



Vishey Home Inspection Service "AI-HomeInspection.com®"

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Inspection Report by: Gregory J. Vishey, 1254 Hawthorne Rd., Grosse Pte Wds, MI 48236		
Customer: (removed)		
Inspected address: (removed)		
Approx sq ft: 1500	Est. yr. built: 1968	Email: (removed)
Services: Pre-purchase Inspection	Temp. 30-40 deg. F	# of Stories: 1
Style: Ranch	Garage: attached	Today's Date: 1/6/08
Front generally faces: North	Weather: Light rain	Foundation: basement and slab

If you have not signed the Pre-Inspection Contract, your acceptance of report and payment of fee constitutes full acceptance of all Pre-Inspection Contract terms and conditions. If any term of our contract is

deemed unacceptable to you, return all copies of your report within 2 days for a full refund.

1. Purpose, Scope & Applicable Standards for this Inspection - This report summarizes significant findings at the time of the inspection. Photo images may also be enclosed. All enclosures combine to create a complete report; so please read your entire report. Except when identified differently, this inspection fulfills the latest National Association of Home Inspection (NAHI) Standards of Practice. These standards clarify the purpose, limitations, exclusions, and terms of the inspection.

Expected Constraints - The limited duration of the inspection and use of sampling methods reasonably causes some conditions to be missed by an inspector. Past repairs or deliberate attempts to hide defects may conceal them from detection. Weather accentuates certain conditions while concealing others. These risks are the customer's responsibility and additional inspection time and scope can be secured at added cost to offset these risks. Note: An inspector may recommend that added inspections or testing be conducted. The choice to perform or to not perform these is always the responsibility of the customer.

Scope: You have contracted a general, NAHI inspection. This is different from a specialist inspection which can be very costly and lengthy; possibly taking days to disassemble test and inspect the many attributes of a home. Specialist inspections often involve fiber-optic inspection of sealed cavities, video inspection of sewers and lab testing of samples. A general inspection is done on site without lab equipment. It is neither intrusive nor destructive. As a result of its limited scope, general inspections offer substantial cost savings compared to specialist inspections. The goal of a general inspection is to identify major defects or conditions that could result in injury or reasonably affect your evaluation of a property or decision to buy/sell.

Inspectors will reasonably ignore minor irregularities or defects that would be apparent to an average person not qualified as a home inspector, where these do not clearly indicate larger problems with major home systems. Minor settling cracks, broken tile or a stuck window for example, are all part of a home's routine maintenance. Such defects would typically not be addressed in the inspection report. If there are questions regarding the inspection scope, please refer to the enclosed NAHI standards.

The following systems are will not be inspected unless specifically quoted and included in the inspection contract: sprinklers, alarm, boat hoist, fire suppression, intercom, counter-top appliances, pool, entertainment, secondary structures, septic field, underground drains, pipes, sewers and wells. Any mention of these systems or their components in the report is to be interpreted as casual and observational only. These are not major systems of the home and your inspector prioritizes the other systems over these. You should call upon other skilled trades to inspect those systems if you want them checked.

Amendments/Disputes - If any report findings, conclusions or recommendations are unclear - or if there is a dispute regarding the inspection or report, please contact Greg Vishey immediately. Inspections are conducted under narrow time constraints in order to offer the customer a valuable, cost-effective service. Within the first four days after report delivery, if you consider this report to be unsatisfactory, you may request (in email or letter) an amendment, or a full refund upon your return of the complete report. To protect you, this inspection fulfills the National Standards of NAHI. Greg Vishey is a NAHI, CRI member.

Escrow: Nearly all terms of transactions are negotiable. The terms of an escrow reserve are changeable by you. Your risks will be reduced by fully understanding the inspection findings before the terms of the sale and escrow are closed. **Any recommendation for repairs, or for a second opinion should be conducted before the close of sale & escrow because a specialist could reveal added defects or recommend upgrades that affect your evaluation of the property.**

Repair Costs: *Note that any repair cost estimate in this report is provided only as a general aid to the customer's understanding of certain significant findings. Such estimates are not comprehensive or complete and are only offered as "typical" costs for "like" repairs. All estimates will reasonably be expected to not match the true costs for repairs. The customer is always responsible for securing accurate and actionable estimates for any deficiency that is noted in this report. Any decision to transact on, or to abandon a property should be based on factual quotes provided by competitively bidding from qualified contractors. Be aware that defects can always be more or less severe than they outwardly appear. Your*

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inspector cannot be held responsible if any estimate proves to be low, high or in any way inaccurate.

Also, some communities demand certain unrelated home repairs or upgrades as a result of city inspections or permit applications. Because these vary by community, they cannot be predicted and the inspector bears no responsibility for those costs.

2 Significant Findings – Safety, Risk or High Cost systems in need of attention. Note that these items may appear to be minor defects or normal maintenance while others may be improvements. Failure to address these could reasonably place occupants at-risk of injury or cause future, more expensive home repairs. Often, such findings are a hint that more serious defects may exist and you are advised to consult with skilled trades to determine the full scope of the defects that might hide in that area. Please place these items on your “to-do” schedule as you start prioritizing your maintenance and repairs. I strongly recommend that you attend to all safety issues immediately.

2.1 Environmental / Hazardous Materials & Information (Possible Safety Concerns)

Cost	Item	Description
Watch:	Mold	Basement: There was no apparent water/fungus damage. No fungus growth was observed. Attic: No visible surfaces or materials were at risk.
Watch:	Radon	1 in 9 Michigan homes has high radon. Brighton, Rochester, Waterford, Commerce Twp & Royal Oak homes often test unsafe. Testing is advised for all new homes. A test was not conducted - this is optional.
Watch:	Lead	Lead is a health risk to children. Plumbing: Lead water pipes were used until ~1930 and pipe solder until ~1980. Paint: Lead paints were used into the 1970's. Note: Michigan requires paint testing be done by a licensed Lead Paint Inspector (it can also be done by the buyer). I do not test for lead paint.

2.2 Brick Mason/Cement/Asphalt

Cost	Item	Description
\$75	Driveway	Implement crack repairs in the asphalt driveway as needed (photo 5).
\$250	Masonry	The exterior veneer has cracked masonry, needing tuck pointing (photo 36).
\$340	Chimney	The large chimney cap is cracked, has a spalled fire tile needing replacement or removal, and both chimneys need hoods with wildlife screens on each open fire tile (photos 21, 25).

2.3 Handyman/General Contractor Repairs – (by area of the house)

2.3.1 Exterior Handy Man/Contractor Repairs

Cost	Item	Description
\$1000	Landscape & Grade	Trees are contacting power and/or utility lines. (Tree trimming is needed). Grading: does not remove water from the foundation area. Maintain grading near the home's sides, down spouts and extensions to maximize water shed from the foundation. Grade soil around the home to achieve a 6" slope per 10'. Install drain pipes to carry water from downspouts to a point 10-15 feet off the foundation before discharging the water to soil (photos 6, 10, 14, 15).
\$100	Caulk	Maintain caulk at outer trim to seal off water entry points behind trim and into wall panels; particularly at windows and doors. The power main from the meter to the main panel needs sealant renewal at the outer foundation. This can prevent water from entering the electrical service box (photos 12, 13).
Note:	Soffits	Ventilation is obstructed at soffit vents to the attic. I recommend installing full-length edge vents during the next roof replacement.
\$275	Garage	Safety: The current garage door opener does not reverse when obstructed. The door opener does not have child safety-trip lights and is regarded to be child-unsafe. I recommended that this older unit be replaced (photo 8).
\$40	Trim	Wood trim on the garage door (side door) is original finish and needs repainting (photo 9).
\$20	Garage	The current hatch from the garage to the attic is a masonite board. For fire safety, this needs to be upgraded to at least 5/8" drywall since there is a common attic above the garage and house without a secondary fire wall.

2.3.2 Handy Man/Contractor BASEMENT Repairs

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Cost	Item	Description
\$250	Dryer vent	I recommend that a 4" dryer vent be installed to carry dryer exhaust to the exterior. If vented to the house interior (as it is set up), this could cause paint, wall and ceiling damage due to excessive moisture.

2.3.3 Handy Man/Contractor INTERIOR Repairs

Cost	Item	Description
Note:	Windows	I recommend repairing the cracked basement casement window (laundry room). Main floor windows are thin, older, Aluminum-framed models with poor energy conservation performance and should be upgraded. Note that Pella (brand) casement windows are the best made energy-saving models to install. Plan roughly on \$475-500/window as a replacement cost estimate.
\$75	Walls, Ceilings	Repair the spot of water damage on the kitchen ceiling. The gap above the half bathroom switch plate needs filling and repair (photo 49).
\$200	Dryer vent	Safety: The basement dryer vent discharges humidity directly to the basement. This needs to be routed through the foundation to the outside.
\$500	Kitchen/ Bath	Tile and fixtures require re-caulking (photo 44). Install and properly vent a bathroom vent fan to the exterior. For loose shower head pipes: Inject Redi-foam into the wall cavity, along the shower head tube to secure it (photo 45).

2.3.4 Handy Man/Contractor ATTIC & ROOF Repairs

Cost	Item	Description
\$75	Roof, Attic, Ventilation	Remove insulation from soffit areas (photo 28). "Can vents" on the roof require large apertures to work and current vents are improperly cut in at least one location (east end)- photo 35). Note that a plastic container in the N-E corner of the attic may have been used for a past roof leak but this area was dry at the time of the inspection and no water was visible in the container when viewed from the ridge area (photo 33). Note that the use of a can vent for the kitchen range vent may be an incorrect application for this product and should be discussed during your next roof installation.
\$75	Roof	The roof is in the last third of its life. A new roof should be planned in 5-8 years. Seal all exposed shingle damage, nail heads and any gaps in flashings as found. Plan on the new roof costing \$3800-\$4500. Repairs are needed now to nail pops (photo 15), flashings (photo 11) and gouges. Bolts that attach the satellite dish to the roof need to be sealed (photo 23).
\$130	Gutters	The rear gutters are loose and drooping near the center chimney. One front gutter is incorrectly pitched and accumulates water above the front entrance. The front gutters need cleaning.

2.4 Electrician

2.4.1 Electrical - Service Panel - Electrician Repairs

Cost	Item	Description
\$750	Panel	Safety: A fuse service panel design life is approximately 30 yrs. This panel is considered beyond its design life. (photo 38 – partial view) (Note that two new ground rods and a ground wire across the meter will also be needed with a new service panel).
\$25	Breakers & Panel Wire	Safety: Small gage wires on high current fuses are a fire and safety hazard. Circuit #13 has a 15 amp wire on a 20 amp fuse and needs to have a 15 amp fuse installed.

