

INSPECTION REPORT



For the Property at:
21309 WOODHILL DR.
FARMINGTON HILLS, MI 48167

Prepared for: SHRIDHAR KULKARNI
Inspection Date: Saturday, December 4, 2010
Prepared by: David Richardson

Milestone Inspections, LLC
15681 Portis St.
Plymouth, MI 48170
734-748-7270

December 5, 2010

Dear Shridhar Kulkarni,

RE: Report No. 1845
21309 Woodhill Dr.
Farmington Hills, MI
48167

Thank you for retaining Milestone Inspections, LLC for your inspection. I enjoyed working with you. This is your inspection report. See "The Bottom Line" section of the report for the primary concerns and the body of the report for other concerns.

Don't forget to access the HOMEBOOK from the table of contents on the last page of the report (it can be saved to your computer), for useful information about your maintaining your home. The HOMEBOOK also contains detailed information about the concepts/issues raised by your inspector (e.g. ways to keep your basement dry, implications of foundation cracks, attic ventilation, etc). Also, visit WWW.MANAGEMYHOME.COM for a useful and free online home maintenance program.

Again, thank you for retaining Milestone Inspections, LLC for your inspection. Feel free to call us at (734) 748-7270 if you have any questions regarding the inspection or report.

Sincerely,

David Richardson
on behalf of
Milestone Inspections, LLC

Milestone Inspections, LLC
15681 Portis St.
Plymouth, MI 48170
734-748-7270

INVOICE

December 5, 2010

Client: Shridhar Kulkarni

Report No. 1845

For inspection at:

21309 Woodhill Dr.

Farmington Hills, MI

48167

on: Saturday, December 4, 2010

Full Inspection

\$425.00

Radon Testing

\$85.00

Total

\$510.00

PAID IN FULL - THANK YOU!

Milestone Inspections, LLC
15681 Portis St.
Plymouth, MI 48170
734-748-7270

INSPECTION AGREEMENT

Report No. 1845

21309 Woodhill Dr., Farmington Hills, MI December 4, 2010

PARTIES TO THE AGREEMENT

Company

Milestone Inspections, LLC
15681 Portis St.
Plymouth, MI 48170

Client

Shridhar Kulkarni

This is an agreement between Shridhar Kulkarni and Milestone Inspections, LLC.

PRE-INSPECTION AGREEMENT

Please Note: The purpose of this note is to establish an understanding of the written contract between Milestone Home Inspections and the Buyers of the inspected property. It is the responsibility of the Buyers to read the entire report including this agreement. Acceptance of this agreement and the inspection results, including acceptance of the scope of the inspection and what is not inspected, is implied by the Buyers reliance on the report and the submittal of the paid fee.

Milestone Home Inspections is pleased to offer you the valuable service of a visual inspection of the home you are considering purchasing. Milestone Home Inspections is a certified member of the American Society of Home Inspectors (ASHI) and your inspection will be performed in accordance with ASHI standards (available upon request). We will provide you with verbal inspection results and a written inspection report for the fee listed on the front of this report. Only those areas of the home detailed in the written report shall be inspected. The purpose of the inspection is to identify the significant and potentially significant concerns that are readily evident based on visual inspection of the exposed surfaces. Our goal is not to create a detailed maintenance or repair list. Minor problems, positive aspects, and descriptive information are provided as a courtesy to further assist the buyer in knowing the house that is being purchased, but the lists of these items should not be considered exhaustive. Also, it should be understood that minor concerns will be missed due to the nature of a visual home inspection furniture and stored items typically block outlets, walls, closet walls, floors, etc. Some minor concerns will only be verbally discussed.

It is important that you recognize that the inspection results are the opinion of the inspector and not a warranty of any condition of the property or code compliance requirements. Likewise, estimates of repairs are not to be relied on as they are merely opinions of the inspector. You should contact a repair specialist for any estimates you desire (more than one estimate is recommended). Any conditions requiring repair, replacement, or servicing should be evaluated by licensed professionals in appropriate trades before closing.

Milestone Home Inspections does not inspect and is not responsible in any way as to the condition of:

cosmetic defects- tile cracks, worn carpet, etc.
security, audio, or intercom systems
FHA/VA and/or City inspection items
sprinkler systems & household appliances
EIFS siding (fake stucco)
thermocouples
swimming pools, hot tubs, or saunas
hidden or latent defects
freshly painted surfaces
well, septic, or softener systems

MILESTONE INSPECTIONS, LLC

INSPECTION AGREEMENT

21309 Woodhill Dr., Farmington Hills, MI December 4, 2010

building code or zoning violations
analysis of structural integrity underground sewers, plumbing or tanks (heating oil, etc.)
hidden insect, mold, rot, moisture or other infestation/damage
flood plain determination or property flood potential
fire or safety equipment
chimney flues or shower pans
recreational equipment
systems shut down or otherwise secured
environmental testing mold, lead, radon, asbestos, etc.
electromagnetic field testing (from power lines, appliances, etc.)
geologic stability of any property
property value or appraisal

The total liability of the inspector for any claimed mistakes or omissions, including but not limited to claims of breach of contract or negligence, shall be limited to the fee paid for inspection. If you feel a mistake has been made by your inspector, you must contact Milestone Home Inspections in writing and allow them to re-inspect the area in question prior to making any repairs. Failure to do so bars any potential claims relating to said repair. All claims must be made within one year of inspection date.

If a claim is made by you against Milestone Home Inspections and you are not successful in prosecuting it, all costs and fees resulting from your claim, including all attorney fees of the inspector, will be paid by you. This Inspection Agreement contains the entire agreement between Milestone Home Inspections and you. No amendments or modifications shall apply unless written and signed by Milestone Home Inspections and you. This report is limited to the content within these pages.

I, Shridhar Kulkarni (Signature) _____, (Date) _____, have read, understood and accepted the terms of this agreement.

THE BOTTOM LINE - PRIMARY CONCERNS FOUND

Report No. 1845

21309 Woodhill Dr., Farmington Hills, MI December 4, 2010

THE BOTTOM

ROOFING

EXTERIOR

STRUCTURE

ELECTRICAL

HEATING

COOLING

INSULATION

PLUMBING

INTERIOR

REFERENCE

THE PURPOSE OF THE INSPECTION IS TO IDENTIFY SIGNIFICANT CONCERNS. This "Bottom Line" summary contains discussion of the primary concerns found. They include those items that may cost more than \$500 to repair by a professional or are significant safety concerns. Cost ranges are given for these items only. Costs are not typically given for the other concerns in the body of the report. Cost ranges should be considered rough approximations only. Estimates should be obtained from licensed contractors prior to decision-making. Estimates can vary up to 300% or more. Repairs are not always required immediately depending on the comfort level of the buyer; however, it is up to the buyer to decide.

We recommend contacting licensed contractors to address/repair all concerns in this report. Concerns listed in this report, but not identified as significant, could turn out to be significant upon further investigation. Some possible concerns are noted for monitoring over time. If monitoring reveals ongoing problems, significant cost repairs could be needed. Retaining appropriate contractors is prudent to address/repair all noted concerns.

HOMEBOOK: The last page of this report is a table of contents for a home reference manual (Homebook). Click on the chapter links for access - it can be saved to your computer. The Homebook contains detailed information about home maintenance and problems. The Homebook should be reviewed as a supplement to the information provided by the inspector.

HOME MAINTENANCE: Visit WWW.MANAGEMYHOME.COM for a free website regarding home maintenance. A month-by-month maintenance checklist is provided with many other tools for managing your home maintenance.

PRIMARY CONCERNS FOUND: These are discussed below.

OVERALL ASSESSMENT & POSITIVE ASPECTS of the inspected home are included below.

