

Advantage Companies

Residential Inspection Report

6026 Salem, Portage, MI 49002



Inspection Date:
10/04/2014

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Report Overview

THE HOUSE IN PERSPECTIVE

This is an average quality home but it needs many repairs. While the repairs recommended in this report are typical for a home of this age and type, the amount of repairs are numerous.

Expectations

Inspectors are hired to find issues and we try not to disappoint; approximately 80%-85% of an inspection is boilerplate. At the end of the day, buyers and sellers have to be reasonable. In my opinion, reasonable means correct safety, structural and *obvious* code issues. The inspection shouldn't be a second negotiation; you would be surprised how subjective these can be even with inspectors using "checklists". Every home, existing and new will have gigs on it.

As a prospective home buyer, getting to the inspection stage is one of the big milestones over the course of a real estate transaction. You may have walked through the home a few times and given it your own critical eye, but now the big guns are coming in to tell you just what you might be getting in to.

That can be a bit of a blessing and a bit of a curse at the same time for prospective buyers that have fallen in love with a property. They want to know everything about it, but they don't want to hear that it's got significant problems that might be a barrier to purchase. Because of this dynamic, inspections can be a bit of a daunting prospect, but they certainly don't have to be.

Forget the Notion of a Perfect Home

Many prospective home buyers have walked through a property only to fall in love with it. Maybe it has the perfect amount of space for a particular family or maybe it has the right kind of amenities for a new couple. Whatever the case, rose-colored glasses may immediately be put on and seeing flaws in the property can then prove difficult.

Throw out the notion that a particular home is perfect and you will find it much easier to accept the possibility that an inspector will turn up something that needs to be addressed. Through no fault of anyone's time can simply wear down aspects of a home like a foundation and repairs may be necessary. This is not a deal-breaker and a settlement is likely to be reached in the event of an issue. Prepare for your perfect home to not be so perfect.

Own the Process

A home inspector is working for you, giving you the information you need to either reach a settlement on key issues or take care of things after a real estate transaction has been completed. Don't let this valuable resource slip through your fingers without getting full explanations on every item on the inspector's checklist. Don't let the burden of information lie on the inspector and your real estate agent. Instead, take that burden on yourself.

Committing to the process and pledging to understand what needs to be done to a home after purchase will greatly ease your transition into a new home and remove the prospect of headaches down the road. Many consumers have gotten into homes to find problems they did not expect either because they did not listen to the inspector or commit to understanding what was told to them.

An inspector can find only the problems or defects that exist and are viewable at the time of the inspection. When looking at an older furnace that is in proper working condition, it is impossible to predict how or when it will fail. The only guarantee a home inspector can give you is this: Everything in or on the home will fail sooner or later.

Again, not all parts of a furnace or other appliances are inspected. Check the agreement the home-inspection company gave you with the inspection report.

When a home is occupied, there are areas of the home that cannot be visually inspected--areas inside filled closets or under stairways, floors under furniture, attics where the access panel is too small or is blocked, under floor crawl spaces that are too narrow or are flooded, and on and on.

When the home inspector cannot inspect an area of a home, it should be noted in the report as to what was not inspected and why. Thoroughly read your report, and then call the home inspector if you have any questions about all those other problems.

Enjoy Yourself

This might seem like an odd piece of advice, but keep in mind that you are embarking on a real estate transaction that will bring a new home to you or your family. That is an exciting prospect and treating it as some dour event that you have to trudge through will only fulfill that perspective.

Yes, there will be issues with the home you want and yes, there might be complications, but don't let that detract from the joy you should be feeling about finding the right home for you and getting to work on building a new life within it. The real estate process should be a fun one and the inspection process is no different. Go with it and enjoy yourself as you pick apart your new toy.

Hearing bad news will always be an uncomfortable part of life, but in the great scheme of things, hearing that your prospective new piece of real estate might need a new furnace is not the worst that could happen. By keeping in mind these three bits of advice, you can take control of your inspection process in your own mind to ensure an easy transition into the new home you have selected.

CONVENTIONS USED IN THIS REPORT

For your convenience, the following conventions may be used in this report.

*** = Repair:** denotes a system or component which is missing or which needs corrective action to assure proper and reliable function.

M = Maintenance: a system or component, which is considered to require routine/ongoing maintenance/upkeep.

Safety Issue: denotes a condition that is unsafe and in need of prompt attention.

R = Recommended/Improve: denotes improvements, which are recommended but not required.

Monitor: denotes a system or component needing further investigation and/or monitoring in order to determine if repairs are necessary.

FE = Future Expense/Deferred Cost: denotes items that have reached or are reaching their normal life expectancy or show indications that they may require repair or replacement anytime during the next five (5) years.

Please note that those observations listed under “**Discretionary Improvements**” are not essential repairs, but represent logical long-term improvements. For the purpose of this report, it is assumed that the house faces east.

IMPROVEMENT RECOMMENDATION HIGHLIGHTS / SUMMARY

The following is a synopsis of the potentially significant improvements that should be budgeted for over the short term. Other significant improvements, outside the scope of this inspection, may also be necessary. Please refer to the body of this report for further details on these and other recommendations.

**MAJOR CONCERNS, SAFETY ISSUES
REPAIR ITEMS, IMPROVEMENT ITEMS
ITEMS TO MONITOR, DEFERRED COST ITEMS**

THE SCOPE OF THE INSPECTION

All components designated for inspection in the ASHI® Standards of Practice are inspected, except as may be noted in the “Limitations of Inspection” sections within this report. **Viewing the photos on the CD-Rom provided with this report (when applicable) is critical to the overall understanding and interpretation of the Inspection Report.**

It is the goal of the inspection to put a homebuyer in a better position to make a buying decision. Not all improvements will be identified during this inspection. Unexpected repairs should still be anticipated. A trip charge may apply if we make a return trip to the property at your/realtor’s request for any reason. The inspection should not be considered a guarantee or warranty of any kind. The Advantage Companies/Advantage Home Inspections and its Inspector’s liability are specifically limited to the amount charged for the inspection(s) for a maximum of one hundred eighty - (180) days from the date of the inspection. This inspection is visual only. A representative sample of building components are viewed in areas that are accessible at the time of the inspection. No destructive testing or dismantling of building components is performed.

Please refer to the Inspection Agreement Contract for a full explanation of the scope of the inspection.

WEATHER CONDITIONS

Dry weather conditions prevailed at the time of the inspection. The estimated outside temperature was 51 degrees F.

RECENT WEATHER CONDITIONS

Wet weather conditions have been experienced in the days leading up to the inspection.

Advantage Companies
Inspection Agreement

(Please read carefully)

PAGE 1 OF 2

THIS AGREEMENT is made and entered into by and between Advantage Companies, referred to as “Inspector”, and Buyer (Prepared For) Listed on Page 1 of the Inspection Report, referred to as “Client”.

In consideration of the promise and terms of this Agreement, the parties agree as follows:

1. The client will pay the sum of the Agreed upon fee listed on page 3 of the Inspection Report for the inspection of the “Property”, being the residence, and garage or carport, if applicable, located at address stated on Inspection Report.
2. The Inspector will perform a visual inspection and prepare a written report of the apparent condition of the readily accessible installed systems and components of the property existing at the time of the inspection. Latent and concealed defects and deficiencies are excluded from the inspection.
3. The parties agree that the “Standards of Practice” (the “Standards”) shall define the standard of duty and the conditions, limitations, and exclusions of the inspection and are incorporated by reference herein. A copy of the Standards is available upon written request by the client. If the state where the inspection is performed imposes more stringent standards or administrative rule, then those state standards shall define the standard of duty and the conditions, limitations and exclusions of the inspection.
4. The parties understand and agree that the Inspector and its employees and its agents assume no liability or responsibility for the costs of repairing or replacing any unreported defects or deficiencies either current or arising in the future or any property damage, consequential damage or bodily injury of any nature. If repairs or replacement is done without giving the Inspector the required notice, the Inspector will have no liability to the Client. The client further agrees that the Inspector is liable only up to the cost of the inspection.
5. The parties agree and understand the Inspector is not an insurer or guarantor against defects in the structure, items, components or systems inspected. INSPECTOR MAKES NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE FITNESS FOR USE, CONDITION, PERFORMANCE OR ADEQUACY OF ANY INSPECTED STRUCTURE, ITEM, COMPONENT, OR SYSTEM.
6. If Client is married, Client represents that this obligation is a family obligation incurred in the interest of the family.
7. This Agreement, including the terms and conditions on the reverse side, represents the entire agreement between the parties and there are no other agreements either written or oral between them. This Agreement shall be amended only by written agreement signed by both parties. This Agreement shall be construed and enforced in accordance with the laws of the State of Michigan, and if that state’s laws or regulations are more stringent than the forms of the agreement, the state law or rule shall govern.

SEE NEXT PAGE FOR ADDITIONAL TERMS, CONDITIONS AND LIMITATIONS

Inspection Agreement

(Continued from previous page)

ADDITIONAL TERMS, CONDITIONS AND LIMITATIONS

8. Systems, items, and conditions which are not within the scope of the building inspection include, but are not limited to: radon, formaldehyde, lead paint, asbestos, toxic or flammable materials, molds, fungi, other environmental hazards; pest infestation; security and fire protection systems; household appliances; humidifiers; paint, wallpaper and other treatments to windows, interior walls, ceilings and floors; recreational equipment or facilities; underground storage tanks, energy efficiency measurements; concealed or private secured systems; water wells; heating systems accessories; solar heating systems; sprinkling systems; water softener; central vacuum systems, telephone, intercom or cable TV systems; antennae, lightning arrestors, trees or plants; governing codes, ordinances, statutes and covenants and manufacturer specifications. Client understands that these systems, items and conditions are excepted from this inspection. Any general comments about these systems, items and conditions of the written report are informal only and DO NOT represent an inspection.

9. The Inspection and report are performed and prepared for the sole and exclusive use and possession of the Client. No other person or entity may rely on the report issued pursuant to this Agreement. In the event that any person, not a party to this Agreement, makes any claim against Inspector, its employees or agents, arising out of the services performed by Inspector under this Agreement, the Client agrees to indemnify, defend and hold harmless Inspector from any and all damages, expenses, costs and attorney fees arising from such a claim.

10. The Inspection will not include an appraisal of the value or a survey. The written report is not a compliance inspection or certification for past or present governmental codes or regulations of any kind.

11. In the event of a claim by the Client that an installed system or component of the premises which was inspected by the Inspector was not in the condition reported by the Inspector, the Client agrees to notify the Inspector at least 72 hours prior to repairing or replacing such system or component. The Client further agrees that the Inspector is liable only if there has been a complete failure to follow the standards adhered to in the report or State law. Furthermore, any legal action must be brought within six (6) months from the date of the inspection or will be deemed waived and forever barred.

12. This inspection does not determine whether the property is insurable.

13. Exclusions of systems – in-accessible or restricted access of crawlspace & attic areas.

ADDENDUM TO INSPECTION AGREEMENT

Any dispute, controversy, interpretations or claim including claims for, but not limited to, breach of contract, any form of negligence, fraud or misrepresentation arising out of, from or related to, this contract or arising out of, from or related to the inspection or inspection report shall be submitted to final and binding arbitration under the Rules and Procedures of the Expedited Arbitration of Home Inspection Disputes of *Construction Arbitration Services, Inc.* The decision of the Arbitrator appointed there under shall be the final and binding judgment on the Award may be entered in any Court of competent jurisdiction.