2.4.2 Wiring, Junctions, Switches, Outlets, Boxes - Electrician Repairs

Cost	Item	Description
\$500	Temporary	Safety: Temporary hanging lights (in the garage) need repair to be permanent electrical installations – or they should be removed. The extension cord to the water softener needs to be replaced with permanent wiring (or remove it). The outlet doubler under the basement steps is temporary electrical splitter (photo 42) and needs to be removed or replaced with hard-wired outlets. The Romex wire from the dishwashes plugs into an outlet above the laundry area and needs to be

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		replaced with permanent electrical attachment to the home (photo 39) Romex is solid wire and is not permitted to be connected to temporary plugs for appliances.
\$30	Boxes & Outlets	Safety: Open boxes require covers. (see the loose, open outlet box above the microwave – photo 48) Secure loose boxes to the walls. (same)
\$90	GFCI	Safety: Install GFCI outlets. Outlets near moisture need to be GFCI protected.
\$125	Water meter	Safety: The water meter is unbonded and not grounded to the electrical panel – this will need to be done during future electrical repairs.
\$45	Outlet	Safety: One burned outlet at the laundry area needs replacing (photo 53). Note that this 2-outlet receptacle cannot serve the sump, washer and dryer simultaneously and additional outlets are needed.

2.5 Heating/Cooling/Water Heater

Cost	Item	Description
Note:	Furnace	A furnace has a 30-35-year design life. Schedule its eventual replacement. The current furnace is 20 years old and is regarded to be fouled with rust, in need of cleaning, but serviceable. Clean mixing tubes fouled with dust. (photo 37)
\$400	Exhaust	Safety: Furnace - Re-cement the vent to the chimney. (there are minor gaps). Note also that this vent will need to be upgraded to a flue liner system during the next furnace or water heater replacement. Secure the loose vent with screws to the water heater.
\$175	H/C system	Install a humidifier to add stability to dryness. (use Honeywell, ArilAire, or General brands)
\$15	A/C	Clean the A/C condenser in the near term. Ensure it is kept level, clean and unobstructed. It must drain water properly. Keep lines running through the foundation properly sealed.

2.6 Plumber

Cost	Item	Description
\$10	W. meter	One water main valve frozen - requires repair. (I loosened it slightly – the right valve needs more work)
\$45	Toilet	Repair incorrectly filling/flushing toilet. (1) - Runs-on. (I recommend using American Standard Cadet-III models).
\$60	Sump	The sump pump assembly is adrift in the sump well and needs to be better secured. The check valve on the sump is inoperative and needs repair or replacement (photos 41, 42).
\$300	Laundry	The laundry basin sump pump pressure switch is inoperative. When the tub was filled, the pump would not actuate. After manually actuating the hand switch, the pump would not turn off until unplugged from the wall. This pump needs repair or replacement. A second unit (used) was resting on the floor next to this unit. The leaking pipe coupling under the sink requires repair.
\$250	Hose bibs	I recommend upgrading outside hose bibs to frost-proof models (photo 13).
\$80	Water Softener	The abandoned water softener should be removed and plumbing by-passed. Older plumbing from the previous well system should also be removed (photo 40).
\$TBD	Pipe	One L-shaped pipe on the front face of the house (basement side) needs to be evaluated for function and removal. There are minor water stains around this pipe and its joints are loose.
\$100	Drains	The bath tub drain and the kitchen sink drain are inexpensive flexible couplings that are not durable. These should be upgraded to prevent future leaks.
\$475	Water Htr	The 15 year old water heater is regarded to be beyond its design life of 6-10 years. This unit was incorrectly vented, is missing its drip tube and has no dielectric isolators to protect against interior tank corrosion. I recommend that this unit be replaced in the short term.
\$10	Hall bath	The sink in the half bath is missing its aerator and needs to be replaced.

2.7 General Cleaning & Wildlife Control

Cost	Item	Description
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\$40	Exterior debris	Debris left in the garage attic needs to be removed (photos 27, 29). No yard debris was present needing removal.
\$430	Duct work	House heating duct cleaning – The ducts have dust and debris and you would benefit from cleaning them. (I recommend the teams that use a truck with large vacuum systems). Clean ducts after your move-in is complete.
\$20	Wildlife	Mice observed in the attic need to be removed with old-fashioned mouse traps each year around October-November when mice enter attics (photo 34). Poisoned bait traps are hazardous to cats and can result in mystery odors as mice eat them and go off to strange places to die.

2.8 Inspection Limitations & Adverse Conditions:

<input checked="" type="checkbox"/> Inspection was constrained	<input type="checkbox"/> No water service
Radon: A test was not conducted - this is optional.	
<input checked="" type="checkbox"/> Roofs are not inspected in dangerous conditions (snow-covered areas)	
<input type="checkbox"/> Finished foundation walls are not inspectable	
<input checked="" type="checkbox"/> Covered basement ceilings are not inspectable	
<input type="checkbox"/> Inaccessible spaces below floors not inspected (addition).	
<input type="checkbox"/> Inaccessible attic areas & like spaces are not inspectable	
<input checked="" type="checkbox"/> Outside bibs are untested in low temperatures	
<input checked="" type="checkbox"/> A/C systems cannot be fully operated below 50 degrees F	

3. Site & Grounds

The interaction of a home and its site is critical to the health and stability of a home. *Ideally: A home is positioned on firm soil and water from the roof is collected in gutters then channels to downspouts that discharge into passageways that carry the water far away from the foundation to where it does not return. Any water striking the soil near the home is carried away by a suitable slope that prevents seepage to the foundation. An elevated living space floor keeps water from entering there. The outer shell of the home prevents water entry to the more vulnerable, interior materials.*

Water is destructive and is often the cause of most home defects. It gets into tiny cracks and expands under freezing with large forces. The home's ability to shed, extract and eject moisture is critical to a healthy home. Poor moisture handling makes the house vulnerable to damage. Rot, mold, masonry deterioration and insect infestation are symptoms of water damage.

Most home systems are judged by their handling of moisture; from foundations to attic insulation and ventilation. One focus of this inspection is to understand how this home is achieving, or failing its designed objectives relative to moisture handling.

A review of these grounds was conducted for water shed. The slope of the earth around the structure does not remove water from the foundation area. Good grading is at least a 6" drop per 6,' away from the foundation. Water should never wash toward the foundation or pool near the foundation. Grading was away from the foundation on 1 side (favorable), flat on 1 side of the property (unfavorable) and the neighboring properties drain toward this foundation on 2 sides.

Trees and vegetation: do not crowd the home or grounds. Trees are contacting power and/or utility lines. Branch condition appears good. The house is in the fall zone of one or more trees. No yard debris was present needing removal. As your landscaping grows, trees should never overhang a roof and large trees should never be closer than 20 feet to the foundation. Large trees can damage a foundation, sewer pipes and interrupt water drainage from the foundation. No large trees require removal.

The driveway is made of asphalt, the surface is graded properly and it is generally in good, serviceable condition. Near the home, the driveway sheds water away from the house. This is favorable. Needed driveway repairs: Masonry needs minor crack sealing. The driveway apron is serviceable.

Where a driveway or walkway has seams or runs along a foundation, low-cost sealants can be used to seal out the water and prevent its entry to the foundation. The best sealing compounds are self-leveling elastomeric compounds (like those seen between cement sections at the city pool i.e. gray, soft rubber sealants). Many of these are found at building supply yards.

Sidewalk repair criteria differ from city to city but typically run between 3/8" and 3/4" maximum mismatch at seams with no cracking. Sidewalks are often reviewed in 7 to 10 year cycles and the home owner is responsible for needed repairs (\$45-\$100 per section). Here, sidewalks were not present. Note: Heaving walkway sections can be trip hazards.

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If retaining walls, landscaping structures or fences are present, they are inspected to verify apparent condition and the material they are constructed with. Note that a properly designed retaining wall will often incorporate structural components that are hidden below the soil surface that support against the pressure of the soil. These cannot be seen without excavation and no opinion regarding the strength or longevity of a retaining wall can be offered. On this property, retaining walls are not present. A fence is not present on this property. Trees are contacting power and/or utility lines. Generally, the ground cover and vegetation around the home is best described as in need of reasonable maintenance. No major landscaping features were present.

4. Exterior Foundation Structure

The foundation construction was block/mortar construction. Vertical supports to the center house structure were steel columns and placement relative to the vertical load was in line with the load direction (favorable). All vertical supports were centered and locked on the main beam and their bedding in the foundation appears to be concrete. The main beam is a single steel "I-Beam."

Foundations are inspected to determine if there is heavy water leakage through them or apparent softening/deterioration of concrete, brick, block, mortar, steel or wood components. On this structure, the inspection of the inside foundation indicates that the foundation is serviceable. Because foundations hold back pressure from the surrounding soil, support the weight of the house AND a heavy burden of roof-top snow, a sound, structural foundation is needed for the long-term stability of the home.

Settling: All homes "settle" over time as the weight of the home makes it sink into the ground. Appropriate footer design and dry foundation soil will best preserve the integrity of a home. Since mud cannot support any weight, keeping the foundation dry is imperative. Water that enters a foundation at any one point can distribute around the home and cause settling at another point (not just where it enters). Over time, trees extract large amounts of moisture, clay swells when wetted; and roots swell and push on foundation walls. A home inspection reviews these effects as they are apparent at one point in time. Settling can be sudden and unequal around a home due to factors unforeseen and beyond the control of the inspector or home owner. Typically, the perimeter of a home weighs more than its center and the outer walls sink faster; usually causing the center beam to "crown." One general relationship is consistent: If water continues to be present on a foundation, then settling is reasonably expected to continue along the path of least resistance until a structural compromise (failure) occurs. Drying a foundation can arrest this damage but will typically not reverse it. This foundation was intact - no visible damage.

At key sites, the wooden understructure tested solid when probed w/a metal scratch awl. I typically probe areas near the home perimeter or bathrooms where water exposure is likely. Softness can indicate structural problems as well as water damage.

4.1 Sumps, Water extraction systems, Slab, Crawl Space and Basement Walls & Flooring:

Homes with crawl spaces and basements are inspected for the presence and operation of sump pumps. In this home, a single sump was found. When tested, the sump operated normally. Water was present in sump while tested. No back-up system was present. If basement finishing is planned (or present), the best protection involves redundant water protection systems. For example, a water-powered or battery powered back-up sump system is advised in addition to a primary sump system.