MINOR CONCERNS: Minor concerns are those likely to cost less than \$500 to repair by a professional. These concerns are not listed in this "Bottom Line" summary section, but in the body of the report. Some minor concerns will not be listed in the report due to the fact that the purpose of the inspection is to report significant concerns. We need to look past many minor concerns in an attempt to identify the significant concerns. The list of minor concerns should not be considered exhaustive.

CONSIDERATIONS FOR ALL BUYERS: Two lists of considerations for all buyers were handed out at the inspection. The lists include general considerations to gather more information about the home and maintenance actions that should be reviewed and addressed after moving in. These lists should be considered part of the report. The items in the list will, for the most part, not be re-iterated in the report unless emphasis is needed.

PHOTOS & PICTURES are typically only included in the body of the report. Refer to the photos and pictures for clarification of concerns discussed in this "Bottom Line." Also, click on the blue links in the report for more information.

INSPECTOR QUALIFICATIONS (David Richardson): ASHI Certified Inspector #113366 (American Society of Home Inspectors); B.S. Civil Engineering (U. of Mich.); Builder License #2101147875; Errors & Omissions Insured.

FOLLOWING ARE THE PRIMARY CONCERNS FOUND:

Roofing

SLOPED ROOFING \ Asphalt shingles

Condition: • [Old, worn out](#)

- Roof appears to be about 20 years old. Shingles significantly worn in many locations. Replacement needed. There is mold on the roof sheathing in the attic from condensation and poor ventilation - moldy sheathing should be replaced with shingles. Replace/seal all flashings (chimney, addition, etc.) as part of re-roof. Some of the sheathing boards are sagging, so for new shingles to lay flat some board replacement may be needed - roofer needs to assess all boards and replace as needed. To avoid moss growth on front (north) roof surfaces have roofer install galvanized strips.

Cost: +/- \$10,000 - obtain estimates for actual - cost, in part, depends on extent of sheathing that will be replaced.

Exterior

General

• In-ground pool system present - only checked in cursory manner for obvious concerns. The pump/filter/heater system is old and likely needs replacement or significant repair. Also, the diving board is damaged. The pool is covered so view of liner concealed. Expect significant cost for repair/upgrade - obtain estimates when weather permits.

WALLS \ Brick, stone and concrete

Condition: • [Masonry deterioration](#)

- Retain contractor to repair exterior brickwork as needed, including replacement of damaged bricks on chimney, repair of damaged brick above the back addition, and re-pointing on back. The cracked brickwork above the back addition appears due to settlement of the brick support structure which is concealed so can't be assessed. Often the support sag and then stay in place, but need to monitor for ongoing brick movement that could indicate the need for additional repair.

Cost: +/- \$500 - obtain estimates for actual.

PORCHES, DECKS, STEPS, PATIOS AND BALCONIES \ Steps and landings

Condition: • The deck staircase in back is loose and tipped - repair needed to make solid. Also, there are rotted deck boards and other minor concerns - repair as needed.

Cost: +/- \$500 to level/secure - more if replacement desired - obtain estimates for actual.

LANDSCAPING \ Lot grading

Condition: • [Improper slope](#)

- The front yard and driveway slopes toward the house so rain can accumulate near the house thereby increasing the chance for basement leaks. Areas where water collects are evident. Need to re-grade and install French drains so rain readily drains around the house (not into the house). Also, need to clear ground down along the front of the house so wetness in soil doesn't weep through the brick and into the wall. Leak stains are evident in the basement at top of the foundation, cracks, and plumbing drain, so leaking could be active (active leak at main drain - separate report items - Plumbing, Interior, and Exterior sections).

Task: Re-grade and install French drains as needed to direct rain around the house.

Cost: Depends on extent or drainage corrections performed - obtain estimates from landscaping contractors.

LANDSCAPING \ Walk and driveway

Condition: • [Cracked or damaged surfaces](#)

- Significant driveway cracks, spalling, and tripping hazards - repair, level, replace as desire/needed. Replacement cost +/- \$5 per square foot. Calculate based on amount to be replaced, unless only patched. Replacement of all significantly damaged sections +/- \$4,000 - obtain estimates for actual.

Electrical

DISTRIBUTION SYSTEM \ Smoke detectors

Condition: • Smoke detectors should be installed on all levels of the house, in hallways outside bedroom areas, and in all bedrooms. Upon moving in, install and test smoke detectors as needed.

- Units old and/or missing.

Cost: +/- \$200

Cooling & Heat Pump

AIR CONDITIONING \ Life expectancy

Condition: • [Old](#)

- The air conditioning system is 20 years old - about the normal maximum life expectancy. System not operated due to low outside temperature. System could fail at any time given age. Inquire with seller about system operation & budget for replacement.

Cost: +/- \$3,000 - obtain estimates for actual.

Plumbing

WASTE PLUMBING \ Drain piping - performance

Condition: • There is wetness at the main house drain pipe in the circuit breaker room - either from drainage leaks outside or leaking pipe. Pipe penetration through the foundation was sealed in the past with concrete. Sealing needed again (see INTERIOR section of report about injection-sealing), but could be leak - have plumber check if concerned.

WASTE PLUMBING \ Venting system

Condition: • Plumbing vent pipe is disconnected in the attic, re-glueing needed.

Cost: +/- \$100

WASTE PLUMBING \ Sump pump

Condition: • The main sump pump pipe is significantly rusted and the back-up sump leaks when operated (water-pressure activated unit - water supply turned off so pump will not work if needed). Replacement/repair of pumps needed - retain plumber.

Task: Also, inquire with seller about any flooding conditions that may have occurred and details as to cause and repairs made (installation of back-up sump pump and flood line near circuit breaker panel likely indicate past flooding).

Cost: +/- \$500 for replacement

FIXTURES AND FAUCETS \ Faucet

Condition: • [Drip, leak](#)

Location: Front hose bibb & 1/2 bath sink.

Task: Repair dripping faucets.

Time: Priority (wasting water).

Cost: +/- \$150

Interior

General

- [Radon testing is being conducted per request of the buyer - results will be reported separately \(usually within 48 to 72 hours\). Click on this link for information about radon at the EPA website.](#)
- [Mold removal is needed in one or more locations. Click on this link for "A Brief Guide to Mold, Moisture and Your Home" \(EPA document\).](#)
 - Wash mold from surfaces in the furnace room, around the sump pump, in the northeast basement closet, and in the circuit breaker closet. The mold in the circuit breaker closet could indicate past sewer back-up, flooding due to sump pump failure, or leaks at the main drain/foundation interface (stains at this location in breaker room). Inquire with seller about cause or past flooding. Need to maintain outside drainage, repair the sump pumps, and repair foundation leaks to avoid conditions conducive to mold. Mold does not appear to be a significant health issue at this time. If mold smell develops plan on checking behind concealed drywall via test holes (cleaning personnel at house during inspection cleaning basement - mold smell not present, but cleaning products and vacuuming made smell assessment limited - multiple dehumidifiers likely indicates musty conditions) - remove any present. Also, ventilate basement closets to prevent mold.

WINDOWS \ General

Condition: • Window repairs needed: Significantly rotted sash (and sash falling apart) in the living room, window balance broken (won't stay open) in the northeast bedroom, and mutton bars broken in the master bedroom.

Cost: +/- \$500 - obtain estimates for actual.

WINDOWS \ Glass (glazing)

Condition: • [Broken](#)

Task: Replace glass unit where broken in basement - one location to west of French doors (glass is interior pane only - exterior pane still intact).

Cost: +/- \$200

BASEMENT \ Leakage

Condition: • [Cracks](#)

Leak stain (dry) evident at a hairline foundation crack in the furnace room (north wall) and active leak evident at the main sewer drain in the circuit breaker room (basement). Injection-sealing can be used to stop leaks. Also, need to maintain outside drainage (especially on the north side of the house - see other report items for information about minimizing chance for basement leaks) so rain doesn't drain against the house - to minimize chance for basement leaks.