Client has read this entire Agreement and accepts and understands this Agreement as hereby acknowledged. Client acknowledges understanding that a copy of the standards of practice (which applies) will be provided upon written request.

Payment for the inspection constitutes acceptance of terms & conditions of this agreement in lieu of client's signature below.

Signature: _____ Date: _____ Day: _____

Signature: _____ Date: _____ Time: _____

Inspector's Signature



Date: Listed on Page 1 of Inspection Report

Structure / Foundation

DESCRIPTION OF STRUCTURE / FOUNDATION

Foundation:	•Concrete Block •Basement Configuration •Foundation 90% not visible
Columns:	•Wood •Concrete Block •Not Visible
Floor Structure:	•Wood Joist
Wall Structure:	•Wood Frame
Ceiling Structure:	•Joist
Roof Structure:	•Rafters •Plywood Sheathing •Solid Plank Sheathing

STRUCTURE / FOUNDATION OBSERVATIONS

General Comments

The construction of the house is of average quality with typical liberties taken with good building practice and with the quality of materials employed. The inspection did not disclose significant deficiencies in the structure. The inspection did not discover evidence of substantial structural movement.

RECOMMENDATIONS / OBSERVATIONS

•**Repair:** Mold/Mildew was found in the attic and/or basement. This is usually due to improper ventilation and excess moisture. Proper ventilation helps control humidity and reduces the risk of rot. Remediation recommended.

Monitor: **No water was visible in the basement at the time of inspection. Wood Boring Insects**

- **Monitor:** See Pest Report
- **Monitor:** Bait traps visible. Check with seller for any present/past service contracts.

LIMITATIONS OF STRUCTURE / FOUNDATION INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Structural components concealed behind finished surfaces could not be inspected.
- Only a representative sampling of visible structural components was inspected.
- Crawlspace & attics are viewed from access hatch only.
- Furniture and/or storage restricted access to some structural components.
- Engineering or architectural services such as calculation of structural capacities, adequacy, or integrity are not part of a home inspection, unless specifically contracted for in a separate agreement.
- See CD-Rom for additional photos if applicable.
- The roof space/attic was viewed from the access hatch only.
- The basement was finished

Please also refer to the Inspection Agreement Contract for a detailed explanation of the scope of this inspection.

Roofing

DESCRIPTION OF ROOFING

Roof Covering:	•Composition Shingle •Estimated Age 1-5+- yrs. •Estimated Remaining Life 20-25+- yrs.
Roof Flashings:	•Metal •Roofing Material (Shingles)
Chimneys:	•Masonry
Roof Drainage System:	•Aluminum •Downspouts discharge above grade
Method of Inspection:	•Walked on roof

ROOFING OBSERVATIONS

Positive Attributes

The roof coverings are newer and appear to be in generally good condition.

RECOMMENDATIONS / OBSERVATIONS

Sloped Roofing

Composition (asphalt shingles)

Nowadays the most popular choice for material for roof shingles is the composition roof shingle, especially if you can't afford the high cost of clay tile or slate roofs. Higher-quality versions made from asphalt or fiberglass shingles offer a more durable option and may be available with recycled content. The advantage of these roof shingles is that they are quite pocket friendly. Apart from this, they are also available in a wide variety of styles and colors and thus you have a lot of options to choose from. They are relatively easy to install, and in some applications can be nailed in place over an existing roof. They require low maintenance and can be walked on without damaging the material. Most brands offer Class A fire protection. In other word, composition shingles have excellent fire resistant properties.

They come in two types - organic, and non-organic, which is fiberglass. They follow strict guidelines for manufacture. They come in a variety of colors and durability. They are seen on homes in every part of the country. The biggest downfall of this shingle is its vulnerability to wind and ice damage.

Organic shingles are generally paper (felt) saturated with asphalt to make it waterproof, then a top coating of adhesive asphalt is applied and ceramic granules are then embedded. It is generally 2 to 3 feet long. It is made of substances like tar, thick felt, crushed rock and other suitable materials all formed together into a single section. Organic shingles contain around 40% more asphalt per square (100 sq ft.) than fiberglass shingles which makes them weigh more and gives them excellent durability and blow-off resistance.

Fiberglass shingles have a base layer of glass fiber reinforcing mat. The glass fiber mat is not waterproof by itself. Fiberglass mat is made from wet, random-laid fiberglass bonded with urea-formaldehyde resin. The mat is then coated with asphalt which contains mineral fillers and makes the fiberglass shingle waterproof. Fiberglass reinforcement was devised as the replacement for asbestos paper reinforcement of roofing shingles and typically ranges from 1.8 to 2.3 pounds/square foot. A newer design of fiberglass asphalt shingle, called laminated or architectural, uses two distinct layers which are bonded together. Laminate shingles are heavier, more expensive, and arguably more durable than traditional shingle designs. Laminated shingles also give a more varied, contoured visual effect to a roof surface.

Below is a list of some of the advantages and disadvantages of Composition (asphalt shingles):

Advantages:

- * Can be used on any house from contemporary to historic.
- * inexpensive
- * ranges from low-cost 3-tab shingle to architectural shingles with extra durability and style
- * many colors, types, and manufacturers
- * suitable for most residential applications
- * easy to repair
- * fire resistant

Disadvantages:

- * relatively short life-span (15–30 years)
- * scars easily when hot

* subject to mildew and moss

* environmentally unfriendly

- **Monitor:** The shingles, flashings and chimney should be monitored annually as preventative maintenance.
- **Note:** The shingles manufacturer's life expectancy rating is approximately 25 years.

Chimneys

- **Repair:** The cap of the masonry chimney should be replaced and the chimney flue should be checked for damage. Damaged flues can be unsafe.
- **Improve: Repair:** A rain cap and vermin screen could be installed on the masonry chimney and the chimney flue should be checked for damage.

Gutters & Downspouts

- **Improve:** Underground downspout extensions recommended (\$30-40+- each plus labor).

Maintenance Repair: The gutters require cleaning to avoid spilling roof runoff around the building – a potential source of water entry or water damage. Minor leaks in the gutter should be repaired or caulked.

Maintenance: Repair: Minor leaks in the gutter should be repaired or caulked.

LIMITATIONS OF ROOFING INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Not the entire underside of the roof sheathing is inspected for evidence of leaks.
- Evidence of prior leaks may be disguised by interior finishes.
- Estimates of remaining roof life are approximations only and do not preclude the possibility of leakage. Leakage can develop at any time and may depend on rain intensity, wind direction, ice build up, and other factors.
- Antennae, chimney/flue interiors which are not readily accessible are not inspected and could require repair.
- Roof inspection may be limited by access, condition, weather, or other safety concerns.
- See CD-Rom for additional photos if applicable.

Please also refer to the Inspection Agreement Contract for a detailed explanation of the scope of this inspection.

Exterior

DESCRIPTION OF EXTERIOR

Wall Covering:	•Wood Siding
Eaves, Soffits, and Fascias:	•Wood
Exterior Doors:	•Metal •Sliding Glass – Atrium Door •Storm Doors •Hollow Wood
Window/Door Frames and Trim:	•Vinyl-Covered
Entry Driveways:	•Asphalt •Concrete
Entry Walkways and Patios:	•Concrete
Porches, Decks, Steps, Railings:	•Concrete
Overhead Garage Door(s):	•Steel
Surface Drainage:	•Level Grade •Graded Away From House
Fencing:	•Chain Link •Vinyl

EXTERIOR OBSERVATIONS

General Comments

The exterior of the home shows normal wear and tear for a home of this age.

Concrete Flatwork:

In the field of concrete construction, everyone knows that concrete cracks, a lot of it settles, some flakes, holds puddles and some just plain looks ugly!

The finished job will last no longer than what is under it. The ground under concrete must be free of anything that will decay and cause settling. If roots or other debris are buried under it, failure of the concrete is inevitable. Base soil should be clean, leveled and compacted for best results.

Forms can't just be set by eye. Using a laser to set the elevations and slopes of forms and grade pegs is the start. But concrete must be placed and troweled to those preset forms and pegs or puddling is inevitable. Also, if the base is not free of organic material and compacted properly the cracking and settling can become disastrous. Elevations must be set to accommodate drainage. In addition to the inclusion of fiber reinforcement, control joints and expansion joints must be planned to keep cracking to a minimum. Soil compaction is one task that too often gets overlooked when building a new residential home. Unless owners press their builders to have it done and are available to see for themselves that it actually does get done, it's not a job that builders will typically automatically do. Unfortunately, not having soil compaction done can have both predictable and unanticipated consequences for owners down the road. Concrete flatwork such as patios, stoops, approaches to garages, and sidewalks are all subject to settling if the soil beneath them is not properly compacted. When concrete flatwork butts up against fixed construction, concrete settling can stress and cause cracking of finishing materials on the fixed construction such as exterior siding.

Positive Attributes

Window frames are clad, for the most part, with a low maintenance material.

RECOMMENDATIONS / OBSERVATIONS

Exterior Walls

- **Repair:** Wood/soil contact at the base of the siding should be eliminated. Rotted or damaged siding that is uncovered should be repaired. These areas are at risk of additional hidden damage, recommend 6 to 8 inches of clearance from the siding to finish grade.

Driveway

- **Maintenance Repair:** Seal cracks in concrete flatwork (garage, driveway, sidewalks, patio, etc.). Moisture penetration and the freeze thaw cycle will deteriorate concrete quickly.
- **Maintenance Repair:** Fill cracks and seal coat asphalt driveway every 2-3 years or as needed. Moisture penetration and the freeze thaw cycle will deteriorate asphalt quickly.

Landscaping

- **Recommended:** Remove wood chips and replace with stones. Wood chips draw moisture, moisture attracts bugs.

Fencing

- **Repair:** The fencing is in only fair condition. Minor repairs are needed.

Discretionary Improvements

Installing a new automatic overhead garage door opener would be a logical improvement. It would be wise to install a smoke detector in the garage.

GROUNDS REMARKS

Service Walks/Driveways

Spalling concrete cannot be patched with concrete because the new will not bond with the old. Water will freeze between the two layers, or the concrete will break up from movement or wear. Replacement of the damaged section is recommended. Walks or driveways that are close to the property should be properly pitched away to direct water away from the foundation. Asphalt driveways should be kept sealed and larger cracks filled so as to prevent damage from frost.

Patios that have settled towards the structure should be mudjacked or replaced to assure proper pitch. Improperly pitched patios are one source of wet basements.

Exterior Wood Surfaces

All surfaces of untreated wood need regular applications of paint or special chemicals to resist damage. Porch or deck columns and fence posts which are buried in the ground and made of untreated wood will become damaged within a year or two.

Decks should always be nailed with galvanized or aluminum nails. Decks that are not painted or stained should be treated with a water sealer.

