.

**AS A HOME SELLER...
SHOULD I HAVE A PRE-SALE INSPECTION?**

According to home inspection experts, approximately 50% of the resale homes on the market today have at least one significant defect. If such a defect is not discovered until a buyer conducts his/her pre-purchase inspection, you could lose that valuable buyer!

A pre-sale inspection will identify major defects, but will also identify minor repairs & maintenance concerns. You may then decide to make selective repairs or simply disclose the inspection report. This could simplify the negotiation process, thus, expediting the sale of your home. As an added plus, money spent on an inspection and repairs made during the 90-days to contract may reduce your taxable capital gain.



The **HOUSEPROFESSOR** promises to share all of its 25+ years of knowledge and know-how to help you feel fully informed about the physical condition of your home purchase or sale. Quotes, times available and the ability to "book" an inspection are possible through Web Specation by visiting our website- houseprofessor.com. Thank you and we wish you success in your home search!

**CALL TODAY!
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The **HOUSEPROFESSOR** is committed to satisfying the home buyer's and seller's need to collect timely crucial knowledge about the condition of their property from an experienced, confident and caring company.

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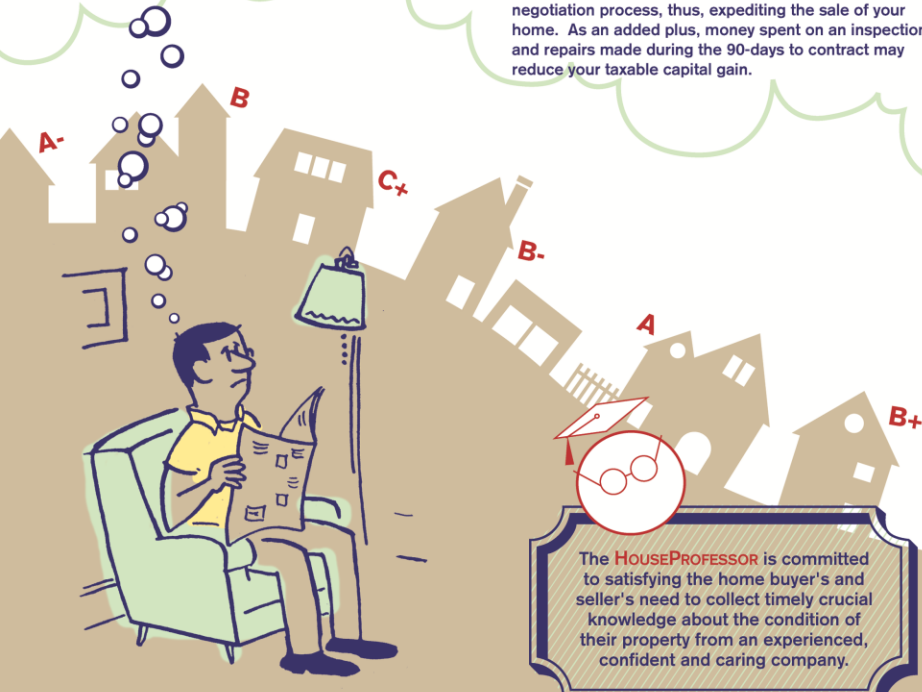
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EXPERIENCE and CONFIDENCE...

...in our abilities allows us to extend \$5,000.00 of liability on each inspection (ASHI Standards of Practice is the gauge for this liability). The **HOUSEPROFESSOR** is backed up further with a \$1,000,000.00 Errors & Omissions Policy. **If we miss something we should not have, we pay for it!** Our rates are very competitive, ranging from \$220.00 - \$395.00 for most homes.

**PEACE OF MIND
AT A LOW PRICE!!**



WHO WE ARE

The **HOUSEPROFESSOR** is a Sterling Heights, Michigan originated private home inspection company that has served southeastern Michigan with over 11,000 inspections since 1981. We adhere to a strict Standard of Practice established by the American Society of Home Inspectors, ASHI, in our inspection process. ASHI is recognized as the elite home inspector organization and we are Certified Members.

HERE'S WHAT WE DO...

We will spend 2-3 hours with you at the home site when conducting a standard home inspection. Your inspector will be looking at the following eight categories:

ROOFING **B+**
STRUCTURE **A**
ELECTRICAL **B-**
HEATING & COOLING **A**

PLUMBING **A-**
BASEMENT **B+**
EXTERIOR **A**
INTERIOR **B**

FINAL GRADE: **B+**

AT THE END OF THE STANDARD HOME INSPECTION, YOU WILL RECEIVE:

- A "Report Card" on your home
- A detailed customized report via Web-Spection
- A Photo Gallery of all discovered priority concerns.
- A helpful "Walk-Thru" Guide & Check List... a must, just prior to closing!
- Cost estimates for discovered major repairs.
- A copy of the ASHI Standard of Practice & Code of Ethics.

Call Now!
586-739-1909

or visit HOUSEPROFESSOR.COM



PREPARING FOR THE INSPECTION...

A clause should exist in your Purchase Agreement that makes your offer contingent upon a professional inspection. Consult with your real estate agent and/or attorney for clause details. All utilities should be on, appliance pilots lit, and access to all systems and areas made available. Most of our clients find that accompanying us is a valuable learning experience and is strongly encouraged.



IT'S "REPORT CARD" TIME!

What grade will your house get?

"A" through "E" grading comparing your house to peer houses, in each of our eight categories.

Priority concerns are documented and discussed.

Qualities of the house are documented and discussed.



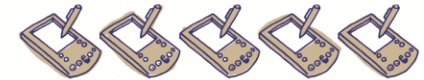
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Soil Borings: Expansive Clay, Fuel Oil in Soil, Underground Storage Tank (UST), Septic Field.

Energy Analysis: Cost-effective measures are determined that will lower your utility bills.

Well & Septic Inspections: **Qualified in Michigan.**

Commercial & Light Industrial Inspections.

Swimming Pool & Hot Tub Inspections.



A+

**WHAT GRADE WILL
YOUR HOUSE GET?**