Time: Priority

Cost: +/- \$350 to injection-seal each location.

THE BOTTOM LINE - PRIMARY CONCERNS FOUND

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21309 Woodhill Dr., Farmington Hills, MI December 4, 2010

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ROOFING

EXTERIOR

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REFERENCE

APPLIANCES \ Oven

Condition: • Inoperative

- One of three wall ovens is inoperable - repair or replacement needed.

OVERALL ASSESSMENT

This house is in good overall condition. No major structural concerns were evident and the house has been generally well-maintained. However, a sizeable collection of concerns was noted, the main cost concern being the need for a new roof. The other main concerns are: basement leak evidence, old pool system, old AC system, rotted window, and loose deck stairs. These and other primary concerns are discussed above. Other concerns are discussed in the body of the report.

POSITIVE ASPECTS include: Newer furnace, newer water heater, circuit breakers, grounded electrical circuits, copper water piping, poured concrete foundation.

Description

Sloped roofing material:

- [Asphalt shingles](#)
- Shingles appear to be about 20 years old. Poor condition in many locations. Replacement needed.

Limitations

Roof inspection limited/prevented by: • Estimate of number of shingle layers is based on shingles exposed at edge of roof. Sometimes shingles are installed in a way that hides layers below.

Inspection performed:

- With binoculars
- From roof edge
- From the ground
- And from windows.

Recommendations

SLOPED ROOFING \ Asphalt shingles

1. Condition: • [Old, worn out](#)

- Roof appears to be about 20 years old. Shingles significantly worn in many locations. Replacement needed. There is mold on the roof sheathing in the attic from condensation and poor ventilation - moldy sheathing should be replaced with shingles. Replace/seal all flashings (chimney, addition, etc.) as part of re-roof. Some of the sheathing boards are sagging, so for new shingles to lay flat some board replacement may be needed - roofer needs to assess all boards and replace as needed. To avoid moss growth on front (north) roof surfaces have roofer install galvanized strips.

Cost: +/- \$10,000 - obtain estimates for actual - cost, in part, depends on extent of sheathing that will be replaced.



1. Flashing/caulking needed at re-roof.



2. Area of significantly worn shingles.

ROOFING

21309 Woodhill Dr., Farmington Hills, MI December 4, 2010

- THE BOTTOM
 - ROOFING**
 - EXTERIOR
 - STRUCTURE
 - ELECTRICAL
 - HEATING
 - COOLING
 - INSULATION
 - PLUMBING
 - INTERIOR
- REFERENCE



3. Significant shingle damage (example).



4. Re-flashing or re-tar flashing at addition.



5. Worn shingles (example location).



6. Mold on roof sheathing (NW corner of attic).

Description

Gutter & downspout material: • [Aluminum](#)

Wall surfaces - masonry: • [Brick](#)

Wall surfaces : • [Metal siding](#)

Limitations

General: • - The exterior storage room in the back was accessed due to sign indicating keep out.

Inspection limited/prevented by:

- Storage
- In garage.

Recommendations

General

2. • In-ground pool system present - only checked in cursory manner for obvious concerns. The pump/filter/heater system is old and likely needs replacement or significant repair. Also, the diving board is damaged. The pool is covered so view of liner concealed. Expect significant cost for repair/upgrade - obtain estimates when weather permits.



7. Old pool filter/heater/pump system.

3. • [Click on the following link for the Consumer Products Safety Commission for information about pool safety.](#)

- Automatic closing/locking gates needed at all entries to the pool. This and other safety concerns should be addressed.

- THE BOTTOM
 - ROOFING
 - EXTERIOR**
 - STRUCTURE
 - ELECTRICAL
 - HEATING
 - COOLING
 - INSULATION
 - PLUMBING
 - INTERIOR
- REFERENCE

4. • Additional miscellaneous concerns noted.

- Address: Caulk brick/trim interfaces where caulk missing (several - see example in photo below); damaged trim at garage door opening; level settled pavers at back walk; caulk cracked pool deck; clear trees away from house; repair gates as needed; clear gutter screens; caulk leaking gutter seams; window screens missing in several locations (some screens in basement); don't store heavy items at the garage ceiling (falling hazard).



8. Example of areas where caulk recommended.



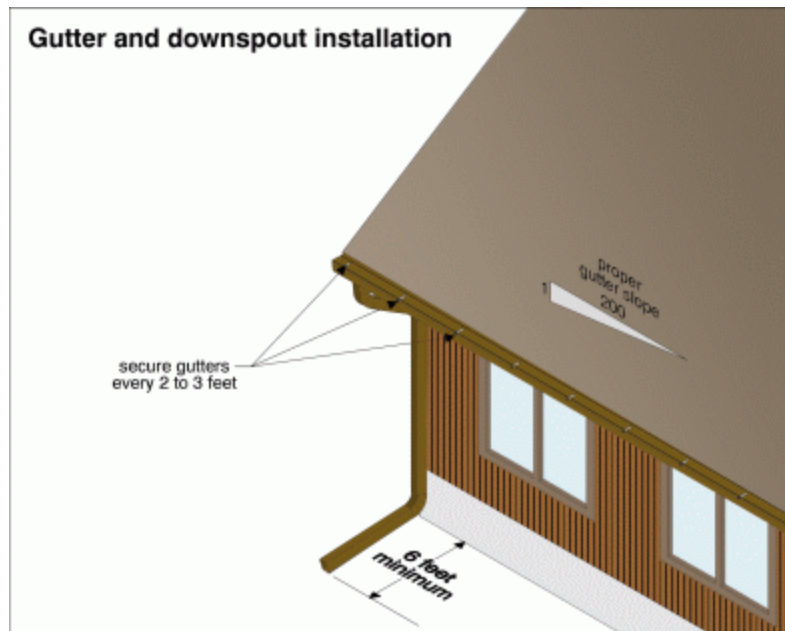
9. Damaged trim at garage door opening.

ROOF DRAINAGE \ Downspouts

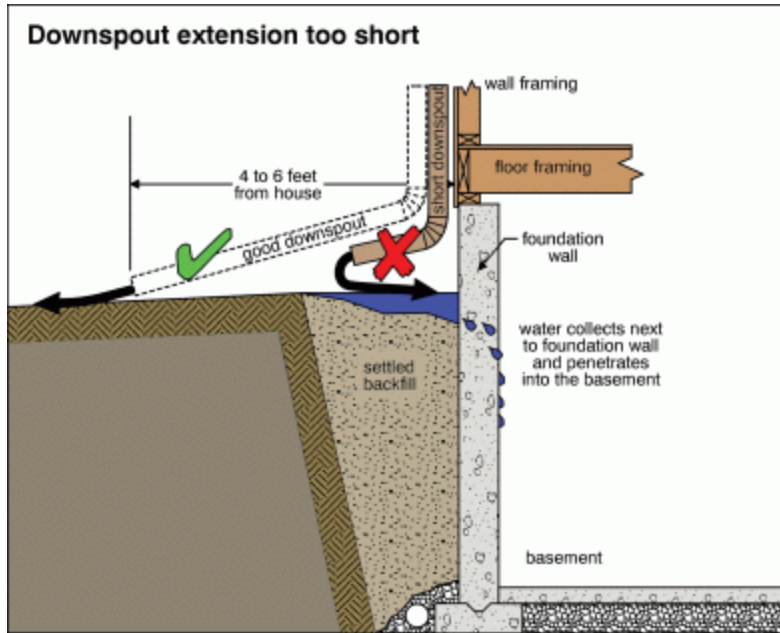
5. Condition: • Extend upper downspouts all the way to gutters to help avoid premature shingle wear and decrease chance for leaks.

6. Condition: • [Downspouts end too close to building](#)

Task: Extend downspouts away from house; monitor buried drain in back for overflow - clear drain or extend downspout if clogged (see photo below).