When accessible, basement and slab footings and floors are inspected for condition and stability. In this home, the floor was painted concrete and was flat and well laid.

During the inspection, basement and slab walls were found to be dry but exhibited past water stains. Wall and floor surfaces are inspected for significant damage. Damage can range from surface stains that are remedied through cleaning to structural damage. During the inspection, the basement and slab floor was dry. Water entry at the floor-foundation joint is a common finding in most homes and was not present at the time of inspection. No water stains were found- leakage is low risk. In this location and with this type of construction, this finding is considered normal. There was no evidence of past flooding evidence of past, extensive flooding (typically evidenced by more extensive wall or floor damage or water rings around walls). Past, repeated water seepage through walls is often evidenced by moist surfaces or an accumulation of salts and efflorescence (leaching cement, salt, calcium and lime crystals). Traces of efflorescence were found on the walls.

Below-grade storage: I recommend keeping storage 6"-8" off the floor and 12" away from the walls. This promotes air circulation at the likely source for water seepage (and where humidity promotes fungus growth). There are rare cases where basement and slab flooding can result in deep water on the floor. Clogged city pipes, malfunctioning city pumps or construction damage can each cause a basement and slab to flood when it has not done so before. These types of events are

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unforeseeable. While infrequent, basement and slab flooding is a risk that all homes have, and protection of basement and slab storage is advised.

The construction for the first floor understructure was covered in areas preventing inspection. The design was typically a 2 x 10, 16" center, wood. This structure was judged to be serviceable.

4.2 Fungus Growth (Fungus = Mold)

Much can be told about a home when smelling the air of a basement and slab upon first entry. In this home, the basement and slab smelled dry and clean. The smell of basement and slab air or apparent humidity strongly hints at the prevailing dampness of a foundation. This is an important indicator to the risks for fungus and other risks to owners. Excessive moisture promotes foundation deterioration as well as a breeding environment for nature (bacteria, fungus and insects). Dampness above 50% humidity encourages mold/ fungus growth on most cellulose products. There are thousands of mold types that range in color from red to green to black. Stachybotrys is one of the more dangerous (toxic) fungi that is found in our area; making big news as "black mold." Luckily, this mold is not as common as indicated. More common molds such as Penicillium and Aspergillus can be significant health risks for occupants. During the inspection, basement and slab walls and floors are inspected for stains and apparent fungus growth or damage. There was no apparent water/fungus damage. Note that mold damage can range from surface stains (remedied through cleaning) to structural damage.

There are no government guidelines for fungus exposure and your risk depends on the fungus type and your sensitivity. The EPA recommends that growths over 10 square feet be handled by professional firms. For this report, I use the following scale:

Minor fungus = trace findings to <1 square foot of growth **Large fungus** = 6 to 10 square foot of growth
Moderate fungus = 1 to 5 square foot of growth **Major fungus** = >10 square foot of growth

While it is important to understand the type of any discovered fungus (because different fungi represent different risks and hazards, the amount of it can also determine if a home's occupants experience health problems. No fungus growth was observed. *If needed, an effective method for killing fungus and cleaning it from durable, non-fading, non-absorbing surfaces is with a solution of "acidified bleach" (1 cup laundry bleach + 1 cup white vinegar + 1 gallon of water + 4-5 drops of dish soap). Wipe well, then force-dry the area with a fan. Note: bleach often fails to penetrate to the root of the growth and it may return (bleach typically removes only the surface stain). A longer lasting cleanup follows with a wipe using granular Spic-N-Span in water as a second-step, 4 hour or more, later and more forced drying. The key to eliminating the growth of new fungus is to promote air circulation and to keep humidity below 50%.*

Fungus can grow behind walls and in out-of-sight places where a home inspector would not be able or expected to find it. NAHI Inspections will mention when and where significant, apparent growth of fungus is during an inspection, but the apparent absence of fungus should never be interpreted as a confirmation that a property is clean of fungus.

Mold is a sensitive topic for buyers and inspectors. If there are signs of pervasive fungus in a home, the inspector will typically advise that other environmental tests be contracted to further investigate risk and quantify the scope for possible remediation. The discovery of fungus growth in small amounts is very common (fungus is natural in our environment) Additional information can be found in the "Condition Description" section that follows this report and in the CD-ROM Library.

4.3 Basement, Crawl, Foundation Flooding and Water Leakage

A special concern regarding basement and slabs and flooding in general: Even if a basement and slab is perfectly clean and dry at the time of inspection, foundations in our area should be regarded as likely sources of water entry around the base of the foundation or through the floor. It should be regarded as fact that basement and slab are not water-tight vessels and will exhibit some amount of water entry under extreme wet conditions. Foundation walls frequently have cracks and holes that run, weep or leak. The causes for water entry vary and remedies range from collection & extraction systems to ablative coatings. No leakage remedy is fool-proof in all conditions and basement and slab finishing and storage should always be regarded as "at risk." There is a general industry preference for the "Drylok" masonry products made by UGL (see www.UGL.com). Don't use plain latex wall paints below grade as fungus grows on most latex. I recommend foundation painting with a mildew/fungus resistant latex, polyurethane or enamel paint over the water-proofing (Drylok) layer. This type of finish reduces moisture ingress by sealing the masonry and provides a cleanable, user-friendly finish. A more complete explanation for finishing foundation walls (and finishing basements) is found in the "General House and Property Conditions" section of this report.

Among other features, water lines, gas lines and sewer pipes perforate the walls and floors and can be water entry sources.

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Drain back-ups can be another. In many cases, the homeowner's best strategy for a dry foundation is to route down spouts six feet off the foundation, having a soil grade of six inches per six feet and if necessary, installing a water extraction system (a sump). Favorable findings at the inspection should never be interpreted as a guarantee that a basement and slab will never leak. In light of soil and home behavior in this area, a typical inspection might regard limited moisture entry as "normal" or "acceptable."

Typical basement and slab water leakage causes: 1. Gutters and downspouts that discharge directly to the foundation. 2. Poor grading around the home's foundation. 3. Gutters and downspouts that discharge into full or clogged storm sewers or drain tile, then back-up. 4. Clogged or incorrect gutters that back water into soffits where it flows down the inside walls. 5. Failed sump extraction systems (failed pump, float, motor or electrical).

5. Exterior (typically evaluated from the ground level, upward)

Masonry - Tuckpointing – Exterior masonry is in need of minor tuck pointing repairs in few areas (low cost).

The structural exterior walls were observed to be constructed of brick or brick veneer over wood framing. The exterior skin of a house keeps the weather (moisture) off the more vulnerable insulation, wood and plaster materials inside the wall. Because a home inspection is non-destructive in nature, it may be impossible to detect certain structural deterioration that is hidden within a wall when outward appearances are normal. Usually, structural elements of the home are concealed behind siding or brick veneer. This outer structure was probed with a scratch awl and tested solid. Since nearly all homes use masonry (i.e. brick or block and mortar) somewhere in their construction, it is important to note that masonry is typically compromised by water entering it and expanding while freezing. The masonry of this home was in need of minor tuck pointing repairs in few areas (low cost).

The window, door, edge and soffit trim were a combination of vinyl siding and aluminum siding in serviceable condition.

Window Exterior Condition:

Window condition (viewed from the ground, outside) was clear and serviceable, with glazing (the material that holds the glass in the frame) intact and serviceable. Note that dirty windows can obscure the presence of interior stains from failed weather seals. The integrity of weather seals is not an inspected feature (it is cosmetic) and a failed weather seal does not render a window unserviceable. The caulking around the windows was in need of replacement in several areas. Caulking reduces drafts and heat loss in the winter and therefore its effectiveness is important to your comfort and lower heating bills. Newer, upgraded window designs can dramatically lower noise from outside, reduce heating bills and keep a house cooler in the summer. This home would benefit from an upgrade to newer windows. Select windows were missing screens. These windows do not utilize storm windows. Note that window hardware and operation are more completely addressed in the *Interiors* section.

Door Conditions:

Outside doors were inspected for operation, security and function. The front door to the home was constructed of steel, hollow-core door with a weather seal that is serviceable, hardware that is serviceable and its security is good with a serviceable lock. The front doorbell is operational. The stoop below the front door should have enough room to maneuver when opening the door and if there is a 30 inch drop to the ground, a secure railing should protect you. The entry had a small step-up - no railing needed.

Outside trim and surface painting is best accomplished over bare, dry, wood with oil-based primers and polyurethane topcoats. Note that when paint peels, it fails at the base coating to the wood. Local scraping solves a local problem and adjacent areas will fail next. Effective correction of peeling paint requires removal of the paint and the old base coat and refinishing.

6. Roof Coverings, Flashings, Gutters and Downspouts

This roof design is a Hip roof (1 long peak). The roof material is asphalt tab shingle and the water shed system manages the roof water run-off by way of aluminum gutters and aluminum downspouts. This roof was walked-on during the inspection.

The surface condition of any roof affects the protection that it offers. This home's roof was in the last third of its life. This estimate is based on the roof material: asphalt tab shingle, its estimated design life: 20-25 years, current condition: curling (unfavorable). The roof was inspected to determine the number of layers used in its present construction and 2 layers are visible at the edge. My estimate of the remaining service: A new roof should be planned in 5-8 years.

This roof deck was inspected for an ice barrier; no ice barrier was visible. (Ice barriers were previously not required). These

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are typically rubber-like membranes that are placed above the gutter areas that seal around the nails that drive through them. A correctly installed ice barrier extends from the drip edge to a point 24 inches inside of the inner (heated) wall of the home.

Drip Edges are L-shaped aluminum, copper, steel or plastic fittings under the shingle edges that keeps water from attacking the underlying wood. This roof was inspected for the presence of a drip edge and a drip edge was not present (one was only present over the front door) in serviceable condition. Note that a roof should have annual inspections and spot repairs. The cost for annual checks and roof repairs with sealant is typically less than \$20 if done by the owner or \$125 if done by a contractor.

Downspouts are aluminum downspouts, in serviceable condition and all drain to the foundation at the home's perimeter. Re-routing downspouts to shed water at least 6-10 feet off the foundation is advised to protect basement and slabs from possible water damage. *Water affects a foundation three ways. 1. Chemically - It deteriorates mortar and concrete and leaches salts and chemicals from the ground that can reduce the mortar to sand. 2. Biologically - Bacteria and fungus grow and consume organic media - including the paint on walls 3. Mechanically - Freeze-thaw cycles and clay swell and shrink apply forces.*

Flashings act as seals along roof lines where the roof deck mates to walls or chimneys. These prevent water entry to the interior that can be destructive to plaster work and can cause mold/fungus growth or rot. Flashings on this roof were galvanized steel flashings and in serviceable condition. The chimney cap (the top) was observed to be cracked and needing service. The chimney column (below the cap) was observed to be intact.