Grading and Drainage

Any system of grading or landscaping that creates positive drainage (moving water away from the foundation walls) will help to keep a basement dry. Where negative grade exists and additional backfill is suggested, it may require digging out around the property to get a proper pitch. Dirt shall be approximately 6" below the bottom sill and should not touch wood surfaces.

Flower beds, loose mulched areas, railroad ties and other such landscaping items close to the foundation trap moisture and contribute to wet basements. To establish a positive grade, a proper slope away from the house is 1" per foot for approximately 5-6 feet. Recommend ground cover planting or grass to foundation.

Roof and Surface Water Control

Roof and surface water must be controlled to maintain a dry basement. This means keeping gutters cleaned out and aligned, extending downspouts, installing splash blocks, and building up the grade so that roof and surface water is diverted away from the building.

Window Wells

The amount of water which enters a window well from falling rain is generally slight, but water will accumulate in window wells if the yard is improperly graded. Plastic window well covers are useful in keeping out leaves and debris.

Retaining Walls

Retaining walls deteriorate because of excessive pressure buildup behind them, generally due to water accumulation. Often, conditions can be improved by excavating a trench behind the retaining wall and filling it with coarse gravel. Drain holes through the wall will then be able to relieve the water pressure.

Retaining walls sometime suffer from tree root pressure or from general movement of topsoil down the slope. Normally, these conditions require rebuilding the retaining wall.

Railings

It is recommended that railings be installed for any stairway over 3 steps and porches over 30" for safety reasons. Balusters for porches, balconies, and stairs should be close enough to assure children cannot squeeze through.

LIMITATIONS OF EXTERIOR INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- A representative sample of exterior components was inspected rather than every occurrence of components.
- The inspection does not include an assessment of geological, geotechnical, or hydrological conditions, or environmental hazards.
- Screening, shutters, awnings, or similar seasonal accessories, fences, recreational facilities, outbuildings, seawalls, break-walls, docks, erosion control and earth stabilization measures are not inspected unless specifically agreed-upon and documented in this report.
- See CD-Rom for additional photos if applicable.
- Overhead garage door locked, not tested.

Please also refer to the Inspection Agreement Contract for a detailed explanation of the scope of this inspection.

Electrical

DESCRIPTION OF ELECTRICAL

Service Drop:	•Overhead
Service Entrance Conductors':	•Aluminum
Main Disconnects:	•Breakers •Located: Basement •Main Service Rating 100 Amps
Service Grounding:	•Copper
Distribution Wiring:	•Copper
Wiring Method:	•Romex Wire
Switches-Receptacles:	•Grounded
Ground Fault Circuit Interrupters:	•Recommended at all Wet Locations
Smoke Detectors:	•Recommended at all Sleeping Areas

ELECTRICAL OBSERVATIONS

General Comments

Inspection of the electrical system revealed the need for typical, minor repairs. Although these are not costly to repair, they should be high priority for safety reasons. *Unsafe electrical conditions represent a shock hazard.* A licensed electrician should be consulted to undertake the repairs recommended below. **Note:** Wiring methods have changed over the years from knob and tube to flexible armored cable (Greenfield) to nonmetallic cable (NM), conduit (EMT), and underground feeder (UF) cable. From about 1890 to the present, wiring methods have become much safer due to the installation types of wiring and the addition of ground wires. Between 1890 and 1910, knob and tube wire was all the rage in home building. Individual insulated wires were held in place by porcelain insulating brackets. They also passed through wood in porcelain tubes that protected the rubberized cloth fabric from damage. This practice had a hot wire and a neutral wire that were run separately for safety and so they could be spliced together. To do this, the insulation was stripped back, a wire was wrapped around the exposed bare wire, and the splice was soldered together before being taped to cover the splice. The downfall was the wire was exposed to everything and there was no ground wire utilized.

In the 1920's to 1940's, electrical took a turn to a more protective wiring scheme, flexible armored cable. Flex, also known as Greenfield, was a welcomed addition to home wiring because the flexible metal walls helped to protect the wires from damage. Even then, this wiring method had its troubles. Although the wire is protected and the outer flexible metal cover acts as a ground, there still was no separate ground wire. If the flexible covering didn't make contact with the next piece or it was cut, the ground connection was severed.

In the 1930's, a quicker installation method was developed. Nonmetallic sheathed cable was born and it incorporated a rubberized fabric coating sheath, much like knob and tube wiring, but a hot and neutral wire were run together in this one sheath. It also had its drawbacks due to the lack of a ground wire.

Luckily in the 1940's, finally came the age of metal conduit. This invention allowed users to pull many wires in the same enclosure. The conduit itself is considered a grounding method, but also leaves the possibility of space for a ground wire to be pulled. Conduit has been in use ever since those days and comes in many different types and sizes to be used inside and outside of your home.

The newest addition to wiring was introduced in the 1960's around 1965. It was an update to NM cable that incorporated the use of a third wire, a bare ground wire with a hot and neutral wire. These three wires are all concealed in an outer sheath made of plastic vinyl. This update made the cable inexpensive and very easy to install. It is very flexible and is used still today.

Along with NM cable for interior use, a similar type cable was also invented. Underground feeder wire (UF) was invented to be buried directly under the ground without having to be placed in conduit. This type wire has a hot, a neutral, and a ground wire embedded in a solid plastic vinyl sheath that protects it from damp areas, water, and materials underground. This was an inexpensive addition to running power underground to things like yard lights and outbuilding feeds.

As you can see, things have certainly changed over the years for the better! You see, the rubber-coated wire would only hold up for 25 years or so before the rubber would dry out and start cracking. This left exposed bare wires that could cause a multitude of problems. Plastic vinyl has been shown to last the life expectancy of your home and is a much better method of wiring. For the preferred method in my book, I choose a conduit installation. With this, you can pull the wires easily, add wires to the conduit (as allowed), and have a system that protects the wires from damage. It is the all-in-one system, of choice. The only question now is, will we see another next big thing in electrical wiring in our lifetime?

RECOMMENDATIONS / OBSERVATIONS

Outlets

- **Safety Issue:** The installation of a ground fault circuit interrupter (GFCI) is recommended at all wet locations. A GFCI offers increased protection from shock or electrocution.

- **Note:** When you look at a normal 120-volt in the United States, there are two vertical slots and then a round hole centered below them. The left slot is slightly larger than the right. The left slot is called "neutral," the right slot is called "hot" and the hole below them is called "ground." If an appliance is working properly, all electricity that the appliance uses will flow from hot to neutral. A **GFCI monitors the amount of current flowing from hot to neutral**. If there is any **imbalance, it trips the circuit**. It is able to sense a mismatch as small as 4 or 5 milliamps, and can react as quickly as one-thirtieth of a second. So let's say you are outside with your power drill and it is raining. You are standing on the ground, and since the drill is wet there is a path from the hot wire inside the drill through you to ground. If electricity flows from hot to ground through you, it could be fatal. The GFCI can sense the current flowing through you because not all of the current is flowing from hot to neutral as it expects -- some of it is flowing through you to ground. As soon as the GFCI senses that, it trips the circuit and cuts off the electricity. A GFCI works by constantly sensing the current running through both the hot and neutral wires. If there is even the slightest difference between the two, the circuit is shut off immediately.

Therefore if any current is flowing from the hot wire to ground instead of back through the neutral wire the power will be instantly disconnected. That is why no ground wire is needed.

Also, it is usually NOT necessary to replace EVERY ungrounded outlet with a GFCI outlet. Typically several outlets are on the same circuit. As long as the FIRST outlet in the chain that has its power coming directly from the circuit breaker is a GFCI, then the rest of the outlets on the circuit AFTER the GFCI outlet are also protected by it.

This is why it is critical that ALL of the following be identified correctly:

- 1) Hot vs. Neutral wires
- 2) Line vs. Load wires (The wire coming IN from the source or previous outlet in the chain is the LINE, and a wire going out to the next outlet is the LOAD)
- 3) The FIRST outlet in a circuit must be determined, as that must be the one replaced with the GFCI outlet. The others can be replaced with regular three prong outlets (with no connection to the ground screw).

So use the money saved by not needing to replace every outlet with a GFCI and invest in a good meter or voltage detector. Turn the circuit breaker off and verify that every outlet you plan on replacing is unpowered. If not, then it is on a different circuit. Work on only one circuit at a time. Find ALL outlets on that circuit then disconnect ALL wires from each one (be sure the power is still off). If all wires on all outlets are not disconnected then there is the possibility of power feeding back through the neutral and you will get misleading results (and possibly a shock from the neutral wire).

Make sure no wires are touching each other or anything else, and that all exposed wires are protected from children, pets, etc. then have someone turn the power back on and find the ONE hot wire. This will be the HOT LINE for the FIRST outlet. Turn the power off again and connected this wire to the HOT, LINE terminal. The corresponding wire will be the NEUTRAL LINE connection for that outlet. If there is another pair of wires at that outlet that go to the next outlet, connect these to the LOAD terminals, again observing which is hot and neutral.

Now the rest of the outlets on that branch circuit can be replaced with regular three prong outlets. There is no distinction between line and load on these, but be sure the hot wires (usually black) go to the darker of the screws (usually brass colored) and the neutral wires go to the lighter screws (usually silver colored). If you look closely at an outlet you will see that one of the vertical slots is longer than the other. The hot is the shorter of the two.

In addition, as noted earlier, ALL outlets affected must be labeled properly. The GFCI needs to be marked "No Equipment Ground" and EACH of the downstream outlets marked ""GFCI Protected" and "No Equipment Ground". Generally, the GFCI outlet comes with several stickers for this purpose.

Finally, I recommend that all outlets be oriented with the "ground" hole on top if installed vertically or with the neutral slot on top if mounted horizontally. Contrary to popular belief there is no requirement that these look like a "face". Using the suggested method means that if a metallic object (for example a fork) were to fall on a plug that might have worked loose a fraction of an inch, it will contact the "ground" prong (if preset) in the case of a vertical outlet or the neutral prong if a horizontal outlet.

Switches

Recommended: These timer switches have buttons or a knob that turns a light or fan on for a preset amount of time. Timer switches are appropriate for rooms you don't stay in for very long, such as a bathroom, walk-in-closet or attic. If you need to keep the light/fan on for an extended period, you can reset or over-ride the controls with the touch of another button. **Timer switches can help minimize moisture in bathrooms if used to control bathroom vent fans. To be most effective, start the fan 5 minutes before a shower and set the timer to run for 30 minutes after a shower.**

Lights

- **Maintenance Repair:** Some of the basement lights are inoperative. If the bulbs are not blown, the circuit should be investigated by a licensed electrician.

Smoke Detectors

- **Improve:** Smoke detectors may be outside of manufacturer's life expectancy. The installation of new smoke detectors outside sleeping areas is recommended.

Carbon Monoxide Detectors

- **Safety Recommendation:** Nighthawk (Kidde) brand carbon monoxide/explosive gas alarm (model #KN-COEG-3), installed on each floor (specifically near sleeping locations). Approximate cost \$40-50 each.

Discretionary Improvements

Grounded outlets may be desirable in some areas where ungrounded outlets exist. This will depend on electrical needs.