[Click on image to enlarge.](#)



Click on image to enlarge.



10. Open pipe at back downspout drain.

WALLS \ Brick, stone and concrete

7. Condition: • [Masonry deterioration](#)

- Retain contractor to repair exterior brickwork as needed, including replacement of damaged bricks on chimney, repair of damaged brick above the back addition, and re-pointing on back. The cracked brickwork above the back addition appears due to settlement of the brick support structure which is concealed so can't be assessed. Often the support sag and then stay in place, but need to monitor for ongoing brick movement that could indicate the need for additional repair.

Cost: +/- \$500 - obtain estimates for actual.

EXTERIOR

21309 Woodhill Dr., Farmington Hills, MI December 4, 2010

- THE BOTTOM
 - ROOFING
 - EXTERIOR**
 - STRUCTURE
 - ELECTRICAL
 - HEATING
 - COOLING
 - INSULATION
 - PLUMBING
 - INTERIOR
- REFERENCE



11. Area of cracks at brick joints in back.



12. Re-point brick joint in back (fill w/mortar)



13. Cracked/spalled brick at chimney top.

PORCHES, DECKS, STEPS, PATIOS AND BALCONIES \ Columns

8. Condition: • [Rot or insect damage](#)

- Minor rot present at back deck posts where they are set in concrete - plan on eventually cutting off bottoms of posts and replacing with pressure-treated wood. Rot does not appear to be structurally significant at this time.

EXTERIOR

21309 Woodhill Dr., Farmington Hills, MI December 4, 2010

- THE BOTTOM
 - ROOFING
 - EXTERIOR**
 - STRUCTURE
 - ELECTRICAL
 - HEATING
 - COOLING
 - INSULATION
 - PLUMBING
 - INTERIOR
- REFERENCE



14. Rot progress at deck posts.

PORCHES, DECKS, STEPS, PATIOS AND BALCONIES \ Steps and landings

9. Condition: • The deck staircase in back is loose and tipped - repair needed to make solid. Also, there are rotted deck boards and other minor concerns - repair as needed.

Cost: +/- \$500 to level/secure - more if replacement desired - obtain estimates for actual.

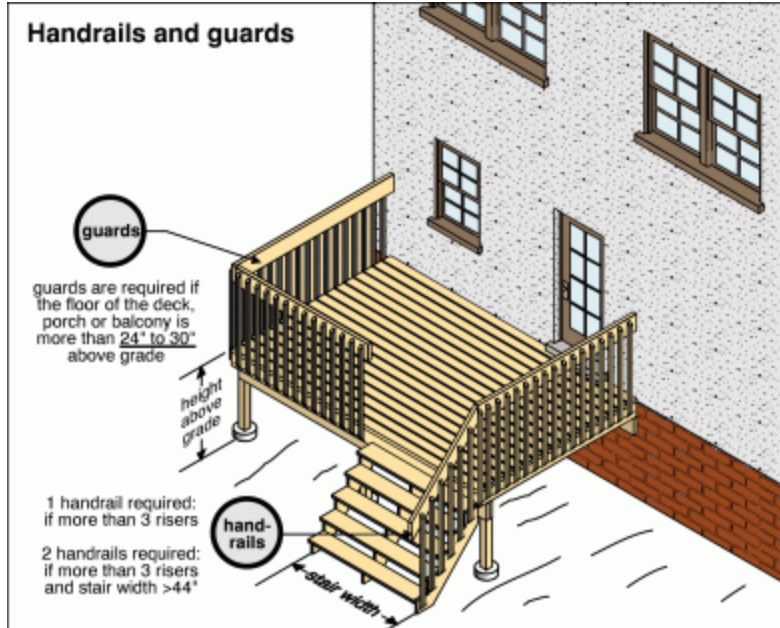


15. Loose/tipped stairs at deck.

PORCHES, DECKS, STEPS, PATIOS AND BALCONIES \ Handrails and guards

10. Condition: • [Missing](#)

- Proper hand railing needed at back deck stairs (see picture below).



[Click on image to enlarge.](#)

LANDSCAPING \ Lot grading

11. Condition: • [Improper slope](#)

- The front yard and driveway slopes toward the house so rain can accumulate near the house thereby increasing the chance for basement leaks. Areas where water collects are evident. Need to re-grade and install French drains so rain readily drains around the house (not into the house). Also, need to clear ground down along the front of the house so wetness in soil doesn't weep through the brick and into the wall. Leak stains are evident in the basement at top of the foundation, cracks, and plumbing drain, so leaking could be active (active leak at main drain - separate report items - Plumbing, Interior, and Exterior sections).

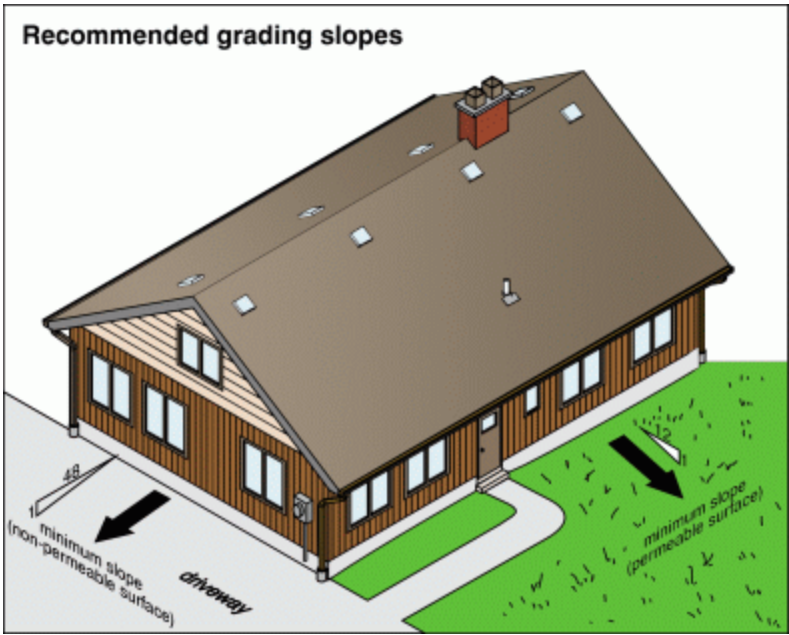
Task: Re-grade and install French drains as needed to direct rain around the house.

Cost: Depends on extent or drainage corrections performed - obtain estimates from landscaping contractors.

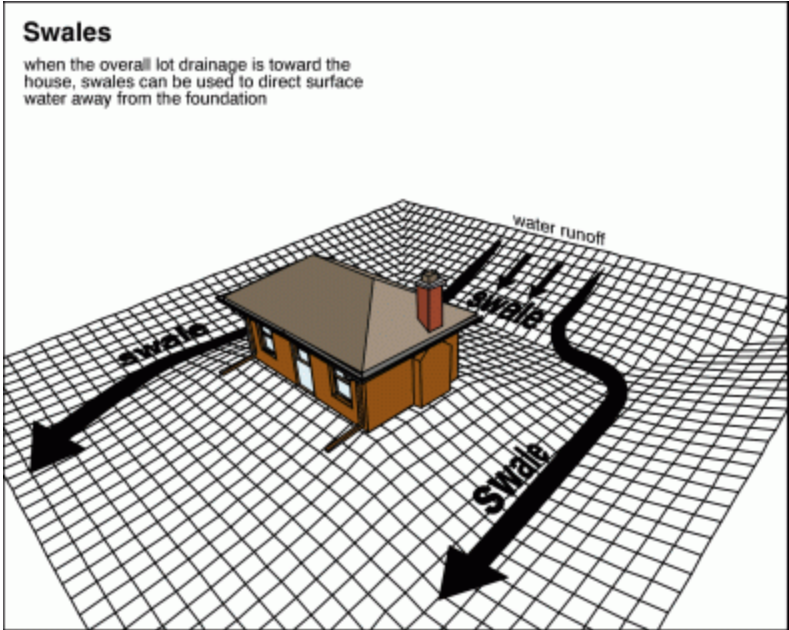
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21309 Woodhill Dr., Farmington Hills, MI December 4, 2010