Roof vents are a key feature to stay warm in the winter and cool in the summer. In winter, vents bring in dry, cold air and remove moisture from the insulation (moisture reduces the ability of insulation to hold heat). Note that just 5% moisture in fiberglass insulation can double your heat loss. Minimum attic ventilation is defined as 1 square foot of ventilation per 300 square feet of roof surface. Based on its size, this home needs approximately 4 sq ft of top-side ventilation for heat rejection in the summer and moisture rejection in the winter...if soffit vents and vapor barriers are properly installed and effective. If not, the needed ventilation could be 2 or 3 times this amount. On this home, soffit ventilation was poor - not supporting the top ventilation needs. Ideally, soffit vents should balance the area of the roof top vents. Note that grills or vent covers decreases the effective vent size and therefore a grill with a 50% opening would double the total soffit ventilation needed to balance airflow under a roof. You should maximize soffit and roof top ventilation to the greatest extent possible and note that power vents (fans) are generally ineffective. Soffits: soffits were serviceable and adequately finished.

Other roof features such as skylights, light pipes and antennae are typically inspected during a roof inspection to the extent that they can compromise the roof or place the home at risk. In this home no special features were present.

7. Roof Structure, Attic and Insulation

The underside of the home's roof is inspected where access to the attic is available. Attic access was through a garage ceiling hatch. All major attic areas were accessible. No attic access limitations were present. The roof "deck" materials (overhead) are 2 x 4 wood joists with 1 x 6" gap boards. The roof framing and deck was dry in all viewable areas. The integrity of the framing and deck was checked for cracks, cuts and other structural risks. This roof was observed to be generally sound in construction and solid. This attic was checked for electrical fixtures; no electrical features were observed in the attic.

Attic insulation was found to be uniformly distributed above the living space. For adequate ventilation, the eaves need to permit airflow into and through the attic. Here, the eaves were observed to be vented and were stuffed excessively with insulation. Ideally, the light of day should penetrate the attic at the soffit areas if airflow there is unobstructed. When inspected, No visible surfaces or materials were at risk. The attic insulation material was primarily treated cotton with added roll/batt fiberglass. Note that the majority of heat loss is through the top of the house. Attic insulation slows down that heat loss. Better insulation means lower utility bills and better comfort.

Insulation effectiveness is measured by an "R-value." A higher "R" means less energy loss. This attic's R-value is estimated to be in the range of 20-26. Construction requirements in our region are for **R19 min.** and **R50+** for new construction.

Attics frequently have evidence of insect, bird or rodent wildlife. In this home bait traps for mice were found

8. Garages/Carports

The garage was attached. The garage had operable electrical. There was no plumbing in the garage. The roof condition was similar to the home's. A working, power garage door opener was in place. The power door system did not have safety trips.

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Note that powered doors should have safety trips installed at the base to reverse it when something breaks the light beam. In addition, the door is supposed to reverse when obstructed with a force of 18# (to protect property & children from harm). The power door does not reverse when obstructed. The garage was unheated.

9. Electrical

Electrical service is evaluated for system type, capacity and serviceability through the use of direct inspection and a sampling of representative outlets and fixtures. These systems can be very complicated and defects can be dangerous to personal and property safety through fire and electrocution risks. I regard all electrical defects to be safety hazards. Electrical products often face recall or service campaigns and their standards and practices change frequently. Many requirements are selectively enforced by communities and your inspector cannot be expected to be a specialist in this field or to know what is expected in each community. It is essential that repair recommendations or upgrades advised here, be completed before the close of escrow since a qualified electrician could reveal additional deficiencies or make other upgrade recommendations.

Electrical service to the home was overhead with adequate ground clearance. Power lines approaching the house were free and clear of trees. Neighboring homes did not have utility lines crossing this property. When present, utility and power lines to neighboring homes can be moved away from your property by making a request to the appropriate utility company.

There is no drip loop on the main wire feed to the circuit distribution box and sealant around the entry point should be maintained to protect the home against corrosion and fire risk. Sealant around the wire entry to the outside wall is inspected and during this inspection, was sealing poorly; needing service. There is evidence of rust in the panel base of past water ingress to the circuit distribution box (i.e. that would cause water stains/corrosion). The design of the circuit distribution box utilizes fuses. The primary (main) electrical service panel was accessible and was located in the basement.

The main circuit box was inspected with the cover removed. The main feed from the house entry was determined to be 4 AWG Copper 100A capacity in a twin circuit distribution (2 power line feeds) with a rated capacity on the main fuse panel of 60 amps. Note that the main feed is allowed to be aluminum or copper material and it was copper in this case. The main fuse is sized appropriately for the main feed (safe). Sub-panels for high-current accessories such as heaters, air conditioners, etc were all inspected and found to be serviceable.

Branch circuits are inspected to verify that only one circuit (one wire) is connected to each fuse. This electrical system needs repairs as noted. and each circuit was visually checked to verify that the wiring had the rated capacity to carry the full current that each fuse was rated to deliver. Wires and fuses were all properly matched (favorable). The appearance of each fuse's condition was good, with no damage evident and wire attachments were loose in areas and tightened. (Loose connections can cause burns on fuses and can lead to house fires).

Older homes are often wired with a simple 2-wire system (hot and return only). Knob & tube wiring was used in into the 1940's and many of these systems have been upgraded for reasons of capacity and safety. Later systems used a type of wiring called "Romex" – this wire consists of a wrapped hot, return and a lower gage, bare ground wire. This wiring was used up to the 1970's and the ground wire, while redundant for safety, was often under-sized. These systems are typically called 2-wire w/ground systems. Today's wiring uses a 3-wire Romex system where the wire bundle has a hot, a return, and a ground wire that are all the same gage. While 2 and 3 wire systems are typically safe to use, the 3-wire construction is more robust in preventing fire and accidental shock. Older homes may have several generations of electrical systems and an electrician may be needed to sort out any needed repairs. This home has a 2-wire system w/o ground.

Main and subpanel wiring may use aluminum supply wires but branch wires (for outlets and lights) should always be copper. Aluminum branch wiring was used in the 1960's and 1970's and is known to cause electrical fires. Branch wiring in this home was observed to be all copper (safe). Insulator condition within the box was intact and serviceable.

Voltage was measured as 120 / 120 Vac and this voltage level is considered normal. A ground strap is intended to run from the electrical box to the plumbing and was visually bonded to the water pipes.

Newer construction uses Ground Fault Circuit Interrupt (GFCI) circuits in the fuse box rather than at sink and exterior locations – either method is considered to be effective. For safety, GFCI protected circuits are needed near all wet areas where electricity is within 6' of moisture (i.e. basement, kitchen, laundry, bath, outside outlets, and garage). A new type of protection device has recently been added to home electrical systems; the "Arc Fault Circuit Interrupt" breaker (AFCI). These devices are required for all bedroom outlets in new construction. AFCI's monitor the wiring and connections for loose

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wires or breaks that could cause a fire. When needed, the AFCI breaker will trip and remove the electrical power (and eliminate the fire potential).

Current requirements specify that all electrical outlets within 6' of moisture are to be GFCI protected and all bedrooms are to have arc-fault protection. At the main service panel, AFCI breakers were not present and GFCI breakers were not present.

10. Plumbing

Plumbing type differs widely. One fact is that fresh water supply and waste water management are critical functions that can affect other home systems. Eliminating or preventing leaks with periodic maintenance is a requirement for home owners. Regardless of the system's construction or complexity, leaks from plumbing are a common problem. The best and most dependable pipes are copper with (non-lead) solder because these resist the accumulation of minerals on the inside surfaces (like galvanized steel pipes suffer from) and they are a very durable product (unlike many plastic pipes). Note that lead-bearing solder that was used in copper plumbing in past years, can slightly elevate lead levels in a home's drinking water.

Water Service / Plumbing / Sewer

The fresh water supply system used throughout this house was inspected and visually determined to be copper pipe with solder.. The main water supply line to the home was visually checked and found to be copper (favorable). With city water service, there is always a shut-off valve installed on both sides of the water meter (this allows the meter to be removed and serviced). Both of these valves need to be serviceable without leaking any water. In this home, both valves were functional by hand. Note that water leaks do periodically occur at the valve stem and this feature can usually be tightened with a wrench or pliers to adjust the packing material and to stop the leak.

The furnace vent was secure but the chimney seal requires repair. The water heater vent was adrift to the water heater..

Water meters require bonding (a heavy gage jumper wire connects the pipes on both sides of the meter) to ensure that the electrical system is always attached to ground; even if the meter is removed. In this case, the water meter was visually confirmed to be unbonded; creating a safety hazard. Often the water main pipes come out of the basement floor and are unprotected. These should be secured to a nearby wall in order to prevent damage from children or accidental impact.

The waste pipes were visually inspected where they were visible and were found to be cast iron pipe *Note that your home inspection cannot offer any opinion regarding possible sewer obstructions or damage below the grade. Since this can happen as a result of owner neglect, age, nearby construction, tree root penetration or other means, you should consider that a video inspection of this pipe can be contracted through most plumbers and that this will reveal the inner integrity of the home's sewer line. Sewer line replacement is typically very disruptive to home life and landscaping, and the cost of replacement is typically over \$2000 (this can become many thousands of dollars depending on depth, distance and number of trees affected). A buyer's decision to have a plumber conduct a video scan of the sewer pipes should be weighed against this cost, the home's age, proximity to trees and/or relation to recent or nearby construction. This is one risk that should also be understood before the closing and release of escrow. From my experience, new sewers are required in 2-5% of real estate transactions within 2 years of sale.*

Visible plumbing was inspected for external condition and was judged to be serviceable.