LIMITATIONS OF ELECTRICAL INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Electrical components concealed behind finished surfaces are not inspected.
- Only a representative sampling of outlets and light fixtures were tested.
- Furniture and/or storage restricted access to some electrical components which may not be inspected.
- The inspection does not include remote control devices, alarm systems and components, low voltage wiring, systems, and components, ancillary wiring, systems, and other components which are not part of the primary electrical power distribution system.
- See CD-Rom for additional photos if applicable.
- The main cover plate (dead front) was not removed at the time of the inspection.

Please also refer to the Inspection Agreement Contract for a detailed explanation of the scope of this inspection.

Heating

DESCRIPTION OF HEATING

Energy Source:	•Natural Gas
Heating System Type:	•Forced Air Furnace •Manufacturer: Lennox •Estimated Age: 20-25 Years
Vents, Flues, Chimneys:	•Metal-Single Wall •Masonry-Lined
Heat Distribution Methods:	•Ductwork
Other Components:	•Humidifier •Paper Filter •Condensate Pump

HEATING OBSERVATIONS

General Comments

The heating system does not appear to have been serviced on a regular maintenance schedule.

Note: Recommend service before settlement.

RECOMMENDATIONS / OBSERVATIONS

Furnace

- **Maintenance:** Recommend Bel-Aire [Heating & Cooling](#) or other licensed & insured HVAC contractor (Planned Service Agreement) - \$170+/-/Annually Plus Parts. (No diagnostic fees or trip charges. Annual professional tune-up included. Receive 20% off on repair charges, Priority service, Emergency service, 24 hours a day - 365 days per year in no heat or cooling situations at Bel-Aire's discounted maintenance agreement rates. Prices/Terms are subject to change). Add humidifier service maintenance (cleaning & replacement filter for approximately \$30 – if applicable).
- **Note:** Recommend service before settlement.
- **Maintenance:** The air filter should be replaced every 30-60 days or as necessary. (Arrow Air flow towards furnace)
- **Service:** The heat exchanger should be inspected for cracks/leaks by a licensed & insured HVAC contractor before use.
- **Maintenance:** The humidifier should be serviced on an annual maintenance contract with the furnace (replace filter each fall before the start of the heating season).

Supply Air Ductwork

- **Monitor:** Some of the heat supply is located overhead. If these areas prove to be cool, supplemental heat may be desirable. Relocating the heat supply may only be practical if renovations are planned. Turning thermostat switch for fan motor from auto to on will mix the warm and cooler air together raising the temperature 3-4 degrees.
- **Note:** Each supply register provides approximately 100-150 cubic ft. of HVAC. (L x W x H x 6 divided by 60)
- **Note:** Calculations are not performed and are not a part of the inspection. Recommend licensed & insured contractor inspect & size for proper ratio for adequate coverage if desired. Confirm that permits were pulled when basement was finished.
- **Monitor:** Supply air flow is less than ideal. Rebalancing the ductwork, blower cleaning or repairs, filter replacement, or additional duct work may be needed to obtain good air flow.
- **Note:** HVAC Supply Not Ideal. It is possible that permits were not pulled when the basement was finished. We have no way of confirming that hidden work was completed correctly and to local building codes. Check with your real estate professional and local building department to determine if a permit was pulled and inspections conducted. If this area proves to be cool, a heat supply or some form of supplemental heat should be provided. Note: Check with your real estate professional to determine how to proceed. Property tax implications could increase.
- **Improve:** Duct cleaning is recommended.

Combustion / Exhaust

- **Service:** There was a noticeable quantity of deposits visible in the gas furnace. This is a residue from the reaction of gas combustion and galvanized steel. These deposits are not unusual but can be an indication of lack of periodic cleaning and maintenance.

Discretionary Improvements

The installation of a new programmable “set back” thermostat may help to reduce HVAC costs.

LIMITATIONS OF HEATING INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- The adequacy of heat supply or distribution balance is not inspected.
- Buried fuel tanks ([heating oil storage tank](#)) (LP gas storage tank) (unknown type of fuel storage tank) that are (or appears to have been) installed on this property. Such components are not inspected during a home inspection or building inspection unless specific prior written test arrangements have been made for advice by an appropriate expert.
- The interior of flues or chimneys which are not readily accessible are not inspected.
- The furnace heat exchanger, humidifier, or dehumidifier, and electronic air filters are not inspected.
- Solar space heating equipment/systems are not inspected.
- See CD-Rom for additional photos if applicable.
- The programmable thermostat was not tested.

Please also refer to the Inspection Agreement Contract for a detailed explanation of the scope of this inspection.

Cooling / Heat Pumps

DESCRIPTION OF COOLING / HEAT PUMPS

Energy Source:	•Electricity •240 Volt Power Supply
Central System Type:	•Air Cooled Central Air Conditioning •Manufacturer: Lennox •Estimated Age: 20+ Years
Other Components:	•Condensate Pump

COOLING / HEAT PUMPS OBSERVATIONS

General Comments

As the system is older, it may require repairs or replacement soon.

RECOMMENDATIONS / OBSERVATIONS

Central Air Conditioning

- **Note:** See Heating Section for maintenance recommendations.
- **Note:** Installing a full wrap around cover during winter months **may cause moisture build-up and rust** on the AC condensing unit, shortening its life expectancy. A lid on the top of the unit is sufficient to keep out leaves & debris.
- **Deferred Cost Item:** As is not uncommon for homes of this age and location, the air conditioning system is old. It may require a slightly higher level of maintenance, and may be more prone to major component breakdown. Predicting the frequency or time frame for repairs on any mechanical device is virtually impossible.
- **Maintenance Repair:** The air conditioning system requires servicing (recommended before settlement)

Supply Air Ductwork

- **Monitor:** Supply air flow is less than ideal. Rebalancing the ductwork, blower cleaning or repairs, filter replacement, or additional duct work may be needed to obtain good air flow.

Discretionary Improvements

HOW CAN I GET THE MOST OUT OF MY HVAC SYSTEM?

HVAC systems are designed to provide optimal efficiency and comfort. Now it's time to do the same to your home. Here are some things you can do around the house to optimize the operation of your system, as well as the comfort inside your home.

COOLING

- Set the thermostat as high as comfort will permit.
- Make sure attics are adequately ventilated to relieve heat buildup. If necessary, improve airflow by adding or enlarging vents.
- When building a new house or renovating an old one, choose light-colored roof shingles to reflect more of the sun's heat.
- During moderate weather, don't use the air conditioner unnecessarily.
- Draw blinds or drapes to block the sunlight during the hottest part of the day.
- Install awnings over windows exposed to direct sunlight.
- In the cooling season, don't run kitchen and bath exhaust fans longer than needed?
- Don't place lamps, TV sets or other heat-producing devices beneath a wall-mounted thermostat. Rising heat from that equipment may cause the air conditioning system to overcool your house.

HEATING

- Locate the thermostat on an inside wall away from windows and doors.
- Set the thermostat as low as comfort permits. Each degree over 68°F can add 3% to the amount of energy needed for heating.
- People generate heat. So lower the thermostat a degree or two when expecting a large group of guests.

INSULATION

- Make sure your home is properly insulated. This is the single most important step in conserving energy. Thermal insulation should be specified in terms of thermal resistance (R-values). R-30 (10") is recommended for ceilings, and R-11 (3-1/2") for exterior walls and floors over unheated areas. In colder climates, consider additional insulation.
- Infiltration of humid outside air is your heating and air conditioning system's worst enemy—it could account for 15% to 30% of air conditioning energy requirements. Find the places where air can sneak into the home and plug them with caulking, weather-stripping or plastic. Also, weather-strip and caulk around all entrance doors and windows.
- Cut heat transfer through your windows by 40% to 50% with double-glazing (two panes of glass separated by a sealed air space) and low-e glass.
- Use wood- or metal-frame storm windows even if single-glazed windows are high quality. The extra layer of glass and the layer of still air will cut heat transfer considerably.
- Install storm doors at all entrances to your house.
- Keep all windows and doors closed.
- Remember that by increasing the glass area, you increase the amount of heat added in summer and lost in winter.
- Make sure fireplaces have tight-fitting dampers, which can be closed when the fireplace is not in use. Invest in a humidifier to conserve energy in winter. The air in your home won't be as dry, so you stay comfortable at a lower temperature setting.

LIMITATIONS OF COOLING / HEAT PUMPS INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Window mounted air conditioning units are not inspected.
- The cooling supply adequacy or distribution balance is not inspected.
- See CD-Rom for additional photos if applicable.
- The System was not tested. Most outdoor air conditioning units do not function well in temperatures below 60 degrees F. If night time temperatures are too low, the system will not operate properly and freeze-ups can occur, possibly causing costly damage.

Please also refer to the Inspection Agreement Contract for a detailed explanation of the scope of this inspection.

Insulation / Ventilation

DESCRIPTION OF INSULATION / VENTILATION

Attic Insulation:	•6-8 inches Fiberglass/Cellulose in Main Attic
Exterior Wall Insulation:	•Minimal Suspected
Basement Wall Insulation:	•Not Visible
Vapor Retarders:	•Unknown
Roof Ventilation:	•Roof Vents •Ridge Vents •Soffit Vents
Exhaust Fan/vent Locations:	•Bathroom •Kitchen •Microwave Carbon Vent •Dryer
Sill Plate Insulation:	•Partial

INSULATION / VENTILATION OBSERVATIONS

General Comments

Insulation levels are typical for a home of this age and construction. Caulking and weather-stripping around doors, windows and other exterior wall openings will help to maintain weather tightness and reduce energy costs. **Note:** This information may be acquired from the utility company by requesting an equal monthly payment plan. (They will estimate your monthly usage on past usage.) Understand that your usage may vary significantly from the prior occupant.

RECOMMENDATIONS / ENERGY SAVING SUGGESTIONS

Attic / Roof

Recommended: Check past 24-36 months utility bills for insulation effectiveness.

Note: This information may be acquired from the utility company by requesting an equal monthly payment plan. (They will estimate your monthly bill based on sellers past usage.) Understand that your usage may vary significantly from the prior occupant.

- **Note:** Attic insulation will settle to a fraction of its original volume over time and will not deliver heat-flow reduction at its previous performance level. Hiring a licensed & insured contractor to add cellulose fiber insulation to the attic floor will pay for itself over a period of time. The finely ground material can be blown into a smooth, even blanket over the existing insulation. It filters into and fills up the little nooks and crannies that are part of the attic environment. Cellulose fiber is treated with a fire-retardant substance. (Fiberglass, also used as attic insulation, is naturally difficult to ignite).
- An R-Value of R-49 (18-20") is recommended for most of Michigan.

R-VALUE RECOMMENDATIONS FOR EXISTING BUILDINGS (CURRENT)

Heating System: Natural Gas Furnace Cooling System: Electric Air Conditioning

First 3 digits of ZIP code: 490 Location: Kalamazoo, MI

Insulation Location	R-Value*	Notes
Attic	46-48	18" Recommended for most of Michigan's climate.
Wood frame wall cavity	13	Blow insulation into any uninsulated exterior wall cavity.
Floor	30	Over unheated, uninsulated space.
Basement wall interior	11	Minimum 3-1/2" with a vapor barrier recommended.