- THE BOTTOM
 - ROOFING
 - EXTERIOR**
 - STRUCTURE
 - ELECTRICAL
 - HEATING
 - COOLING
 - INSULATION
 - PLUMBING
 - INTERIOR
- REFERENCE



[Click on image to enlarge.](#)

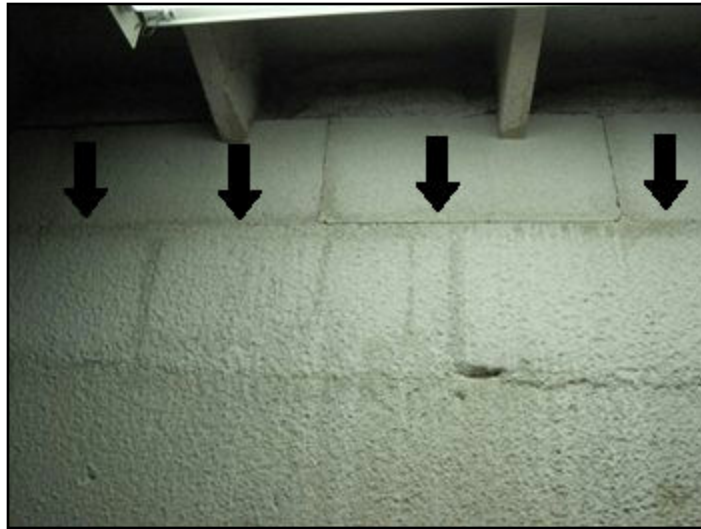


[Click on image to enlarge.](#)

EXTERIOR

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- REFERENCE



16. Leak stains at block foundation near furnace.

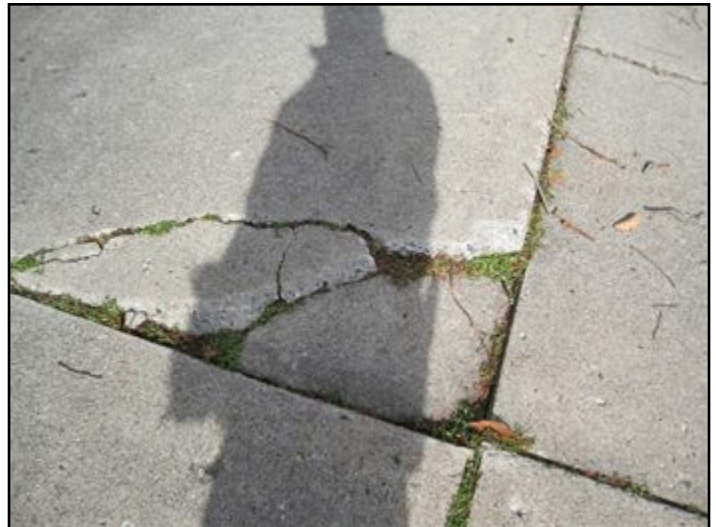
LANDSCAPING \ Walk and driveway

12. Condition: • [Cracked or damaged surfaces](#)

- Significant driveway cracks, spalling, and tripping hazards - repair, level, replace as desire/needed. Replacement cost +/- \$5 per square foot. Calculate based on amount to be replaced, unless only patched. Replacement of all significantly damaged sections +/- \$4,000 - obtain estimates for actual.



17. Spalled driveway.



18. Driveway damaged (example).

Description

Configuration: • [Basement](#)

Foundation material: • [Poured concrete](#)

Floor construction: • [Joists](#)

Exterior wall construction: • [Wood frame](#)

Roof and ceiling framing: • [Trusses](#)

Limitations

Inspection limited/prevented by:

- Insulation

In attic and at perimeter floor in basement.

Attic/roof space: • Crawled through.

Percent of foundation not visible:

- 80 %

- Finished walls - all sides.

Recommendations

FOUNDATIONS \ Foundation

13. Condition: • Foundation walls cracked in one or more locations. Appear to be normal shrinkage cracks at this time. Future performance of cracks cannot be determined. Monitor cracks for worsening or leaking that could indicate need for repair. Consider epoxy or polyurethane injection for leak control.

FOUNDATIONS \ Performance

14. Condition: • Acceptable

- Based on inspection of exposed surfaces.

FLOORS \ Joists

15. Condition: • There is a hump in the floor near/in the master bedroom and the dining room. Does not appear to be structurally significant at this time. Typical cause is sagging joist due to settlement over time. Leveling compound can be used to level floor if bothersome. Monitor for ongoing movement that could indicate need for repair.

Description

General: • - Older intercom system present.

General: • Alarm system present.

General: • Separate air conditioning service/meter installed.

Service entrance cable and location: • [Underground copper](#)

Service size: • Main panel is 225 amp; Air conditioning panel is also a main - 50 amp; Pool system and basement main panel next to large main - 50 amp.

Main disconnect/service box type and location: • [Breakers - basement](#)

System grounding material and type: • [Copper - water pipe](#)

Auxiliary panel (subpanel) type and location: • Air Conditioning condensing unit - outside shut off.

Distribution wire material and type: • [Copper - non-metallic sheathed](#)

Type and number of outlets (receptacles): • [Grounded - typical](#)

Circuit interrupters: Ground Fault (GFCI) & Arc Fault (AFCI): • - GFIs missing and/or faulty in many recommended locations.

Circuit interrupters: Ground Fault (GFCI) & Arc Fault (AFCI): • [GFCI - bathroom](#) • [GFCI - outside](#) • [GFCI - garage](#) • [GFCI - kitchen](#)

Smoke detectors:

• [Present](#)

- Old, not all locations.

Limitations

General: • Alarm systems not included with inspection.

Inspection limited/prevented by: • Smoke detectors and carbon monoxide detectors are not tested and the locations are not specified - for liability reasons. The buyers should check/install detectors immediately upon moving in. Install according to manufacturer recommendations. • In newer homes smoke detectors are required to be wired together so that if one alarm sounds, they all sound. Verification of this wiring is not included within the scope of the inspection. • Carbon monoxide detectors and not inspected of checked for. It is the buyers responsibility to install carbon monoxide detectors as they typically do not stay with the home. Also, carbon monoxide detectors older than about 5 years should be replaced. • Inspection does not include check for braces supporting ceiling fans as these are typically concealed. It would be prudent to have an electrician check for braces and secure ceiling fans as needed. Sometimes fans are installed on boxes only, without bracing. These fans could become loose or fall.

Recommendations

General

- 16. • Old intercom system present - not part of inspection - inquire with seller about operation.
- 17. • Alarm system is present. System not part of inspection. Obtain documentation from seller on system.
- 18. • Additional concerns noted.
 - Address: Replace missing junction box covers above basement ceiling, repair conduit at air conditioning condensing unit in back (see photo), secure loose/hanging wires above basement ceiling, install conduit on exposed outlet wire in furnace room (north wall); light in master shower inoperable.