Water Heater:

The hot water heater system was (a single unit) and observed to be hot and operational and with an estimated capacity of 40 gallons and an estimated age of 15-20 years. *Water heaters can be expected to last as long as their warranty; typically from five to eight years, but they will generally last longer and water chemistry for an area will be a strong deciding factor on a water heater's life. Water leaks from water heaters are a certainty, given enough time and a water heater should always be installed over a pan with a drain to sewer. A pan under the water heater can also collect condensation, possible water entry from the flue and overflow discharge. This feature will help keep moisture from damaging the home.*

On gas-powered heaters, leaks from valve bodies are a frequent finding and these are stated by the gas company to be unallowable at any level. When filled with water, this device can weigh several hundred pounds and it needs to be secure on its foundation. The water heater was a stand-alone design. The outer, metal case on the water heater was intact and considered serviceable. The exhaust vent on gas-fired systems is checked to ensure it is secure to the chimney/discharge point and was found to be adrift to the water heater. (a loose vent pipe can be a Carbon Monoxide leakage source to the living space and vents are expected to be screwed down to the top of the water heater). If water heaters are given an added insulation blanket, that

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blanket cannot cover the safety valve and spill tube. This heater did not have added insulation. The plumbing to and from the water heater was inspected and verified to be correctly plumbed.

Fixtures and Faucets (excluding bathrooms)

Water fixtures and faucets in the kitchen and on the exterior were inspected (note that the bathroom fixtures and faucets are reported separately within this report). Generally, the water valves in the home were operational and did not exhibit leaking. Inspected fixtures had shut-off valves installed. Leaks at valve stems may not occur during an inspection but will typically be noted in the report when they are found. Valve stem drips and leaks can usually be remedied with routine maintenance by changing or tightening the valve seats and/or packings. Water flow at each faucet was adequate. Areas under traps and around the bases of fixtures were inspected to establish if leaks were active. These areas showed past water leaks and were dry. *Note that any toilet that has been fitted in place for over 15 years should be removed from its perch and re-fitted with a new wax ring. The toilet base should then be firmly secured to the floor and sealed with caulk to the floor. Review the current home for this and make this a part of your future maintenance plan.*

11. Central Heating Systems: Forced Air Heating

A variety of heating systems exist; ranging from floor, wall, and gravity furnaces to newer, forced-air furnaces. A NAHI inspection will not dismantle any portion of the system, nor fully evaluate concealed components such as the heat exchanger, firebox, electronic air-cleaners, humidifiers, or duct motors or dampers. Similarly, we do not check every register at which the airflow may well be uneven. The airflow and the efficiency of any system can be compromised by poor maintenance, filters not being changed regularly, and congested ducts. Note that since 1992, all furnaces that discharge into a chimney column require a flue liner to be installed there. This protects the masonry and allows the exhaust gasses to properly vent.

The sellers are the best judges of how well a system works, and you should ask them about its maintenance history and if they have been satisfied with it. Alternatively, you may choose to conduct a more complete evaluation by a heating & cooling specialist. Most heating systems have a design life of around thirty years, but if a system is over ten years old, or if poor maintenance is suspected, it would be wise to arrange a comprehensive cleaning and testing of the motors, fans, and ducts.

This inspection does not evaluate or endorse any secondary heating devices that utilize gas or oil and are not vented. The presence of these in a residence often indicates an inadequacy in the heating system. Note that all heating devices are potentially hazardous in that they include open flame or heated elements; capable of igniting the many flammable materials found in homes. Also, appliances can produce carbon monoxide (CO), which in a tightly sealed or poorly ventilated home can result in sickness, injury, or death. We are not specialists and cannot see inside ducts.

Heating and Air Handling:

The heating system is described as a newer design, mid-efficiency system that is powered by natural gas. The system operation was checked and found to be serviceable; there was no visible flame disruption (when viewed over 1 cycle) Note that a severely cracked or damaged heat exchangers, outer cases or vent pipes on gas-fired systems can cause flame disruption in the firebox when the system operates. In gas-fired systems, a residential Carbon Monoxide (CO) detector is often used to ensure system safety during my inspection. This test is usually done at a representative duct or a nearby location in the living space. In this home, this test was conducted and measured 0 ppm CO (favorable). On open-burner systems, the outer case and firebox interior is inspected for dust, debris, corrosion and damage. On closed (sealed) high-efficiency systems, the outer case is all that is accessible. This unit exhibited no significant findings and appears serviceable. .

The exhaust vent on gas-fired systems is checked to ensure it is secure to the chimney/discharge point and was found to be secure but the chimney seal requires repair (a loose vent pipe can be a Carbon Monoxide leakage source to the living space). The outer case on the heating system was observed to be intact and considered serviceable. The gas supply to the heater appeared and checked serviceable. The blower for the system operated normally.

These findings identify the performance at a point in time and there are no guarantees that the heating system is defect-free or will remain that way for any period of time. This inspection establishes that possible, gross defects are not creating a hazardous condition at the time of the inspection. As a complete heat exchanger inspection can take up to an hour alone to conduct, the buyer is advised to have the system re-inspected by a heating technician if this cursory testing and inspection is inadequate to meet the buyer's needs. Overall, the heating system is considered to be serviceable at this time. There were no supplemental heating systems. The environmental control was via a standard thermostat that was operational during the

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inspection.

12. Air Conditioning Systems - An air conditioner was present on the home.

This inspection does not cover portable air conditioning systems. When present, permanently-installed air conditioning systems are part of a standard home inspection. Since these have oil-bathed motors, manufacturers advise that they not be operated unless temperatures have been above 50 degrees F for the last 12 hours. (Improper operation when cold can burn out the condenser compressor motor). It is important to note that A/C condensers operate at higher efficiency when kept clean and they last longer when mounted flat. Poor locations with bad water handling can rot the base of the unit off or cause the aluminum coils to corrode. Having a slightly elevated pad with good drainage is recommended. Keep all vegetation at least 18" away from an A/C condenser. Vegetation crowds the condenser and needs clearing. This system was untested due to low temperatures and no performance data could be collected. The outside condenser was adequately mounted and sub-panel wiring was in serviceable condition. The service disconnect was verified functional. The A/C disconnect was a Pull-type disconnect.

13. Interior

Interior wall surfaces were typically drywall. Walls were inspected for finish, damage, nail holes, and structure. Generally, the surface finish of the interior walls was good; requiring general cleaning and touch-up. Water damage is typically a serious concern. In this structure, the interior walls did not show signs of water damage.

Home ceilings were inspected for flatness and paint condition. In older homes (typically with wood lath ceilings), the nails securing the heavy plaster to the joists can rust away or back-out. Sagging areas are a warning that the heavy plaster overhead can fall and cause injury. The ceilings in this structure appeared flat and secure. *Note that small amounts of past water damage are regarded to be a frequent occurrence in many homes and can be many years old. These will typically not be specified in the report unless regarded to be an active leak or a major risk to the home. Minor water damage in walls and ceilings frequently results in peeling paint. When you paint a damaged or previously repaired surface with latex paint, the water in the paint can re-activate the peeling and cause it to spread. The best remedy is to refinish these areas with only oil-based paints once repairs are complete.*

Generally, doors were serviceable; door hardware was generally tight and in good serviceable condition.

Windows: Window construction is described as double pane metal frame, sliding construction. Operation was typically good but some windows need adjusting. Window glass damage was found on at least one window. Since windows are needed for emergency exits in the event of a fire, the owner's ability to open them and climb through them is critical. Your ability to open and exit the master bedroom window should be confirmed for personal safety in case of fire. Window hardware requires repair or replacement in select areas.

Bathrooms: *Standards require "greenboard" or water resistant wall panels for walls not directly exposed to moisture. These walls include bath tub surrounds and bathroom walls (shower stalls have direct water exposure and greenboard is not a best choice. Greenboard is water-resistant; it is NOT water proof and it deteriorates in wet conditions. Drywall (a white product) is unacceptable in all damp areas and should never be used in a bathroom. One "best" solution involves the use of "cement board" a.k.a. "backer board." Cement/backer board is typically a cement and fiberglass composite with high moisture resistance and matches the properties of tile & grout.*

Anything less than cement board/ backer board in a bathroom floor, a tub enclosure or a shower stall is a common contributor to early tile failure. A finished bathroom wall does not reveal its inner construction and your inspector cannot determine if the best materials were used in the wall, tub or tile constructions. Generally, rebuilding a shower stall requires stripping the wall surfaces to the studs. A typical cost for this repair would exceed \$2,500. When tub surrounds are re-done with tile, a rebuild with cement board would reasonably cost around \$1500 or more. For this reason, many people place plastic or fiberglass surrounds over damaged tile to lower their repair costs. Bathroom inspection notes are found in the check list in this report.

Fireplaces: *Fireplaces are a source of fire damage and hazardous combustion gasses. An inspection of fireplaces and exhaust ducts does not involve disassembly and therefore is based on visual conditions of the openings and does not exhaustively examine the inner passageways or any feature out of the direct line of sight. The Chimney Safety Institute of America (www.CSIA.org) and the National Fire Protection Association (www.NFPA.org) recommend that a chimney inspection be conducted by a certified chimney sweep. This applies to any brick fireplace or fueled appliance (such as a wood*

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stove) with an exhaust vent. In this home, a single fireplace was inspected. Water heaters and furnaces often share a common chimney or exhaust vent. The draft through chimneys and vents can sometimes be obstructed by broken masonry, leaves, wasps, bird and squirrel nests, or other debris. Where possible, chimneys are inspected for integrity of the fire liner, damper operation and clear passage to the roof. Fireplace liners were in serviceable condition. Fireplace Dampers were serviceable. Creosote build-up was judged to be light (safe).

Kitchen: Kitchen cabinets were in good condition and their attachment to the wall/soffit was judged by eye and by heft to be secure. The general assessment of kitchen storage area and quality is of adequate storage capacity and good access. The kitchen counter top appeared to be made of a Formica-type material, was securely attached, and was in good condition with minor defects. The kitchen flooring was made of a ceramic tile surface that was in good condition, and is judged to be serviceable.

Kitchen and laundry appliances are sometimes included in Home Inspections; if they are included with the sale. In this inspection, the following were noted: The range was electric; it was inspected and serviceable. The oven was electric; it was inspected and serviceable. The stove vent was inspected and serviceable. The sink disposal was not present. The refrigerator was serviceable and did not contain an icemaker. A garbage compactor was not present. The dishwasher was not inspected. The laundry washing machine was inspected and serviceable. The clothes dryer was electric; it was inspected and serviceable.

Many people incorrectly use flexible vinyl vent material for dryer vents. This creates a serious fire risk. The best material is smooth wall aluminum duct; not corrugated metal or metalized plastic. The rear dryer vent attachment needs to be a specially formed, 90 degree attachment. Dryer ducts produce the best drying, airflow and lint rejection when installed with two 45 degree elbows instead of one 90 degree elbow. Also, fabric softeners cause lint to accumulate inside of the vents. Check vents annually and clean them as often as needed. When a vent plugs, it forces lint into the base of the dryer where fire and heating elements can ignite it. Obstructed dryer vents are a VERY frequent cause of home fires. Dryer vents often exit the home through a full size, 4" fitting but on older homes, many dryer vents use a smaller 3" fittings that need enlargement to 4."