R-values have units of F-ft²-h/Btu. The recommended R-values were produced using the [ZIP-Code](#) computer program. The recommendations are based on an analysis of cost effectiveness, using average local energy prices, regional average insulation costs, equipment efficiencies, climate factors, and energy savings for both the heating and cooling seasons.

- **Monitor:** When adding attic insulation, verify that exhaust vent pipes from the bathroom(s) are vented to the building exterior. Make sure insulation does not block the air flow of the soffit vents.

Bathroom Vent Fans

- **Repair: Replace:** The basement bathroom vent fan did not respond to controls.

LIMITATIONS OF INSULATION / VENTILATION INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Insulation/ventilation type and levels in concealed areas are not inspected. Insulation and vapor barriers are not disturbed and no destructive tests (such as cutting openings in walls to look for insulation) are performed.
- Potentially hazardous materials such as Asbestos and Urea Formaldehyde Foam Insulation (UFFI) cannot be positively identified without a detailed inspection and laboratory analysis. This is beyond the scope of the inspection.
- An analysis of indoor air quality is not part of our inspection unless explicitly contracted-for and discussed in this or a separate report.
- Attic access panels are not opened in occupied homes.
- Any estimates of insulation R values or depths are rough average values.
- Mold-mildew is not included as part of this inspection. Information provided as courtesy only. If mold is suspected, a licensed & insured contractor should be retained to determine what you should do next.
- See CD-Rom for additional photos if applicable.
- The attic was viewed from the access hatch only.
- No access was gained to the wall cavities of the home.

Please also refer to the Inspection Agreement Contract for a detailed explanation of the scope of this inspection.

Plumbing

DESCRIPTION OF PLUMBING

Water Supply Source:	•Public Water Supply
Service Pipe to House:	•Copper
Main Water Valve Location:	•Front Wall of Basement
Interior Supply Piping:	•Copper •Steel •Not Visible
Waste System:	•Public Sewer System •(Reported By Seller)
Drain, Waste, & Vent Piping:	•Plastic PVC Piping •Steel
Water Heater:	•Gas •Approx Capacity: 40 Gal. *MFG: Bradford White •Estimated Age: 1-3+- yrs.
Fuel Shut-Off Valves:	•Natural Gas Main Shut - Off at Meter

PLUMBING OBSERVATIONS

General Comments

The water pressure supplied to the fixtures is above average. Only a slight drop in flow was experienced when two fixtures were operated simultaneously.

The plumbing system requires some typical minor improvements. The plumbing fixtures are older. Upgrading fixtures would be a logical long term improvement. In the interim, a higher level of maintenance will likely be required.

RECOMMENDATIONS / OBSERVATIONS

Water Heater

Monitor: Water Heaters have a typical life expectancy of 7-12 years. One cannot predict with certainty when replacement will become necessary.

Waste / Vent

- **Repair:** The waste piping is leaking (bathroom sinks).
- **Monitor:** The presence of sufficient venting for the waste piping is suspect.

Fixtures

- **Monitor:** The faucets are showing signs of age. Updating faucets over time should be anticipated.
- **Improve:** The bathroom sink stopper needs adjustment.
- **Monitor:** The sink was observed to drain slowly, suggesting that an obstruction may exist.
- **Monitor, Repair:** The floor adjacent to the toilet shows evidence of water damage.
- **Repair:** The up bath toilet is old and leaks. Replacement may be necessary.

Bath Vent Fans

- **Recommended:** A timer switch is recommended for all bathroom vent fans (if applicable). Leave fan on for approximately 30 minutes after shower.
- **Recommended:** Vent bath fan to exterior with insulated duct.

Discretionary Improvements

Upgrading the old plumbing fixtures within the home would be a logical long term improvement.

Replacement of the aging faucets within the home would be a logical long term improvement.

- **Improve: Deferred Cost:** Recommend the installation of new frost free hose bibs.

Contractor Reference

- **Note:** Plumber Reference - Matt Brumm 269-720-8265

LIMITATIONS OF PLUMBING INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Portions of the plumbing system concealed by finishes and/or storage (below sinks, etc.), below the structure, or beneath the ground surface are not inspected.
- Water quantity and water quality are not tested unless explicitly contracted-for and discussed in this or a separate report.
- Clothes washing machine connections are not inspected.
- Interiors of flues or chimneys which are not readily accessible are not inspected.
- Water conditioning systems, solar water heaters, fire and lawn sprinkler systems, and private waste disposal systems are not inspected unless explicitly contracted-for and discussed in this or a separate report.
- See CD-Rom for additional photos if applicable.
- The water conditioning system was not part of the inspection.
- Hose bibs that were shut off were not tested.

Please also refer to the Inspection Agreement Contract for a detailed explanation of the scope of this inspection.

Interior

DESCRIPTION OF INTERIOR

Wall and Ceiling Materials:	•Drywall •Plaster
Floor Surfaces:	•Carpet •Vinyl/Resilient •Wood •Concrete
Window Type(s) & Glazing:	•Double/Single Hung •Sliders •Fixed Pane •Double Glazed
Doors:	•Wood-Hollow Core •Sliding Glass – Atrium Door •Storm Door(s)

INTERIOR OBSERVATIONS

General Condition of Interior Finishes

On the whole, the interior finishes of the home are in average condition. Typical flaws were observed in some areas.

General Condition of Windows and Doors

The majority of the windows and doors are average quality units.

General Condition of Floors

The floors of the home are relatively level and walls are relatively plumb.

RECOMMENDATIONS / OBSERVATIONS

Wall / Ceiling Finishes

- **Monitor:** Typical minor settling cracks were noted.
- **Note:** Small drywall cracks can be repaired with latex paintable caulk (painters caulk). This will allow the crack to expand and contract with less chance for cracking again. Drywall patch will usually crack and need repairing again in 6-12 months.
- **Note: Recommended:** You should check with your realtor and the local building department (before settlement) to determine if a building permit was obtained for finishing the basement and other improvements. We have no way of determining if materials & workmanship hidden behind walls, floors and ceilings, was done to code and properly inspected. **Note:** Property taxes could increase, proceed carefully.
- **Monitor:** Typical drywall flaws were observed.

Floors

- **Monitor:** Seams in the vinyl flooring are not in ideal condition. Improvement is discretionary.
- **Improve: Deferred Cost:** The bathroom vinyl flooring is damaged
- **Maintenance:** The carpet has minor stains in various locations.

Windows

- **Maintenance Repair:** Damaged screens (minor) were noted on some of the windows.
- **Note:** A representative number of windows are inspected, per ASHI standards.

Doors

- **Repair:** Minor damage to hollow core interior doors.
- **Improve:** The door between the garage and the interior of the house should be rated to resist fire as per local codes.

Cabinets

- **Improve: Deferred Cost:** The kitchen cabinets & counters are older. Improvement may ultimately be desirable.

Basement Leakage

- **Monitor:** No evidence of moisture penetration was visible in the basement/crawlspace at the time of the inspection. *It should be understood that it is impossible to predict whether moisture penetration will pose a problem in the future.* The vast majority of basement/crawlspace leakage problems are the result of insufficient control of storm water at the surface. The ground around the house should be sloped to encourage water to flow away from the foundation. Gutters and downspouts should act to collect roof water and drain the water at least five (5) feet from the foundation or into a functional storm sewer. Downspouts that are clogged or broken below grade level, or that discharge too close to the foundation are the most common source of basement leakage. Please refer to the Roofing and Exterior sections of the report for more information.

In the event that basement/crawlspace leakage problems are experienced, lot and roof drainage improvements should be undertaken as a first step. Please beware of contractors who recommend expensive solutions. Excavation, damp-proofing and/or the installation of drainage tiles should be a last resort. In some cases, however, it is necessary. Your plans for using the basement may also influence the approach taken to curing any dampness that is experienced.

Environmental Issues

- **Monitor:** Lead based paint was in use until approximately 1978. According to the Federal Department of Housing and Urban Development, a lead hazard can be present in a house of this age. This can only be confirmed by laboratory analysis. An evaluation of lead in paint is beyond the scope of this inspection. For more information, consult the Environmental Protection Agency (E.P.A.) for further guidance and a list of testing labs in your area.
- **Monitor:** Radon gas is a naturally occurring gas that is invisible, odorless and tasteless. A danger exists when the gas percolates through the ground and enters a tightly enclosed structure (such as a home). Long term exposure to high levels of radon gas can cause cancer. *The Environmental Protection Agency (E.P.A.) states that a radon reading of more than 4.0 picocuries per liter of air represents a health hazard.* A radon evaluation is beyond the scope of this inspection (unless specifically requested). For more information, consult the Environmental Protection Agency (E.P.A.) for further guidance and a list of testing labs in your area.
- **Monitor:** It would be wise to install carbon monoxide detectors within the home. Carbon monoxide is a colorless, odorless gas that can result from a faulty fuel burning furnace, water heater, range, fireplace, space heater or wood stove.

Discretionary Improvements

Deferred Cost: Improve: Re-finishing of the wood flooring would be a logical improvement. In addition to protecting bedrooms, additional smoke detectors are recommended outside sleeping areas within the home.

- **Recommended Improvement:** Install new exterior lock sets upon taking possession of the home.
- **Improve:** It is recommended that all exhaust fans be vented to the exterior with insulated duct.
- **Recommended Improvement:** Kiddie Nighthawk carbon monoxide detectors (Model #: KN-COEG-3 or similar) are recommended at all sleeping locations of the home (install one on each level) to conform to local building codes. Carbon monoxide is a colorless, odorless gas that can result from a faulty fuel burning furnace, water heater, range, fireplace, space heater or wood stove. It cannot be seen or smelled but can kill you.

LIMITATIONS OF INTERIOR INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions

- Furniture, storage, appliances and/or wall hangings are not moved to permit inspection and may block defects.
- Carpeting, window treatments, central vacuum systems, household appliances, recreational facilities, paint, wallpaper, and other finish treatments are not inspected.
- We have no way of determining if permits are pulled for finished basements and can not be responsible for hidden code violations. We recommend that you check with the local building department before settlement.
- See CD-Rom for additional photos if applicable.
- Recent renovations and/or interior painting concealed historical evidence.
- The adequacy of the fireplace draw cannot be determined during a visual inspection.

Please also refer to the Inspection Agreement Contract for a detailed explanation of the scope of this inspection.

Appliances

DESCRIPTION OF APPLIANCES

Appliances:	•Dishwasher •Waste Disposer •Space Saver Microwave •Built-in Electric Oven •Electric Cooktop
Laundry Facility:	•Gas Piping for Dryer •Dryer Vented to Building Exterior •120 Volt Circuit for Washer •Hot and Cold Water Supply for Washer •Washer Discharges to Standpipe •240 Volt Circuit for Dryer
Other Components Tested:	•Kitchen Exhaust Fan •Door Bell

APPLIANCES OBSERVATIONS

General Comments

The appliances are showing signs of aging. As such, they are more prone to breakdowns. A few years of serviceable life should still remain. *No representation is made to continued life expectancy of any appliance.*

RECOMMENDATIONS / OBSERVATIONS

Microwave

- **Note:** The microwave responded properly to controls at the time of inspection.