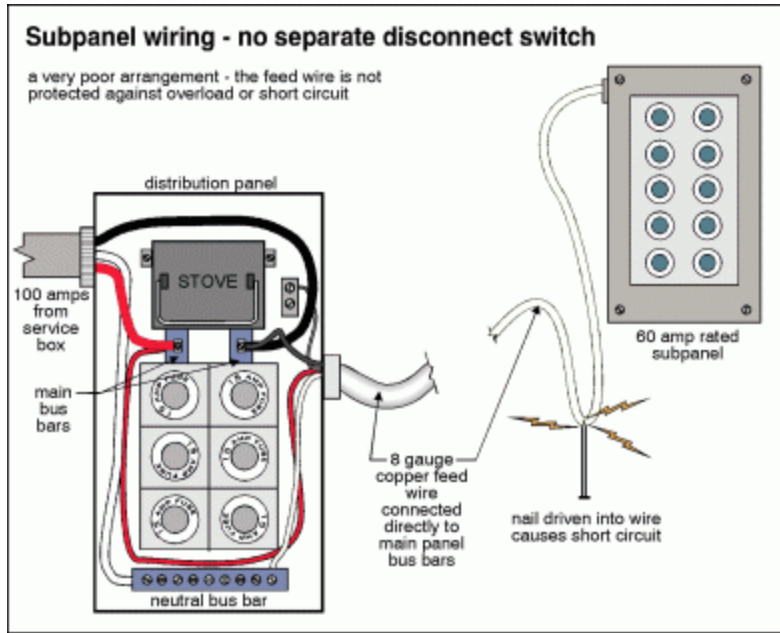
19. Open conduit at AC subpanel in back.



20. Open junction box, loose wire above ceiling.

SERVICE BOX, GROUNDING AND PANEL \ Distribution fuses/breakers

- 19. Condition: • [No fuses or breakers for subpanel](#)
 - The pool system/basement circuit breaker panel next to the main is not tapped off a breaker so when the main panel main breaker is shut-off this panel is still live. Tapping off a 220v breaker in the main panel is recommended.

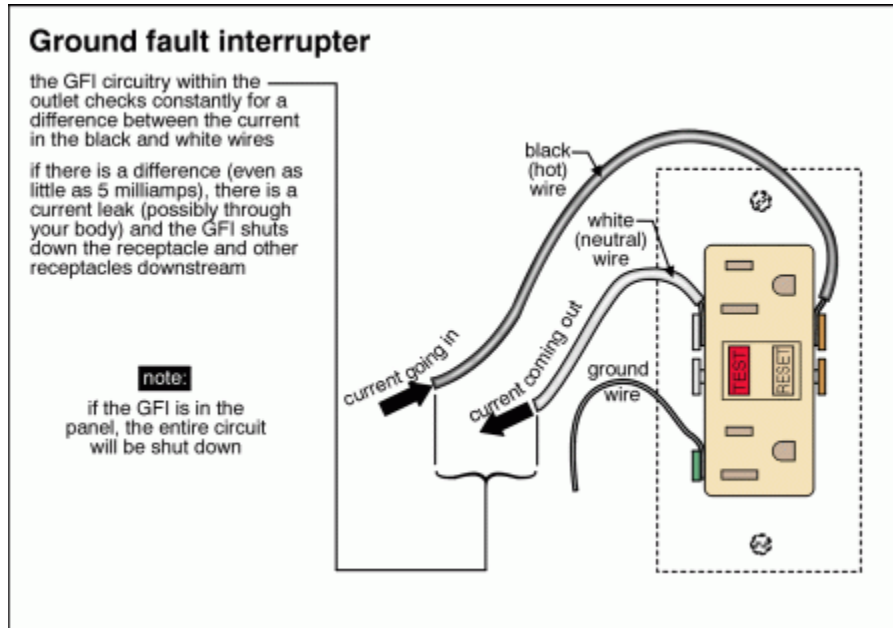


Click on image to enlarge.

DISTRIBUTION SYSTEM \ Outlets (receptacles)

20. Condition: • **No GFI (Ground Fault Interrupter)**

- GFIs missing or faulty in several locations. Installation needed at kitchen counters, bars, unfinished basement areas, bathrooms, and shower light. Replace faulty units in the garage, outside and at bar sink in the living room. Replace/install as needed, then test all locations: Bathrooms, kitchen counter, unfinished basement, outside, and garage.



Click on image to enlarge.

- THE BOTTOM
 - ROOFING
 - EXTERIOR
 - STRUCTURE
 - ELECTRICAL**
 - HEATING
 - COOLING
 - INSULATION
 - PLUMBING
 - INTERIOR
- REFERENCE

DISTRIBUTION SYSTEM \ Smoke detectors

21. Condition: • Smoke detectors should be installed on all levels of the house, in hallways outside bedroom areas, and in all bedrooms. Upon moving in, install and test smoke detectors as needed.

- Units old and/or missing.

Cost: +/- \$200

22. Condition: • Installation of carbon monoxide detectors is recommended. Install per manufacturer's installation instructions.

Description

Fuel/energy source: • [Gas](#)

System type: • [Furnace](#)

Approximate capacity: • 120,000 BTU/hr

Efficiency: • [Mid-efficiency](#)

Approximate age: • [4 years](#)

Main fuel shut off at: • Meter

Fireplace:

- [Wood-burning fireplace](#)
- With gas log in living room.
- [Gas fireplace](#)
- Unvented unit in basement.

Carbon monoxide test:

- 0 parts per million - approximate
- At heat vents in house.

Limitations

Heat exchanger: • Heat exchangers are not fully visible, therefore cannot be fully inspected. The American Society of Home Inspectors (ASHI) inspection standards exclude heat exchangers from the inspection standard and therefore any liability associated with the heat exchanger.

Heat exchanger: • Only a small portion visible

Recommendations

GAS FURNACE \ Mechanical air filter

23. Condition: • Filter is dirty - replace. Change every 1 to 2 months or as needed.
- Replace dirty small filter and wash electronic filter.

GAS FURNACE \ Humidifier

24. Condition: • Wash mold from humidifier and wash hardness deposits inside unit (unit is old, but operational - plan on eventual upgrade).

FIREPLACE \ Gas fireplace

25. Condition: • Gas log unit (living room) could not be lighted - no gas flow and/or pilot setting inoperable - repair as needed.

HEATING

21309 Woodhill Dr., Farmington Hills, MI December 4, 2010

THE BOTTOM

ROOFING

EXTERIOR

STRUCTURE

ELECTRICAL

HEATING

COOLING

INSULATION

PLUMBING

INTERIOR

REFERENCE

26. Condition: • The basement fireplace is an unvented gas unit - install carbon monoxide detector near unit and follow manufacturer safety instructions (e.g. don't run for extended periods). Also, unit could not be started - knob wouldn't turn - inspector doesn't force because may break - repair/starting needed.

Description

Air conditioning type: • [Air cooled](#) • [Whole house fan](#)

Compressor approximate age: • 20 years

Limitations

Inspection limited/prevented by: • The size of the air conditioner is not reported unless it is suspect (appears too small for house). The temperature distribution cannot be assessed, except for general air flow. • The air conditioning system is not operated from October through May or when the temperature is less than 65 degrees outside, because damage to the compressor could result. This is a normal limitation to the inspection.

Recommendations

AIR CONDITIONING \ Life expectancy

27. Condition: • [Old](#)

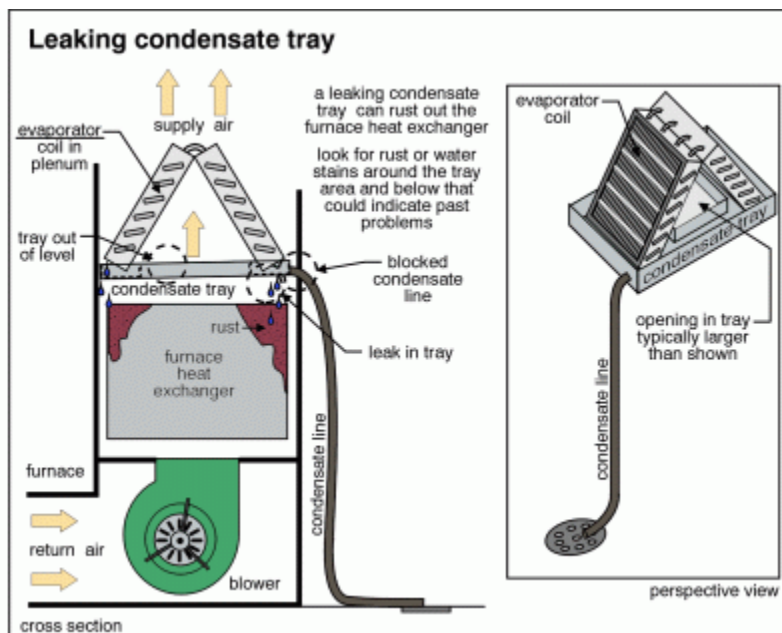
- The air conditioning system is 20 years old - about the normal maximum life expectancy. System not operated due to low outside temperature. System could fail at any time given age. Inquire with seller about system operation & budget for replacement.