Fire detection: Furnaces are usually placed within living spaces and a Carbon Monoxide detector is recommended. Estimated cost of three smoke alarms plus a CO detector is approximately \$115. This home did have smoke detectors installed.

An effective way of protecting plaster and drywall in damp areas (tub and shower enclosures, ceilings, laundry areas and kitchen splash areas) involves the use of two coats of flat oil based primer or white pigmented shellac. Pigmented shellac is alcohol based and is an effective waterproofing finish. I personally like Zinsser's Primer-Sealer. (I recommend against "Kilz" - a poor performing primer). Zinsser also has oil-based kitchen and bath paint with fungicide that is recommended. Based on years of personal experience, I prefer the Zinsser products.

Note: Peeling paint may need to be repaired without any water-based products to avoid further peeling. I have used automotive fillers (Bondo) and oil paints successfully in these situations. Note that the water in latex ceiling and latex wall paints can re-activate the paint peeling mechanism and cause small affected areas to spread. Peeling paint is sometimes impossible to repair and a new ceiling surface may need to be installed over the original surface.

14. Recommended Reading:

"General House and Property Conditions" (following this report) & **"Article Library"** (CD ROM)

These contain information about basement and slab wetness, fungus and other areas of your inspection report that might generate questions. Please make these an important part of your report review.

The enclosed CD-ROM contains hundreds of articles on home repair and healthful living that address many of the conditions in this report. I also suggest reviewing the following publications:

- Children & Hazardous Materials, 228pp (found in the 'Hazardous Materials' folder) (EPA)
- Help Yourself to a Healthy Home, 34pp (found in the 'Hazardous Materials' folder) (EPA)
- Guide to Indoor Air Quality, 32pp (found in the 'Indoor Air Quality' folder) (EPA)

15. Conclusion

Thank you for trusting me to inspect your home. I welcome your comments and appreciate suggestions. In the future, you will likely discover other defects in this home. I will gladly answer the questions that arise. Please implement all repairs that are advised in this report and note that the recommended contractors may also identify other deficiencies needing correction. Their

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inputs and suggestions will further reduce your uncertainty and make this home safer and lower-maintenance.

Please consider my services for new designs, commercial or home improvements. I appreciate your referrals to friends, family & associates.

Best Wishes,

Gregory J. Vishey, BSME, MSA, SSBB, CRI

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Major Exterior Features:	<input checked="" type="checkbox"/> Outside bibs	<input type="checkbox"/> Sprinkler system
<input type="checkbox"/> Water: (no major features)	<input type="checkbox"/> Sewer pipe	<input checked="" type="checkbox"/> Large trees

Driveway, Apron, Sidewalks	Driveway material: asphalt	Flatness: the surface is graded properly
Cracks: Masonry needs minor crack sealing. Serviceability: good, serviceable condition.		
Apron: The driveway apron is serviceable.		
Watershed: Near the home, the driveway sheds water away from the house. This is favorable.		
Sidewalks: were not present. Mis-match #: n/a		

Grading & Landscaping	Grading does not remove water from the foundation area	
Grading @ home : AWAY 1 side	FLAT 1 side	TOWARD 2 sides
Retaining walls: are not present.	Wall Mat'l:	Weep holes:
Fences: A fence is not present on this property .		
Fence finish:		
Landscaping: No major landscaping features were present.		

Trees, Tree Health & Yard	Trees do not crowd the home or grounds.
Grounds: in need of reasonable maintenance	Branch condition appears good.
The house is in the fall zone of one or more trees	Tree removal: No large trees require removal.
Trees are contacting power and/or utility lines.	
No yard debris was present needing removal.	

Exterior Masonry & Foundation (Viewed from Outside)
Veneer construction: brick or brick veneer over wood framing.
Probe outer wall: probed with a scratch awl and tested solid.
Masonry summary.: in need of minor tuck pointing repairs
Attribute location: in few areas (low cost).

Exterior Surface Walls, Windows & Trim Conditions		
Building type: Single	Veneer attachment: Rings solid	<input type="checkbox"/> Service required
Veneer brick	Brick surface: Hard	
Gray brick		
Mortar depth: Inset	Mortar cond.: Hard	Masonry drains: not present
Masonry finish: Clean	Siding type: Vinyl	Siding cond.: Serviceable
Trim mat'l: a combination of vinyl si	Condition: serviceable condition.	
Ext. Awnings: N/A	Soffits: soffits were serviceable and adequately finished	
Suspect asbestos: (no exterior materials are suspect).		
Ext.Paint:	<input type="checkbox"/> Chalking	<input type="checkbox"/> Cracking
	<input type="checkbox"/> Peeling	<input type="checkbox"/> Blisters
Stucco:	<input type="checkbox"/> Cracks	<input type="checkbox"/> Bulges
	<input type="checkbox"/> Soft spot	<input checked="" type="checkbox"/> Poor caulking
Soffit:	<input type="checkbox"/> Holes	<input type="checkbox"/> Sagging
	<input checked="" type="checkbox"/> Soffit rot	<input type="checkbox"/> Water stains
Mail box:	<input checked="" type="checkbox"/> Secure	<input type="checkbox"/> Loose
	<input type="checkbox"/> Damaged	<input type="checkbox"/> Missing
<input checked="" type="checkbox"/> Windows good cond.	<input checked="" type="checkbox"/> Rot in window frames	<input type="checkbox"/> Ice Damage
<input type="checkbox"/> Bad weather seal found	<input type="checkbox"/> No window wells present.	
Ea. window: was clear and serviceable, Glazing: intact and serviceable.		
House: would benefit from an upgrade to newer windows.		
Caulk: in need of replacement in several areas.		
Screen: Select windows were missing screens.		
Storms: These windows do not utilize storm windows.		

Patios & Decks - (Present)	<input checked="" type="checkbox"/> Outdoor patio: Cement
<input type="checkbox"/> Foundation: intact	<input type="checkbox"/> Serviceable
	<input checked="" type="checkbox"/> Deck top:cement

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<input type="checkbox"/> Outdoor lights	<input type="checkbox"/> Electrical n/a	<input type="checkbox"/> Structure: Wolmanized
Structural Fast.: n/a	Surface Fast.: n/a	Height & railing: n/a
Steps: n/a	Ground cover: n/a	Spindle spacing: n/a

6.0 Roof (as viewed from outside)		Surface/Shingle: 20-25 years
Type: Hip roof (1 long peak)	Roof - walked-on	Curl: curling (unfavorable)
Surface: asphalt tab shingle	<input type="checkbox"/> Ridge straight	<input checked="" type="checkbox"/> Shingle o/hang < 1/2" (incorrect)
Roof minor repairs required	<input type="checkbox"/> soft areas	Layers: 2 layers are visible at the edge
Roof pitch: The roof pitch will properly shed water.		
Attachment: Roofing nails Good spacing, minor sealing required on nail heads		

Roof age: in the last third of its life. A new roof should be planned in 5-8 years.

<input type="checkbox"/> Spalling	<input checked="" type="checkbox"/> Nail pops	<input type="checkbox"/> Cracked tabs	<input type="checkbox"/> Torn tabs	<input type="checkbox"/> Skylights
<input type="checkbox"/> Cuts	<input type="checkbox"/> Missing tabs	<input type="checkbox"/> Failed vent seal	<input type="checkbox"/> Loose vent	<input type="checkbox"/> Sat. dish
<input type="checkbox"/> Wasps	<input type="checkbox"/> Bird nests	<input type="checkbox"/> Exposed wood	<input type="checkbox"/> Flipped tabs	<input type="checkbox"/> TV antenna
<input type="checkbox"/> Edge vent	<input checked="" type="checkbox"/> Can Vents	<input type="checkbox"/> Peak Vent	<input type="checkbox"/> Ridge Vent	<input type="checkbox"/> Radio ant.
<input type="checkbox"/> Rot in chimney soffit	<input type="checkbox"/> Wildlife screen	<input checked="" type="checkbox"/> Spalled brick	<input type="checkbox"/> Holes	
<input type="checkbox"/> Damaged column	<input type="checkbox"/> Chimney saddle	<input checked="" type="checkbox"/> Cap is cracked	<input type="checkbox"/> Bare wood	
<input checked="" type="checkbox"/> Height > 2' above @ 10'	<input checked="" type="checkbox"/> Cover missing	<input type="checkbox"/> Loose mortar	<input type="checkbox"/> Fall hazard	
<input checked="" type="checkbox"/> Soffit Vents		<input type="checkbox"/> Power vent/fan	Est. min. vent needed: 4 sq ft	
poor - not supporting the top ventilation n				
<input checked="" type="checkbox"/> Horizontal drip edge: a drip edge was not present (one was only present over the front door) in serviceable condition				
<input checked="" type="checkbox"/> Side (slope) drip edge: a metal drip edge was present at the sloped edges				
<input checked="" type="checkbox"/> Gutters: aluminum gutters in serviceable condition Gutters are drooping in areas and need repair.				
<input checked="" type="checkbox"/> Downspouts: aluminum downspouts in serviceable condition all drain to the foundation				
Flashings: galvanized steel flashings in serviceable condition no ice barrier was visible.				
Roof: no special features were present. Chim cap: observed to be cracked and needing service.				
Chimney column: observed to be intact.				

8.0 Garage (Present)		<input checked="" type="checkbox"/> Side Entrance		<input checked="" type="checkbox"/> Side Window(s)	
Electricity: The garage had operable electrical.		Plumbing: There was no plumbing in the garage.			
Roof cond.: The roof condition was similar to the home's.		<input type="checkbox"/> Rot in garage roof			
Pwr door op: A working, power garage door opener was in place.		<input checked="" type="checkbox"/> Garage door: Repair			
Trips: The power door system did not have safety trips.					
<input checked="" type="checkbox"/> Reversal load: The power door does not reverse when obstructed.			Garage heat: The garage was unheated.		
# Bays: 2	# Pwr bay doors: 1	# Man. bay doors: 0	<input type="checkbox"/> Adj/lube hardware		
<input type="checkbox"/> Outside button	<input checked="" type="checkbox"/> Inside	<input type="checkbox"/> Keypad	<input type="checkbox"/> Gutters serviceable	<input type="checkbox"/> Serviceable finish	
<input checked="" type="checkbox"/> Fire-rated house door	<input checked="" type="checkbox"/> 1/2" Gypsum barrier	<input checked="" type="checkbox"/> Vent path to house	<input type="checkbox"/> Old heater untested		
<input type="checkbox"/> Open electrical found	<input checked="" type="checkbox"/> Temporary electrical	<input checked="" type="checkbox"/> GFCI outlets needed	<input type="checkbox"/> Gas service		
<input checked="" type="checkbox"/> Cement serviceable	<input type="checkbox"/> Water is pooling	<input type="checkbox"/> Walls off plumb	<input type="checkbox"/> Cut joist(s)		

Exterior Doors:	Front door bell: operational.	<input type="checkbox"/> Rear door bell: n/a
Front: steel, hollow-core door Seal: serviceable. Hdw serviceable w/ good with a serviceable lock		
Railing: The entry had a small step-up - no railing needed.		