Oven

- **Monitor: Deferred Cost:** The oven is an old unit. While replacement is not needed right away, it would be wise to budget for a new oven. In the interim, a higher level of maintenance can be expected.
- **Repair:** The springs for the oven door require improvement.

Electric Cooktop

- **Note:** The electric cooktop responded properly to controls.
- **Monitor:** The electric cooktop is an older unit. While replacement is not needed right away, it would be wise to budget for a new cooktop. In the interim, a higher level of maintenance can be expected.

Dishwasher

- **Repair:** The dishwasher was run through a short cycle (fill/drain) and leaked (drain hose loose).

Waste Disposer

- **Monitor:** The waste disposer is an older unit. While replacement may not be needed right away, it would be wise to budget for a new waste disposer. In the interim, a higher level of maintenance can be expected.
- **Monitor: Deferred Cost:** The waste disposer is somewhat noisy.
- **Improve:** The wiring leading to the waste disposer appears to be loose. This should be improved.

Door Bell

- **Repair:** The door bell is inoperative.

Water Conditioning Equipment

- **Service: Repair:** The water conditioning equipment is in suspect condition and has been lacking maintenance. Cleaning and servicing are recommended.

LIMITATIONS OF APPLIANCES INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions

- Thermostats, timers and other specialized features and controls are not tested.
- The temperature calibration, functionality of timers, effectiveness, efficiency and overall performance of appliances is outside the scope of this inspection.
- See CD-Rom for additional photos if applicable.
- Water conditioning equipment is not a part of the inspection and not tested.

Please also refer to the Inspection Agreement Contract for a detailed explanation of the scope of this inspection.

Fireplaces

DESCRIPTION OF FIREPLACES

Fireplaces: •Masonry Firebox •Steel Damper •Wood Burning
Vents, Flues, Chimneys: •Outside Combustion Air Provided •Steel Damper

FIREPLACES OBSERVATIONS

General Comments

Contractor Reference: Mark Hansen – Certified Chimney Sweep (Inspections, Cleaning, Chimney & Damper Repairs, Flashing Liners, Chimney Caps) 269-552-4131 * 269-271-1030

RECOMMENDATIONS / OBSERVATIONS

- **Repair: Safety Issue:** The fireplace damper is seized and requires repair before use.
- **Service Recommended:** Recommend clean/inspect fireplace chimney & flue before use.
- **Deferred Cost:** The glass doors on the fireplace could be improved.

LIMITATIONS OF FIREPLACES INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions

- The interiors of flues or chimneys are not inspected.
- Firescreens, fireplace doors, appliance gaskets and seals, automatic fuel feed devices, mantles and fireplace surrounds, combustion make-up air devices, and heat distribution assists (gravity or fan-assisted) are not inspected.
- The inspection does not involve igniting or extinguishing fires nor the determination of draft.
- Fireplace inserts, stoves, or firebox contents are not moved.
- See CD-Rom for additional photos if applicable.
- The adequacy of the fireplace draw is not determined during a visual inspection; for safety reasons, if no fire is burning we do not ignite fires nor light paper or other materials.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Maintenance Advice

UPON TAKING OWNERSHIP

After taking possession of a new home, there are some maintenance and safety issues that should be addressed immediately. The following checklist should help you undertake these improvements:

- Change the locks on all exterior entrances*, for improved security.
- Check that all windows and doors are secure. Improve window hardware as necessary. Security rods can be added to sliding windows and doors. Consideration could also be given to a security system.
- Install smoke detectors on **each level** of the home. Ensure that there is a smoke detector **outside all sleeping areas**. Replace batteries on any existing smoke detectors and test them. Make a note to **replace batteries again in six months**.
- Install Carbon Monoxide Detectors** (Recommend "Night Hawk brand with LCD and Test Button) **at sleeping areas**.
- Create a plan of action in the event of a fire in your home. Ensure that there is an operable window or door in every room of the house. **Do not sleep in the basement/lower level without adequate egress access**. Check local codes/consult with your area fire department regarding fire safety issues and what to do in the event of fire.
- Examine driveways and walkways for trip hazards. Undertake repairs where necessary.
- Examine the interior of the home for trip hazards. Loose or torn carpeting and flooring should be repaired.
- Undertake improvements to all stairways, decks, porches and landings where there is a risk of falling or stumbling.
- Review your home inspection report for any items that require immediate improvement or further investigation. Address these areas as required.
- Install rain caps and vermin screens on all chimney flues, as necessary.
- Investigate the location of the main shut-offs for the plumbing, heating and electrical systems. If you attended the home inspection, these items would have been pointed out to you.

REGULAR MAINTENANCE

EVERY MONTH

- Check that fire extinguisher(s) are fully charged. Re-charge if necessary.
- Examine heating/cooling air filters and replace or clean as necessary.
- Inspect and clean electronic air cleaners.
- If the house has hot water heating, bleed radiator valves.
- Clean gutters and downspouts. Ensure that downspouts are secure, and that the discharge of the downspouts is appropriate. Remove debris from window wells.
- Carefully inspect the condition of shower enclosures. Repair or replace deteriorated grout and caulk. Ensure that water is not escaping the enclosure during showering. Check below all plumbing fixtures for evidence of leakage.
- Repair or replace leaking faucets or showerheads.
- Secure loose toilets, or repair flush mechanisms that become troublesome.

SPRING AND FALL

- Examine the roof for evidence of damage to roof coverings, flashings and chimneys.
- Make sure gutters and downspouts are functioning properly. Remove leaves and debris. Water should be deposited 5-10 feet from the foundation.
- Look in the attic (if accessible) to ensure that roof vents are not obstructed. Check for evidence of leakage, condensation or vermin activity. Level out insulation if needed.
- Trim back tree branches and shrubs to ensure that they are not in contact with the house.

- Inspect the exterior walls and foundation for evidence of damage, cracking or movement. Watch for bird nests or other vermin or insect activity.
- Survey the basement and/or crawl space walls for evidence of moisture seepage.
- Inspect and clean humidifiers.
- Look at overhead wires coming to the house. They should be secure and clear of trees or other obstructions.
- Ensure that the grade of the land around the house encourages water to flow away from the foundation. Sloping 1 inch per foot for a minimum of 10 feet.
- Inspect all driveways, walkways, decks, porches, and landscape components for evidence of deterioration, movement or safety hazards.
- Clean windows and test their operation. Improve caulking and weather-stripping as necessary. Watch for evidence of rot in wood window frames. Paint and repair windowsills and frames as necessary.
- Test all ground fault circuit interrupter (GFCI) devices, as identified in the inspection report.
- Shut off isolating valves for exterior hose bibs in the fall, if below freezing temperatures are anticipated.
- Test the Temperature and Pressure Relief (TPR) Valve on water heaters.
- Inspect for evidence of wood boring insect activity. Eliminate any wood/soil contact around the perimeter of the home.
- Test the overhead garage door opener, to ensure that the auto-reverse mechanism is responding properly. Clean and lubricate hinges, rollers and tracks on overhead doors.
- Replace or clean exhaust hood filters.
- Clean, inspect and/or service all appliances as per the manufacturer's recommendations.
- Replace smoke/carbon monoxide detector batteries.

ANNUALLY

- Have the heating, cooling and water heater systems cleaned and serviced.
- Have chimneys inspected and cleaned. Ensure that rain caps and vermin screens are secured.
- Examine the electrical panels, wiring and electrical components for evidence of overheating. Ensure that all components are secure. Flip the breakers on and off to ensure that they are not sticky.
- If the house utilizes a well, check and service the pump and holding tank. Have the water quality tested. If the property has a septic system, have the tank inspected (and pumped as needed).
- If your home is in an area prone to wood destroying insects (termites, carpenter ants, etc.), have the home inspected by a licensed specialist. Preventative treatments may be recommended in some cases.

PREVENTION IS THE BEST APPROACH

Although we've heard it many times, nothing could be truer than the old cliché "an ounce of prevention is worth a pound of cure." Preventative maintenance is the best way to keep your house in great shape. It also reduces the risk of unexpected repairs and improves the odds of selling your house at fair market value, when the time comes.

Please feel free to contact our office should you have any questions regarding the operation or maintenance of your home. We hope you enjoy your new home!

Information about Carbon Monoxide

What is carbon monoxide (CO) and how is it produced in the home?

CO is a colorless, odorless, toxic gas. It is produced by the incomplete combustion of solid, liquid and gaseous fuels. Appliances fueled with gas, oil, kerosene, or wood may produce CO. If such appliances are not installed, maintained, and used properly, CO may accumulate to dangerous levels.

What are the symptoms of CO poisoning and why are these symptoms particularly dangerous?

Breathing CO causes symptoms such as headaches, dizziness, and weakness in healthy people. CO also causes sleepiness, nausea, vomiting, confusion and disorientation. At very high levels, it causes loss of consciousness and death.

This is particularly dangerous because CO effects often are not recognized. CO is odorless and some of the symptoms of CO poisoning are similar to the flu or other common illnesses.

Are some people more affected by exposure to CO than others?

CO exposures especially affect unborn babies, infants, and people with anemia or a history of heart disease. Breathing low levels of the chemical can cause fatigue and increase chest pain in people with chronic heart disease.

How many people die from CO poisoning each year?

In 1989, the most recent year for which statistics are available, there were about 220 deaths from CO poisoning associated with gas-fired appliances, about 30 CO deaths associated with solid-fueled appliances (including charcoal grills), and about 45 CO deaths associated with liquid-fueled heaters.

How many people are poisoned from CO each year?

Nearly 5,000 people in the United States are treated in hospital emergency rooms for CO poisoning; this number is believed to be an underestimate because many people with CO symptoms mistake the symptoms for the flu or are misdiagnosed and never get treated.

How can production of dangerous levels of CO be prevented?

Dangerous levels of CO can be prevented by proper appliance maintenance, installation, and use:

Maintenance:

- A qualified service technician should check your home's central and room heating appliances (including water heaters and gas dryers) annually. The technician should look at the electrical and mechanical components of appliances, such as thermostat controls and automatic safety devices.
- Chimneys and flues should be checked for blockages, corrosion, and loose connections.
- Individual appliances should be serviced regularly. Kerosene and gas space heaters (vented and unvented) should be cleaned and inspected to insure proper operation.
- CPSC recommends finding a reputable service company in the phone book or asking your utility company to suggest a qualified service technician.

Installation:

- Proper installation is critical to the safe operation of combustion appliances. All new appliances have installation instructions that should be followed exactly. Local building codes should be followed as well.
- Vented appliances should be vented properly, according to manufacturer's instructions.
- Adequate combustion air should be provided to assure complete combustion.
- Professionals should install all combustion appliances.

Appliance Use:

Follow manufacturer's directions for safe operation.

- Make sure the room where an unvented gas or kerosene space heater is used is well ventilated; doors leading to another room should be open to insure proper ventilation.
- Never use an unvented combustion heater overnight or in a room where you are sleeping.

Are there signs that might indicate improper appliance operation?

Yes, these are:

- Decreasing hot water supply
- Furnace unable to heat house or runs constantly
- Sooting, especially on appliances
- Unfamiliar or burning odor
- Increased condensation inside windows

Are there visible signs that might indicate a CO problem?