Cost: +/- \$3,000 - obtain estimates for actual.

AIR CONDITIONING \ Condensate drain line

28. Condition: • [Leak](#)

- Dry condensation stains are present on top of the furnace below the condensate drain line. Monitor this area during heavy air conditioning use in the summer - repair leaks if become evident (minor cost if repair needed).



[Click on image to enlarge.](#)



21. Condensate leak evident at furnace.

AIR CONDITIONING \ Refrigerant lines

29. Condition: • Replace damaged/missing insulation on outside refrigerant lines.



22. Insulation missing for refrigerant lines-back

AIR CONDITIONING \ Whole house fan

30. Condition: • Fan timer inoperable - fan only turns on/off manually with switch in upstairs hall closet.

Description

Attic/roof insulation material: • [Glass fiber](#)

Attic/roof insulation amount/value: • R-30

Attic/roof ventilation: • [Roof and soffit vents](#)

Wall insulation material:

- Not visible

Typically, R13 (3.5 inches) present for this age house.

Limitations

General: • See "Structure" section for inspection limitations.

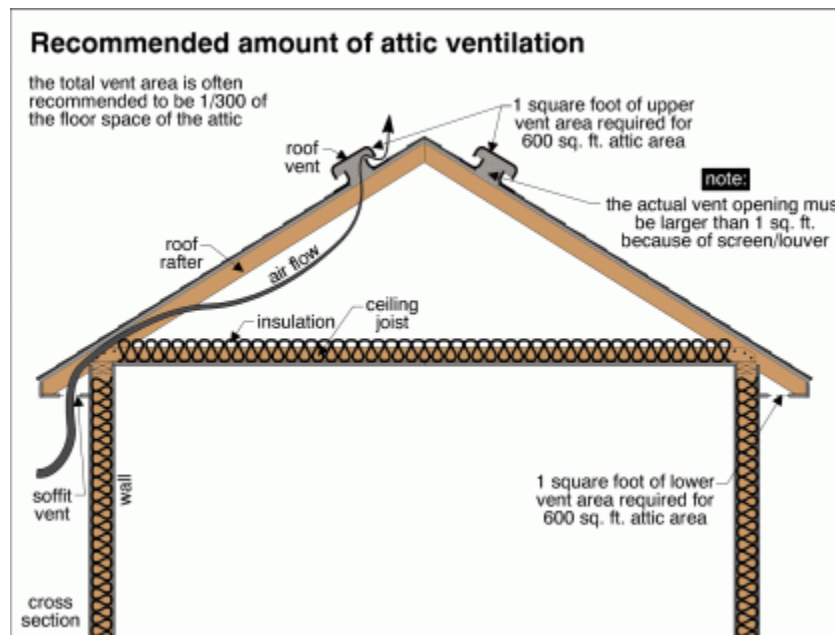
Recommendations

ATTIC/ROOF \ Insulation

- 31. Condition:** • Disturbed insulation in the attic likely indicates mice - install bait traps outside to deal with mice that may enter house, seal (foam or caulk) any access points evident, set traps in attic/basement as monitor for mice.
- 32. Condition:** • Attic insulation amount less than current standard of R45 (about 15 inches) - increasing to current standard is recommended.
 - Also, re-spread disturbed insulation in attic.

ATTIC/ROOF \ Roof vents

- 33. Condition:** • [Inadequate](#)
 - Installation of additional soffit venting recommended at re-roof: Either Smart-Vent or drip edge vent.



[Click on image to enlarge.](#)

INSULATION AND VENTILATION

Report No. 1845

21309 Woodhill Dr., Farmington Hills, MI December 4, 2010

THE BOTTOM

ROOFING

EXTERIOR

STRUCTURE

ELECTRICAL

HEATING

COOLING

INSULATION

PLUMBING

INTERIOR

REFERENCE

WALLS \ Insulation

34. Condition: • Insulate perimeter of wood floor structure in basement, if missing. Typically not present in older homes. Newer homes may have some sections of insulation missing - replace.

- Missing in a couple locations.

Description

General: • - Central vacuum present - newer vacuum unit.

Water supply source: • Public

Service piping into building: • [Copper](#)

Supply piping in building: • [Copper](#)

Main water shut off valve at the: • Meter

Water flow (pressure): • [Functional](#)

Water heater fuel/energy source: • [Gas](#)

Water heater type: • [Conventional](#)

Tank capacity: • 75 gallons

Water heater approximate age: • 6 years

Waste disposal system: • [Public](#)

Waste piping in building: • [Plastic](#) • [Cast Iron](#)

Pumps:

• [Sump pump](#)

- With back-up sump pump.

Limitations

General: • Subsurface drains are not inspected, because they are out of view. Retaining a plumber to check drains with a camera prior to sale is prudent.

Recommendations

General

35. • Instant-hot unit in the kitchen is unplugged - seller said unit is leaking.

Cost: Replacement cost +/- \$200

36. • Old sprinkler control present - likely inoperable system - inquire with seller about sprinkler system.

37. • Collection of miscellaneous minor concerns found.

- Address: Loose sink faucet in the master bathroom; leaking hand-held sprayer hose at the master tub; bar sink faucet handle missing; installation of whirlpool tub motor access will be needed if pump ever fails or possibly for repair of leak in sprayer hose; clear goop from master shower drain.

WASTE PLUMBING \ Drain piping - performance

38. Condition: • There is wetness at the main house drain pipe in the circuit breaker room - either from drainage leaks outside or leaking pipe. Pipe penetration through the foundation was sealed in the past with concrete. Sealing needed again (see INTERIOR section of report about injection-sealing), but could be leak - have plumber check if concerned.

WASTE PLUMBING \ Venting system

39. Condition: • Plumbing vent pipe is disconnected in the attic, re-glueing needed.

Cost: +/- \$100



23. *Disconnected plumbing vent pipe in attic.*

WASTE PLUMBING \ Sump pump

40. Condition: • The main sump pump pipe is significantly rusted and the back-up sump leaks when operated (water-pressure activated unit - water supply turned off so pump will not work if needed). Replacement/repair of pumps needed - retain plumber.

Task: Also, inquire with seller about any flooding conditions that may have occurred and details as to cause and repairs made (installation of back-up sump pump and flood line near circuit breaker panel likely indicate past flooding).

Cost: +/- \$500 for replacement



24. Rusted sump pump pipe.

41. **Condition:** • Installation of sealed lid recommended at the sump pump - for safety and radon control.

FIXTURES AND FAUCETS \ Basin, sink and laundry tub

42. **Condition:** • Often there are dry water/product stains in cabinets below sinks (kitchen and bath). These are sometimes from past leaks, sometimes from stored products, and sometimes from intermittent leaks. Only active leaks or excessive water marks are indicated by the inspector. Always monitor for leaks and repair immediately to avoid damage.

FIXTURES AND FAUCETS \ Faucet

43. **Condition:** • [Drip, leak](#)

Location: Front hose bibb & 1/2 bath sink.

Task: Repair dripping faucets.