13.1 Basement/Crawl/Foundation/Slab STRUCTURE - ** Basement/Crawl/Slab: basement and slab		
Foundation: block/mortar construction.	<input checked="" type="checkbox"/> Layout is: partitioned	
<input checked="" type="checkbox"/> Vertical cracks none	<input type="checkbox"/> Column rusted at the base	
<input type="checkbox"/> Finished wall w/o vapor barrier	<input checked="" type="checkbox"/> there is no visible wall bow	
<input type="checkbox"/> Rot in structure: Main beam	<input checked="" type="checkbox"/> Joists: correct cross-bracing	

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<input checked="" type="checkbox"/> Beam is serviceable	<input type="checkbox"/> Poor wall construction	<input type="checkbox"/> Joists are damaged
---	---	---

Foundation Systems (Interior view)	
Foundation settling : was intact - no visible damage.	<input checked="" type="checkbox"/> Settling amt is estimated at < 1/4"
Vert. supports : steel columns is/are in line with the load direction (favorable). & centered and locked on the main beam appear bedded in a foundation of concrete.	
Beam type: The main beam is a single steel "I-Beam."	Wall: that the foundation is serviceable.
Foundation Serviceability: serviceable.	
Joist Access: covered in areas preventing inspection.	Joists : 2 x 10, 16" center, wood.
Subfl.: tested solid when probed w/a metal scratch awl.	Odor: smelled dry and clean. <input type="checkbox"/> Cracked Joist(s) (1)
Sump : a single sump was found. When tested, the sump operated normally. Water was present in sump while tested. No back-up system was present. The sump assembly was loose and the check valve malfunctioned.	
Basement floor: the floor was painted concrete and was flat and well laid.	
Bsmnt WALL: dry but exhibited past water stains. Leakage was not present at the time of inspection.	
Bsmnt FLOOR: dry.	Normality: this finding is considered normal.
Basement flooding: was no evidence of past flooding No water stains were found- leakage is low risk.	
Mold: There was no apparent water/fungus damage. No fungus growth was observed.	
Floor asbestos: (no floor surfaces are suspect)	Efflorescence: (at the uphill side of the foundation) Traces of efflorescence were found on the walls.

Basement Ceiling, Wall and Floor SURFACES / FEATURES (Present)		
<input type="checkbox"/> Open electrical boxes	<input type="checkbox"/> Exposed (live) electrical	<input checked="" type="checkbox"/> Incorrect wire routing
<input checked="" type="checkbox"/> Temp electrical: wiring	<input type="checkbox"/> Missing wall plates	
<input type="checkbox"/> Insect infestation	<input checked="" type="checkbox"/> Ceiling: drywall - half of basement	
<input type="checkbox"/> Multiple floor layers	<input checked="" type="checkbox"/> Floor drains- visible	<input checked="" type="checkbox"/> Floor traps- present

Crawl: (n/a - There is no Crawl)	<input type="checkbox"/> Crawl floor: accessible - flat dirt
<input type="checkbox"/> Barrier:serviceable plastic sheet	<input type="checkbox"/> Crawl height: <18"
<input type="checkbox"/> Crawl space insulated	<input type="checkbox"/> Crawl contains no sump
<input checked="" type="checkbox"/> Mold on crawl space joists	<input type="checkbox"/> Evidence of wildlife

Joist Allowable Spans for DF-2				Truss Allowable Span [* needs cross bracing]			
2x	12" OC	16" OC	24" OC	Truss	12" OC	16" OC	24" OC
6	<10'9"	<9'9"	<8'6"	10"	<21'3"	<20'0"	<18'7"
8	<14'2"	<12'10"	<11'3"	12"	<24'5"	<23'0"	<21'3"
10	<18'0"	<16'4"	<14'4"	14"	<27'11"	<25'9"	<23'2"
12	<21'11"	<19'11"	<17'5"	16"	<30'4" *	<27'9"	<24'10"

9.0 Electrical Service	Drip loop: no drip loop
Wire loc.: overhead with adequate ground clearance.	<input checked="" type="checkbox"/> Service required on main wires
Weather seal: was sealing poorly; needing service.	<input type="checkbox"/> Interruptible A/C present
Trees: were free and clear of trees.	<input type="checkbox"/> Main wire < 12' to driveway
Property: did not have utility lines crossing this property.	
<input type="checkbox"/> Poor panel mount on exterior	<input checked="" type="checkbox"/> Ground rod not visible <input type="checkbox"/> Spliced (un-allowed)
<input type="checkbox"/> Burned breaker/fuse holder	<input type="checkbox"/> Missing clamps @ top <input type="checkbox"/> Panel screws incorrect
<input checked="" type="checkbox"/> # Missing/open blanks: 0	<input checked="" type="checkbox"/> # Unused Positions: 0 <input checked="" type="checkbox"/> # Double-taps 0
<input type="checkbox"/> Al/Cu Co-joined (unfavorable)	<input type="checkbox"/> Preservative needed on Alu. leads
Box Accessibility: accessible Location: basement Type: fuse	
Rated load: 60 amps Main wire cap.: 4 AWG Copper 100A with cover removed	
Subpanel: all inspected and found to be serviceable.	Box AFCI: not present
Main wire mat'l.: copper Branch wires: all copper (safe).	Box GFCI: not present
Main breaker: is sized appropriately for the main feed (safe).	2-3 Wire:

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2-wire system w/o ground	
Rust: evidence of rust in the panel base in panel Breaker cases: good, with no damage evident	
Wire/brkr match: all properly matched (favorable). Wire attach: loose in areas and tightened.	
<input checked="" type="checkbox"/> OK Voltage? A= 120 B= 120 Voltage balance: normal Insulators: intact and serviceable.	
Pipe ground: visually bonded to the water pipes. General wiring: needs repairs as noted.	

Wire Gauge/Capacity	Cu 14 Ga - 15A	Cu 12 Ga - 20A	Cu 10 Ga - 30A
Cu 8 Ga - 40A	Cu 6 Ga - 55A	Cu 4 Ga - 70A	Al 10 Ga - 20A
Al 8 Ga - 30A	Al 6 Ga - 40A	Al 4 Ga - 55A	Al 2 Ga - 70A

10.0 Water Service / Plumbing / Sewer		
Water pipes: copper pipe with solder. - and city supply: copper (favorable)		
Main valves: both valves were functional by hand	<input type="checkbox"/> Multiple water meters	
Meter bond: unbonded; creating a safety hazard.	General pipe cond.: serviceable.	
Waste pipes: cast iron pipe <input type="checkbox"/> Sewer cleanout damaged	<input checked="" type="checkbox"/> Water softener present	
<input checked="" type="checkbox"/> Public water supply	<input type="checkbox"/> Testing recommended	<input checked="" type="checkbox"/> Septic field listed
<input type="checkbox"/> Whole house filter	<input type="checkbox"/> Meter sensor present	<input checked="" type="checkbox"/> Bib shut-offs present
<input checked="" type="checkbox"/> Possible lead solder	<input type="checkbox"/> (pipe condition) found	<input checked="" type="checkbox"/> Water pipes supported

Gas/Heating:	<input checked="" type="checkbox"/> Public natural gas	<input checked="" type="checkbox"/> Gas pipe supported
<input checked="" type="checkbox"/> Gas line black pipe	<input checked="" type="checkbox"/> Gas leak(s) not observed	<input type="checkbox"/> Uncapped, open line
<input type="checkbox"/> Copper tubing gas line used	<input checked="" type="checkbox"/> Gas meter outside	<input type="checkbox"/> Meter sensor present

10.3 Water Heater(s) 1991/92	Type: The water heater was a stand-alone design.	
# Water htrs: (a single unit) is hot and operational and powered by natural gas		
Cover: This heater did not have added insulation.	ANSI Spec: 1991 Age: 15-20 years.	
Case: intact and considered serviceable.	Capacity: 40 gallons <input type="checkbox"/> Stuck valve	
Vent pipe: adrift to the water heater.	<input checked="" type="checkbox"/> Loose mortar @ chimney	
<input checked="" type="checkbox"/> Spill tube not 6-24" to floor	<input type="checkbox"/> Gaps in vent pipe	<input type="checkbox"/> Water leak present
<input checked="" type="checkbox"/> Dielectric isolators missing	<input type="checkbox"/> Gas leak: pilot valve	<input type="checkbox"/> Abandoned tank
<input type="checkbox"/> Water heater has poor access	<input type="checkbox"/> Unstable perch	Plumbed: correctly plumbed.

11.0 Main Heating System (1) 1991/92	Overall Condition: serviceable	
Heat type: Forced Air Heating newer design, mid-efficiency powered by natural gas.		
Htr was checked and found to be serviceable; there was no visible flame disruption		
Cycle: (when viewed over 1 cycle)	Vent pipe: secure but the chimney seal requires repair	
CO test: this test was conducted and measured CO Level: 0 Amount: ppm CO (favorable)		
Exterior.: no significant findings and appears serviceable. Case.: intact and considered serviceable.		
Gas: appeared and checked serviceable.	Blower: The blower for the system operated normally.	
Suppl heater: There were no supplemental heating systems.	<input type="checkbox"/> No Flue liner (req'd 1992 +)	
Thermostat: standard thermostat that was operational during the inspection.		
<input type="checkbox"/> Htr Poor condition	# Units in this home: 1	<input type="checkbox"/> Multiple zones
<input checked="" type="checkbox"/> Air filter: Clean	<input checked="" type="checkbox"/> Burners need cleaning	<input type="checkbox"/> Rooms w/o heat
<input checked="" type="checkbox"/> Humidifier Missing	<input type="checkbox"/> Plenum contacts furnace	<input type="checkbox"/> Fouled vent grills
<input type="checkbox"/> Poor flame pattern	<input type="checkbox"/> Inlet <10' to firebox	<input type="checkbox"/> Replace duct tape w/ H/C tape
<input checked="" type="checkbox"/> Ducts are dirty	<input type="checkbox"/> Woodstove incorrect <36" or 18" w/steel +1" air gap	
<input type="checkbox"/> Possible asbestos: (no fire barriers are suspect)	<input type="checkbox"/> Pipe is a trip hazard	
<input type="checkbox"/> Possible asbestos: (no gaskets or seals are suspect)	<input type="checkbox"/> Heating system wet	
<input type="checkbox"/> Possible asbestos: (no wrapping materials are suspect)	<input type="checkbox"/> Air leaks need taping/sealant	

12. Air Conditioning: (1 unit)	<input checked="" type="checkbox"/> An air conditioner was present on the home.
This system was untested due to low temperatures and no performance data could be collected.	