Yes, these are:

- Improper connections on vents and chimneys
- Visible rust or stains on vents and chimneys
- An appliance that makes unusual sounds or emits an unusual smell
- An appliance that keeps shutting off (Many new appliances have safety components attached that prevent operation if an unsafe condition exists. If an appliance stops operating, it may be because a safety device is preventing a dangerous condition. Therefore, don't try to operate an appliance that keeps shutting off; call a service person instead.)

Are there other ways to prevent CO poisoning?

Yes, these are:

- Never use a range or oven to heat the living areas of the home
- Never use a charcoal grill or hibachi in the home
- Never keep a car running in an attached garage

Can CO gases be detected?

Yes, CO can be detected with CO detectors that meet the requirements of Underwriters Laboratories (UL) standard 2034.

Since the toxic effect of CO is dependent upon both CO concentration and length of exposure, long-term exposure to a low concentration can produce effects similar to short term exposure to a high concentration.

Detectors should measure both high CO concentrations over short periods of time and low CO concentrations over long periods of time - the effects of CO can be cumulative over time. The detectors also sound an alarm before the level of CO in a person's blood would become crippling. CO detectors that meet the UL 2034 standard currently cost between \$35 and \$80.

Where should the detector be installed?

CO gases distribute evenly and fairly quickly throughout the house; therefore, a CO detector should be installed on the wall or ceiling in sleeping area/s but outside individual bedrooms to alert occupants who are sleeping.

Aren't there safety devices already on some appliances? And if so, why is a CO detector needed?

Vent safety shutoff systems have been required on furnaces and vented heaters since the late 1980s. They protect against blocked or disconnected vents or chimneys. Oxygen depletion sensors (ODS) have also been installed on unvented gas space heaters since the 1980s. ODS protect against the production of CO caused by insufficient oxygen for proper combustion. These devices (ODSs and vent safety shutoff systems) are not a substitute for regular professional servicing, and many older, potentially CO-producing appliances may not have such devices. Therefore, a CO detector is still important in any home as another line of defense.

Are there other CO detectors that are less expensive?

There are inexpensive cardboard or plastic detectors that change color and do not sound an alarm and have a limited useful life. They require the occupant to look at the device to determine if CO is present. CO concentrations can build up rapidly while occupants are asleep, and these devices would not sound an alarm to wake them.

For additional information, write to the U.S. Consumer Product Safety Commission, Washington, D.C., 20207, call the toll-free hotline at 1-800-638-2772, or visit the website <http://www.cpsc.gov>

Cost Summary

INTRODUCTION

The following cost figures are order of magnitude estimates only. They pertain to some of the observations made in this report. This is not an all-inclusive list of future repair costs, and may only address limited general annual maintenance. It is recommended that a budget of roughly one percent of the value of the home be set aside annually to cover unexpected repairs and annual maintenance.

It is further recommended that qualified, reputable contractors be consulted for specific quotations. You may find that contractor estimates vary dramatically from these figures, and from each other. Contractors may also uncover defects not apparent at the time of the inspection, resulting in additional costs. Please proceed cautiously.

Should you have any questions regarding contractor opinions or quotations, please contact our office. Any work performed by the homeowner will dramatically reduce costs.

Not all improvements will be identified during this inspection. Unexpected repairs should still be anticipated.

The focus of the inspection process is on Health, Safety, Structural and Mechanical items.

These approximate costs are not intended to represent or influence, in any way, the value of a property.

APPROXIMATE IMPROVEMENT COSTS

ROOFING

R Install Chimney Weather/Pest Cap	\$100+- and up
* Chimney Improvements (Spalling).....	\$250-300+- and up
RM Clean Gutters & Downspouts (Leaves & Debris)	\$100+- and up

EXTERIOR

R Change Exterior Locks	\$30-40+- and up each plus labor
* Doorbell Repair/Replacement	\$10-50+- plus labor
* Repair or Replace Damaged Screen(s)	\$20-30+- and up each
RFE Install Garage Door Opener & 120V Outlet (if desired).....	\$300+- and up
RM* Tuck-Point - Repair Masonry Flowerbox	\$50-100+- and up
RM Seal Concrete Flatwork Cracks/Spalling (Sidewalks/Driveway).....	\$100-200+- and up
RM Seal Coat Asphalt Driveway	\$100+- and up
* Minor Fence Repairs	\$50-100+- and up
* Basement Egress Window Improvements (debris).....	\$50/100+- and up
* Install Missing Egress Window Ladder.....	\$50+- and up
FE Replace Wood Chips w/Stone (Recommended).....	\$100+- and up plus labor
RM Ground Clearance Insufficient below Siding	\$100-200+- and up

ELECTRICAL

R Install Bathroom Vent Fan Timer Switch(s) - Recommended.....	\$20-30+- and up each plus labor
* R/R Basement Bathroom Vent Fan	\$50-150+- and up each
R* Add GFCI Receptacles at all Wet Locations (Recommended).....	\$15-20+- and up each plus labor
R Install Grounded Outlets (if desired)	\$50-100+- and up each

HEATING& COOLING

RM Annual Maintenance Service Contract (Recommended before settlement)....	\$200+- plus parts
FE Cooling System - Compressor, Coil & Line Set Replacement (When Necessary)	\$2000-3000+- and up

INSULATION / VENTILATION

R FE Attic Insulation Improvements (18-20" Total Recommended).....	\$800-1200+- and up
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PLUMBING

* Bathroom Waste Piping Improvements (sink drains leaking)	\$100+- and up
* 1 st Floor Bath Toilet Repair/Replacement	\$50/200 And Up
* R/R Basement Toilet (runs on)	\$50+- and up
* R/R Water Softener (Leaking/Condition Suspect).....	\$200-1200+- and up

INTERIOR

- * Smoke Detector Improvements\$20-40+- and up each plus labor
- R** Carbon Monoxide Detector Improvements.....\$40-50+- and up each
- RFE** Bath Vinyl Floor Improvements\$Get Estimate
- * FP Damper/Chimney Improvements (Clean/Inspect/Repair) before use.....\$150-250+- and up plus parts

APPLIANCES

- * R/R Oven Repairs (door Hinges Sprung)\$100/750+- and up
- * Dishwasher Drain Repairs (loose-leaking)\$50+- and up
- RFE** Replace Garbage Disposal.....\$150-200+- and up

*Denotes Health, Safety, Structural, and Mechanical Items for Review and Repair. (May be included in Sales Agreement)

R = Recommended

FE = Future Expense/Deferred Cost

M = Maintenance

BFR = Budget for Replacement

REPORT CONCLUSION

Congratulations on taking the first steps in the purchase of your new home. In as much as we never know who will be occupying or visiting a property, whether it be children or the elderly, we ask you to consider following these general safety recommendations: install smoke and carbon monoxide detectors; identifying all escape and rescue routes; rehearse an emergency evacuation of the home; upgrade older electrical systems including ground-fault outlets; never service any electrical equipment without first disconnecting its power source; safety-film all non-tempered glass; ensure that every elevated window and the railings of stairs, landings, balconies, and decks are child-safe, meaning that barriers are in place or that the distance between the rails is not wider than four inches; regulate the temperature of water heaters to prevent scalding; make sure that goods that contain caustic or poisonous compounds, such as bleach, drain cleaners, and nail polish removers be stored where small children cannot reach them; ensure that all garage doors are well balanced and have a safety device, particularly if they are the heavy wooden type; remove any double-cylinder deadbolts from exterior doors; and consider installing child-safe locks or alarms on the exterior doors of all pool or spa properties.

We are proud of our service, and trust that you will be happy with the quality of our report. We have made every effort to provide you with an accurate assessment of the condition of the property and its components and to alert you to any significant defects or adverse conditions. However, we may not have tested every outlet, and opened every window and door, or identified every minor defect. Also because we are not specialists or because our inspection is essentially visual, latent defects could exist. Therefore, you should not regard our inspection as conferring a guarantee or warranty. **IT DOES NOT.** It is simply a report on the general condition of a particular property at a given point in time. Furthermore, as a homeowner, you should expect problems to occur. Roofs will leak, drain lines will become blocked, and components and systems will eventually fail, usually without warning. For these reasons, you should take into consideration the age of the house and its components and keep a comprehensive insurance policy current. If you have been provided with a home protection policy, read it carefully. Such policies may only cover insignificant costs, such as that of roofer service, and the representatives of some insurance companies may deny coverage on the grounds that a given condition was preexisting or not covered because of a code violation or manufacturer's defect. Therefore, you should read such policies very carefully, and depend upon our company for any consultation that you may need.

In addition, please keep in mind the following;

When Things Go Wrong

There may come a time that you discover something wrong with the house, and you may be upset or disappointed with your home inspection.

Intermittent or Concealed Problems

Some problems can only be discovered by living in a house. They cannot be discovered during the few hours of a home inspection. For example, some shower stalls leak when people are in the shower, but do not leak when you simply turn on the tap. Some roofs and basements only leak when specific conditions exist. Some problems will only be discovered when carpets are lifted, furniture is moved or finishes are removed.

No Clues

These problems may have existed at the time of the inspection but there were no clues as to their existence. Our inspections are based on the past performance of the house. If there are no clues of a past problem, it is unfair to assume we should foresee a future problem.

We Always Miss Some Minor Things

Some say we are inconsistent because our reports identify some minor problems but not others. The minor problems that are identified were discovered while looking for more significant problems. We note them simply as a courtesy. The intent of the inspection is not to find the \$200 problems; it is to find the \$2,000 problems. These are the things that affect people's decisions to purchase.

Contractors' Advice

A common source of dissatisfaction with home inspectors comes from comments made by contractors.

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All printed comments and the options expressed herein are those of The Advantage Companies

Contractors' opinions often differ from ours. Don't be surprised when three roofers all say the roof needs replacement when we said that the roof would last a few more years with some minor repairs.

Last Man in Theory

While our advice represents the most prudent thing to do, many contractors are reluctant to undertake these repairs. This is because of the Last Man In Theory. The contractor fears that if he is the last person to work on the roof, he will get blamed if the roof leaks, regardless of whether or not the roof leak is his fault. Consequently, he won't want to do a minor repair with high liability when he could re-roof the entire house for more money and reduce the likelihood of a callback. This is understandable.

Most Recent Advice is Best

There is more to the Last Man In Theory. It suggests that it is human nature for homeowners to believe the last bit of expert advice they receive, even if it is contrary to previous advice. As home inspectors, we unfortunately find ourselves in the position of First Man In and consequently it is our advice that is often disbelieved.

Why Didn't We See It

Contractors may say, I can't believe you had this house inspected, and they didn't find this problem. There are several reasons for these apparent oversights:

Conditions During Inspection

1. It is difficult for homeowners to remember the circumstances in the house at the time of the inspection. Homeowners seldom remember that it was snowing, there was storage everywhere or that the furnace could not be turned on because the air conditioning was operating, et cetera. It's impossible for contractors to know what the circumstances were when the inspection was performed.

The Wisdom of Hindsight

2. When the problem manifests itself, it is very easy to have 20/20 hindsight. Anybody can say that the basement is wet when there is 2 inches of water on the floor. Predicting the problem is a different story.

A Long Look

3. If we spent half an hour under the kitchen sink or 45 minutes disassembling the furnace, we'd find more problems too. Unfortunately, the inspection would take several days and would cost considerably more.

We're Generalists

4. We are generalists; we are not specialists. The heating contractor may indeed have more heating expertise than we do. This is because we are expected to have heating expertise and plumbing expertise, structural expertise, electrical expertise, et cetera.

An Invasive Look

5. Problems often become apparent when carpets or plaster are removed, when fixtures or cabinets are pulled out, and so on. A home inspection is a visual examination. We don't perform any invasive or destructive tests.

Not Insurance

In conclusion, a home inspection is designed to better your odds. It is not designed to eliminate all risk. For that reason, a home inspection should not be considered an insurance policy. The premium that an insurance company would have to charge for a policy with no deductible, no limit and an indefinite policy period would be considerably more than the fee we charge. It would also not include the value added by the inspection.

A note about your final walk-through:

Prior to closing on your new house you should go on a final walk-through inspection of the property (your sales contract should include a clause that let's you examine the property within 72 hours of closing). It's

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All printed comments and the options expressed herein are those of The Advantage Companies.

one more way you can protect yourself from frustration and possibly even fraud. For instance, if your sales contract says the seller is responsible for making sure that the house's major systems plumbing, heating, cooling, mechanical and electrical are in working order at closing time, the final walk-through is your last chance to see if the seller came through on his promises. Usually, the real estate selling and listing agents will accompany you on the final walk-through inspection. As you go through the house and around the property, you should note in writing any remaining problems, as well as any new problems you find, like dents or gouges left by careless movers. If the problems can't be corrected by closing time, you may want to consider withholding funds from the seller to pay for the agreed-upon repairs. If you discover major problems or violations of your contract during the walk-through, you have the right to delay closing until the problems are corrected. You will probably be busy and a little nervous the day before you close on your new house. But don't let that stop you from doing a thorough final walk-through. It's your last chance to make sure that the house and the property you intend to buy are what you actually get.

Thank you for taking the time to read this report. Please feel free to call us (or better yet email us) if you have any questions or observations whatsoever. We are always attempting to improve the quality of our service and our report, and we will continue to adhere to the highest standards of the industry and to treat everyone with kindness, courtesy, and respect.

Sincerely,

Daniel L. Perrin

Advantage Companies
 Owner/Licensed Builder
 State License #2101084801



Invoice/Receipt	
Client Name:	David J. Adams
Inspection Date:	11-04-13
Inspected Address:	6026 Salem, Portage, MI 49002
Inspected by:	<u>Advantage Companies</u>
	Dan Perrin 1235 Lisa Dr. Kalamazoo, MI 49009 269-324-9800
Inspection:	\$300.00
Radon:	\$100.00
Pest:	\$
Coupon:	\$
Total: \$ 400.00	
Payment Type: Paid in Full	<input checked="" type="checkbox"/> Check: <input type="checkbox"/> CC: <input type="checkbox"/> Cash:
Card Type:	<input type="checkbox"/> Visa <input type="checkbox"/> MC <input type="checkbox"/> Discover
	<input type="checkbox"/> Card Number: *****
	<input type="checkbox"/> Auth #:
Bank: PNC 041000124	<input checked="" type="checkbox"/> Acct. No: *****75857

Photo Summary 1



Termite Bait Traps Present



Tuck-Point Flower Box Mortar Joints
Replace Wood Chips w/Stones



Possible Buried Oil Tank



Change Exterior Locks @ Possession



R/R Doorbell - DNR

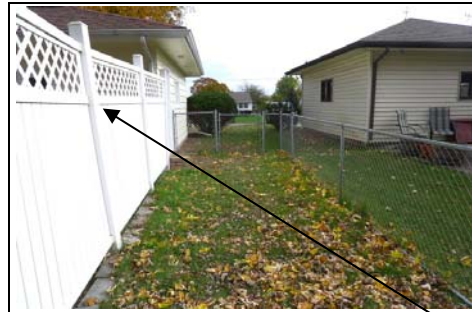


Insufficient Clearance between Ground &
Siding

Photo Summary 2



20+ Yr Old AC Condenser – BFR
Recommend Service before Settlement



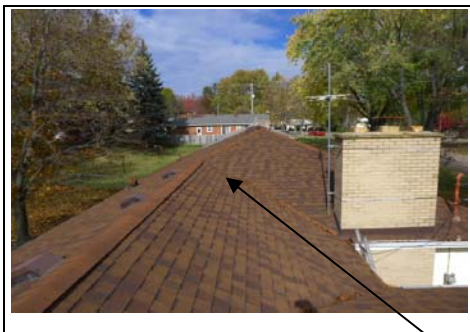
Fence Post Leaning



Add Overhead Garage Door Opener & 120V
Outlet (if desired)



Repair Masonry Chimney Cap – Spalling
Recommend Weather/Pest Cap



Newer Roof View



Recommend 18-20” Attic Insulation (total)

Photo Summary 3



Electric Oven Door Damaged (sprung)



Secure Loose DW Drain Line @ Disposal
Disposal Excessively Noisy



Clean/Inspect/Repair FP Damper
(seized/rusted) & Chimney Flue before
Settlement/Use



1st Floor Bath Sink Drains Leaking

Photo Summary 4



1st Floor Bath Sink Drains Slow
(obstruction?) – Venting Suspect



Repair/Replace Toilet - Leaking



Prior Damage – Toilet Leak



Smoke & Carbon Monoxide Detector
Improvements



Secure Loose Basement Bath Sink Stopper



Basement Bath Fan DNR/Switch

Photo Summary 5



Basement Bath Floor Trim Loose (Trip Hazard)



Safety Hazard – Remove Debris from Egress Window and Install Ladder



Basement Light(s) DNR (bulbs?)



Repair Damaged Screen(s)



Finished Basement – Permits?



Water Meter/Main Shut-Off Valve
Old 2" Shallow Water Well

Photo Summary 6



20+ Yr Old Gas Forced Air Furnace –
Recommend Annual Service Contract



Humidifier – Annual Service Recommended



Condensate Pump in Use



Newer 40 Gallon Gas Water Heater



Newer - 100 Amp Main Breaker Panel



Open Splice – Old Well Pump

Radon Test Report

INSPECTION INFORMATION

Device(s) Name: •Sun Nuclear Corporation
Device Serial Number(s): •71140027
Device Type(s): •Professional Continuous Radon Monitor
Number of Devices Used: •1

TEST CONDITIONS

Foundation Type: •Basement
Foundation Material: •Masonry Block
Basement Living Area: •Yes
Below Floor Ventilation: •Typical for Period Built
Test Area: •Not Occupied
Test Location: •Basement
Test Area Closed Prior To Test? •Yes
Time Test Area Closed: •At Least 12 Hours
Smokers in Home: •Unknown

WEATHER CONDITIONS AT TIME OF TEST:

Wind: •Moderate
Rain: •Moderate
Humidity: •Normal

TEST RESULTS: NO FURTHER ACTION AT THIS TIME

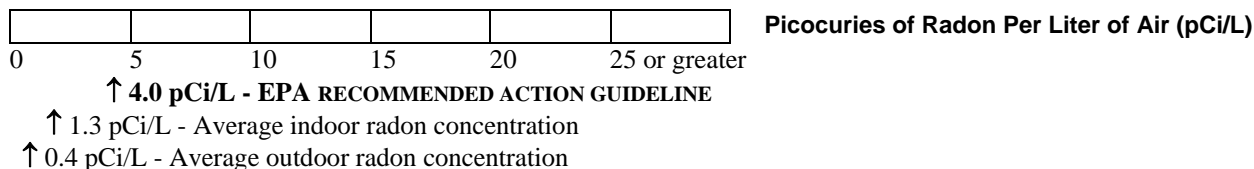
Date / Time Placed: **Date: 11/00/2013 Time: 1:00 PM** Date / Time Removed: **11/04/2013 Time: 2:00 PM**
 Time In Place: 48-60 Hours 61-72 Hours 73-84 Hours 85-86 Hours Over 96 Hours

RADON LEVEL: 3.0 pCi/L (Picocuries of Radon Per Liter of Air)



EPA RADON RISK INFORMATION

Use the chart below to compare your radon test results with the EPA guideline. The higher a home's radon level, the greater the health risk to you and your family.



The U.S. Environmental Protection Agency (EPA) and the Surgeon General Strongly recommend taking further action when the home's radon test results are 4.0 pCi/L or greater. The concentration of radon in the home is measured in picocuries per liter of air (pCi/L). Radon levels less than 4.0 pCi/L still pose some risk and in many cases may be reduced. If the radon level in your home is between 2.0 and 4.0 pCi/L, EPA recommends that you **consider** fixing your home. The national average indoor radon level is about 1.3 pCi/L. The higher a home's radon level, the greater the health risk to you and your family. Smokers and former smokers are at especially high risk. There are straightforward ways to fix a home's radon problem that are not too costly. Even homes with very high levels can be reduced to below 4.0 pCi/L. EPA recommends that you use an EPA or State-approved contractor trained to fix radon problems.

What do radon test results mean?

If your radon level is **below 4 pCi/L**, you do not need to take action.

If you radon level is **4 pCi/L or greater**, use the following charts to determine what your test results mean. Depending upon the type of test(s) you took, you will have to either test again or fix the home.

NOTE: All tests should meet EPA technical protocols.

Chart 1: Radon Test Conducted During a Real Estate Transaction (Buying or Selling a Home)

Type of Test(s)	If Radon Level Is 4.0 pCi/L or Greater
Single Active Short-Term Test (this test requires a machine)	Fix The Home
Average of 2 Passive Short-Term Tests* (these tests do not require machines)	Fix The Home
One Long-Term Test	Fix The Home

* Use two passive short-term tests and average the results.

Chart 2: Radon Test Conducted Outside Real Estate Transaction

Type of Test(s)	If Radon Level Is 4.0 pCi/L or Greater
Single Short-Term Test	Test Again*
Average of Short-Term Tests	Fix The Home
One Long-Term Test	Fix The Home

* If your first short term test is several times greater than 4.0 pCi/L - for example, about 10.0 pCi/L or higher - you should take a second short-term test immediately.

What should I do after testing?

If your radon level is 4.0 pCi/L or greater, you can call your State radon office to obtain more information, including a list of EPA or State-approved radon contractors who can fix or can help you develop a plan for fixing the radon problem. Reduction methods can be as simple as sealing cracks in floors and walls or as complex as installing systems that use pipes and fans to draw radon out of the building.

EPA has a National Radon Program to inform the public about radon risks, train radon mitigation contractors, provide grants for state radon programs, and develop standards for radon-resistant buildings. EPA works with health organizations, state radon programs, and other federal agencies to make the program as effective as possible.

For more information about radon, its risks and what you can do to protect yourself, call 1-800-SOS-RADON and request a free copy of EPA's *A Citizen's Guide to Radon*. You may also call the Radon Fix-It Line at 1-800-644-6999 between noon and 8pm Monday through Friday, EST/EDT, for information and assistance. This toll-free line is operated by Consumer Federation of America, a nonprofit consumer organization.