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The outside condenser was adequately mounted and sub-panel wiring was in serviceable condition.			
The service disconnect was verified functional. The A/C disconnect was a Pull-type disconnect.			
Vegetation crowds the condenser and needs clearing <input type="checkbox"/> Case: Poor exterior cond.			
<input checked="" type="checkbox"/> Base is level	<input type="checkbox"/> Subpanel loose	<input type="checkbox"/> Noisy (bearing risk)	<input type="checkbox"/> Exposed wiring

13.2 Main Floor Interior - Vertical & Horizontal surfaces, Stairs	
Walls: drywall - condition is good; requiring general cleaning and touch-up.	
Wall framing: wood framing Water damage - did not show signs of water damage.	
Window type: double pane metal frame sliding operation - good but some windows need adjusting.	
Hardw. requires repair or replacement in select areas.	Damage: found on at least one window.
General: generally in good, serviceable condition.	Ceiling Cond.: appeared flat and secure.
Stairway: wide and secure doors not open into stairs Railings: handrails were present and secure	

Interior Floor Features:		<input checked="" type="checkbox"/> Hardwood	<input checked="" type="checkbox"/> Serviceable
<input type="checkbox"/> Carpeting	<input type="checkbox"/> Serviceable	<input type="checkbox"/> Good padding	<input type="checkbox"/> Marble tile
<input type="checkbox"/> Linoleum	<input type="checkbox"/> Serviceable	<input checked="" type="checkbox"/> Ceramic tile	<input checked="" type="checkbox"/> Serviceable

13. Interior Wall Features:		<input checked="" type="checkbox"/> Paint: Good	<input checked="" type="checkbox"/> Sanding: Good
<input type="checkbox"/> Possible structural damage from remodeling	<input type="checkbox"/> Nail pops	<input type="checkbox"/> Poor workmanship	
<input type="checkbox"/> Wall paper peeling	<input type="checkbox"/> Smoke stains	<input type="checkbox"/> Large holes	<input type="checkbox"/> Water damage
<input type="checkbox"/> Walls are off-plumb	<input type="checkbox"/> Separating joints	<input type="checkbox"/> Loose taping	<input type="checkbox"/> Loose wall trim

Interior Ceiling Features:		<input type="checkbox"/> Sagging area	<input type="checkbox"/> Rough finish
<input checked="" type="checkbox"/> Water stains	<input type="checkbox"/> Wet/water dripping	<input type="checkbox"/> Fall hazard	<input checked="" type="checkbox"/> Peeling paint - kitchen.
<input type="checkbox"/> Gloss finish - de-glossing req'd to paint	<input type="checkbox"/> Smoke stained	<input type="checkbox"/> Excessive stucco	

General Water Fixtures and Faucets:		Flow: adequate.
Condition: operational and did not exhibit leaking.		
Shut-offs? Inspected fixtures had shut-off valves installed.	<input type="checkbox"/> Hot-Cold reversed	
Stains: These areas showed past water leaks and were dry.	<input checked="" type="checkbox"/> Water dripping/running - BR toilet.	
<input type="checkbox"/> Operate poorly and require service	<input type="checkbox"/> Heater vent is inside of cabinet	

Fireplace:		Qty: a single fireplace was inspected.
Damper Fireplace Dampers were serviceable. Fireplace liners were in serviceable condition.		
Doors Creosote build-up was judged to be light (safe).		
<input checked="" type="checkbox"/> Missing doors	<input type="checkbox"/> Attachment: (n/a)	<input type="checkbox"/> Gas valve <4' (valve not found)
<input type="checkbox"/> Masonry: Loose brick	<input type="checkbox"/> Missing gas logs	

Interior Doors:		Door hardw: generally tight and in good serviceable condition.
<input type="checkbox"/> Interior Doors warped	<input type="checkbox"/> Damaged bi-fold door	<input type="checkbox"/> Poor surface finish
<input type="checkbox"/> Doors won't latch	Condition: were serviceable	<input type="checkbox"/> Frame off-square

Kitchen:		Smoke Alarms: did have smoke detectors installed.
Kitchen Cabinet cond: good Attach: secure. with adequate storage capacity and good access.		
Counter Mat'l: a Formica-type material securely attached good condition with minor defects.		
Floor: ceramic tile surface in good condition flat and level and is judged to be serviceable.		
Range: was electric; it was inspected and serviceable.	Oven: was electric; it was inspected and serviceable.	
Range vent: inspected and serviceable. recirculates air	Sink disposal: not present.	



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Refrigerator: serviceable and did not contain an icemaker.	A garbage compactor was not present.
Dishwasher: The dishwasher was not inspected.	
Clothes dryer: electric; it was inspected and serviceable.	Laundry washing machine: inspected and serviceable.
<input checked="" type="checkbox"/> Distance to cabinets: 18" (ok) <input checked="" type="checkbox"/> Cabinets: hinges are loose	<input type="checkbox"/> Water damage at sink

Bathroom #1: Main floor Bedroom	<input checked="" type="checkbox"/> Outlets not GFCI	<input type="checkbox"/> Mold (mold)
<input checked="" type="checkbox"/> Tub w/tile surround <input type="checkbox"/> Shower Stall	<input checked="" type="checkbox"/> Toilet	<input checked="" type="checkbox"/> Sink <input type="checkbox"/> Stopper inop
<input type="checkbox"/> Free-Standing Tub <input type="checkbox"/> Heater	<input type="checkbox"/> Possible drywall behind tile (unfavorable)	
<input type="checkbox"/> Chipped/cracked <input type="checkbox"/> Steam bath	<input checked="" type="checkbox"/> Bad trap: Tub	<input checked="" type="checkbox"/> Vent fan needed
<input type="checkbox"/> Slow drain: n/a <input type="checkbox"/> No shutoffs: n/a	<input type="checkbox"/> Valve stem leaks: n/a	
<input checked="" type="checkbox"/> Loose shower head (repair) <input checked="" type="checkbox"/> Water runs: Toilet	<input type="checkbox"/> Loose towel bar	
<input checked="" type="checkbox"/> Floor: Ceramic tile on backer board with grout	<input type="checkbox"/> Heavy rot	
<input type="checkbox"/> Peeling paint: wall	<input checked="" type="checkbox"/> Gaps in caulk need repair	<input type="checkbox"/> Warped door

Bathroom #2: First floor Hall	<input checked="" type="checkbox"/> Outlets not GFCI	<input type="checkbox"/> Mold (mold)
<input type="checkbox"/> Tub w/tile surround <input type="checkbox"/> Shower Stall	<input checked="" type="checkbox"/> Toilet	<input checked="" type="checkbox"/> Sink <input type="checkbox"/> Stopper inop
<input type="checkbox"/> Free-Standing Tub <input type="checkbox"/> Heater	<input type="checkbox"/> Possible drywall under tile (unfavorable)	
<input type="checkbox"/> Chipped/cracked <input type="checkbox"/> Steam bath	<input type="checkbox"/> Bad trap: n/a	<input checked="" type="checkbox"/> Vent fan serviceable
<input type="checkbox"/> Slow drain: n/a <input type="checkbox"/> No shutoffs: n/a	<input type="checkbox"/> Valve stem leaks: n/a	
<input type="checkbox"/> Loose shower head (repair) <input type="checkbox"/> Water drips/runs: n/a	<input type="checkbox"/> Loose towel bar	
<input checked="" type="checkbox"/> Floor: Ceramic tile on backer board with grout	<input type="checkbox"/> Heavy rot	
<input type="checkbox"/> Peeling paint: wall	<input type="checkbox"/> Gaps in caulk need repair	<input type="checkbox"/> Warped door

7.0 Attic & Structure	Access: Attic access was through a garage ceiling hatch.	
Limits: All major attic areas were accessible. No attic access limitations were present.		
Vents: Vents were improperly cut into the roof deck.	Dryness: dry in all viewable areas.	
Mold: No visible surfaces or materials were at risk.	Fan: No forced ventilation present.	
Fire damage: No fire damage was evident in the attic	A whole house fan was not present.	
Electrical: no electrical features were observed in the attic.	<input type="checkbox"/> FG Blow 2.5	<input checked="" type="checkbox"/> FG Bat 3.2
Attic floor: 2 x 4 wood truss	Spacing: 24 inch centers	<input type="checkbox"/> RkWool 2.2 <input type="checkbox"/> Celulose 3.5
<input type="checkbox"/> Joists Off-plumb		<input type="checkbox"/> Pearlite 2.7 <input checked="" type="checkbox"/> Cotton 3.5
Roof deck: 2 x 4 wood joists with 1 x 6" gap boards.	<input type="checkbox"/> Extru.PolyS 4	<input type="checkbox"/> PolyIso C 6
Gen. Cond.: generally sound in construction and solid.	<input type="checkbox"/> PIC Foil 7	<input type="checkbox"/> Spray PU 5.9
<input type="checkbox"/> Asb. Risk: (no suspect material was found in the attic)	<input type="checkbox"/> Verm 2.7	~R-val: 20-26
Insulation Base: treated cotton	2 nd layer: added roll/batt fiberglass.	
Distribution: uniformly distributed above the living space.		
Soffit visual: observed to be vented and were stuffed excessively with insulation.		
Light @ soffit: no light was seen in the soffits.		
<input checked="" type="checkbox"/> Load floor no load floor was present	<input checked="" type="checkbox"/> Pests: bait traps for mice were found	
<input checked="" type="checkbox"/> Rafter boards are not present	<input checked="" type="checkbox"/> Insul.: No insulation applied to the roof deck (favorable)	
Verification at leaving site:		
<input checked="" type="checkbox"/> Oven off	<input checked="" type="checkbox"/> Refrig/freezer on (if full)	<input checked="" type="checkbox"/> Electrical on

<end of inspection checklist>