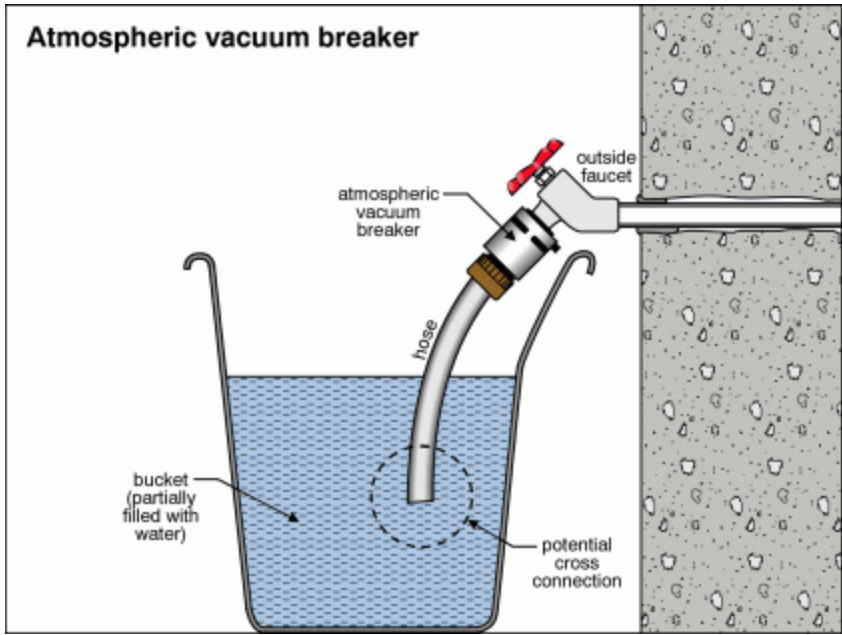
Time: Priority (wasting water).

Cost: +/- \$150

FIXTURES AND FAUCETS \ Hose bibb

44. **Condition:** • [Backflow prevention missing](#)

Task: Install vacuum breakers at hose bibbs (see picture below).



[Click on image to enlarge.](#)

Description

Major wall and ceiling finishes: • [Plaster/drywall](#)

Windows: • - Older Pella and Andersen windows present. In decent condition overall, but some repairs needed.

Evidence of basement leakage:

- Stains

- At foundation crack in the furnace room, at top of foundation walls in the basement. Also, mold present on walls near furnace and on drywall in circuit breaker closet. Minor waterproofing already performed near the furnace (membrane on the foundation wall & chimney clean-out).

Range fuel:

- Electricity

- Ovens and stove-top.

Appliances: • - Three older wall ovens (one not working), newer electric stovetop, newer microwave, newer dishwasher, mid-age disposal, old instant-hot water dispenser (unplugged - reported to be leaking by seller), older Subzero refrigerators, newer gas dryer & clothes washer - all appliances functioning based on cursory check (except instant hot and one oven as noted).

Laundry facilities:

- 240-Volt outlet

- Older 3-slot outlet - four slot/wire needed if newer electric dryers to be used.

- Gas piping

Limitations

Inspection limited/prevented by: • Subfloors commonly squeak. Only excessive squeaking is pointed out by the inspector. However, sometimes excessive squeaking is only evident when the house is empty - when the weight of the contents has been removed. This is a limitation of the inspection. Assess the squeaking upon final walk-through of the house prior to closing.

Not tested/not in service: • The down/up force sensors are not included as part of the inspection due to liability issues and the risk of door damage. Upon moving in, the down/up force should be adjusted as needed so the garage door reverses when contacting an object or person. See web link for garage door safety information. • Radon Testing is always recommended, but is not included unless requested (for additional fee). Visit www.epa.gov/radon for information about radon. Contact Milestone Home Inspections, LLC for professional testing or inexpensive do-it-yourself test kits.

Not included as part of a building inspection: • Carbon monoxide detectors are not checked or looked for as they typically do not stay with the house. Install carbon monoxide detectors per manufacturers recommendations. • Measuring the size of the garage to determine whether vehicles will fit is not part of the inspection. If concerned or if you have a large vehicle, measure the garage to see if your vehicle fits. Some garages are small.

Recommendations

General

45. • [Radon testing is being conducted per request of the buyer - results will be reported separately \(usually within 48 to 72 hours\). Click on this link for information about radon at the EPA website.](#)

46. • [Mold removal is needed in one or more locations. Click on this link for "A Brief Guide to Mold, Moisture and Your Home" \(EPA document\).](#)

- Wash mold from surfaces in the furnace room, around the sump pump, in the northeast basement closet, and in the circuit breaker closet. The mold in the circuit breaker closet could indicate past sewer back-up, flooding due to sump pump failure, or leaks at the main drain/foundation interface (stains at this location in breaker room). Inquire with seller about cause or past flooding. Need to maintain outside drainage, repair the sump pumps, and repair foundation leaks to avoid conditions conducive to mold. Mold does not appear to be a significant health issue at this time. If mold smell develops plan on checking behind concealed drywall via test holes (cleaning personnel at house during inspection cleaning basement - mold smell not present, but cleaning products and vacuuming made smell assessment limited - multiple dehumidifiers likely indicates musty conditions) - remove any present. Also, ventilate basement closets to prevent mold.



25. Mold on drywall in basement, at water meter..

47. • Additional concerns noted.

- Address: Gap present in weatherstripping at French doors in basement - door handle loose at same locations; stained/dented carpeting in several locations.

FLOORS \ Concrete floors

48. **Condition:** • Basement floor cracks are common and generally normal, unless they are excessively wide or are a tripping hazard. It is prudent to caulk basement floor cracks with self-leveling caulk for radon control. Inspector only indicates excessive or severe cracking.

WINDOWS \ General

49. Condition: • Window repairs needed: Significantly rotted sash (and sash falling apart) in the living room, window balance broken (won't stay open) in the northeast bedroom, and mutton bars broken in the master bedroom.

Cost: +/- \$500 - obtain estimates for actual.



26. Rotted window (living room window).



27. Significant rot at living room window.

WINDOWS \ Glass (glazing)

50. Condition: • [Broken](#)

Task: Replace glass unit where broken in basement - one location to west of French doors (glass is interior pane only - exterior pane still intact).

Cost: +/- \$200

DOORS \ Doors and frames

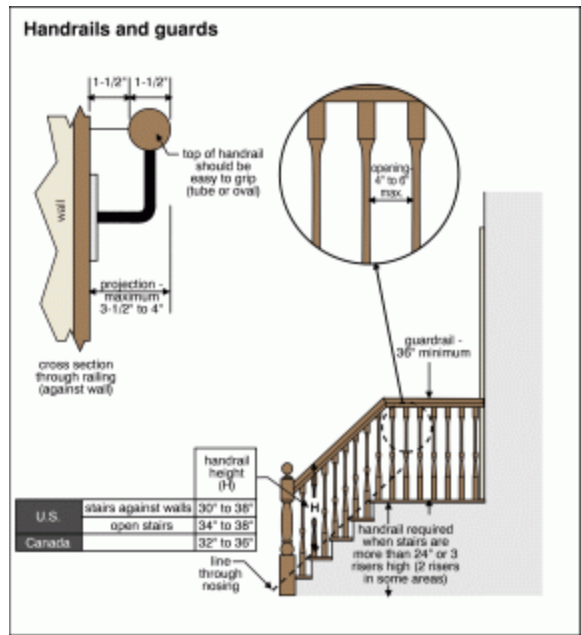
51. Condition: • [Loose or poor fit](#)

- Repair minor door fit around house as needed (multiple locations): 1/2 bath, northeast bedroom, southeast bedroom, master bedroom, basement closet, etc.

STAIRS \ Handrails

52. Condition: • [Missing](#)

- Proper graspable hand rail missing at half of the stairs to the top floor - replacement recommended.



Click on image to enlarge.

BASEMENT \ Leakage

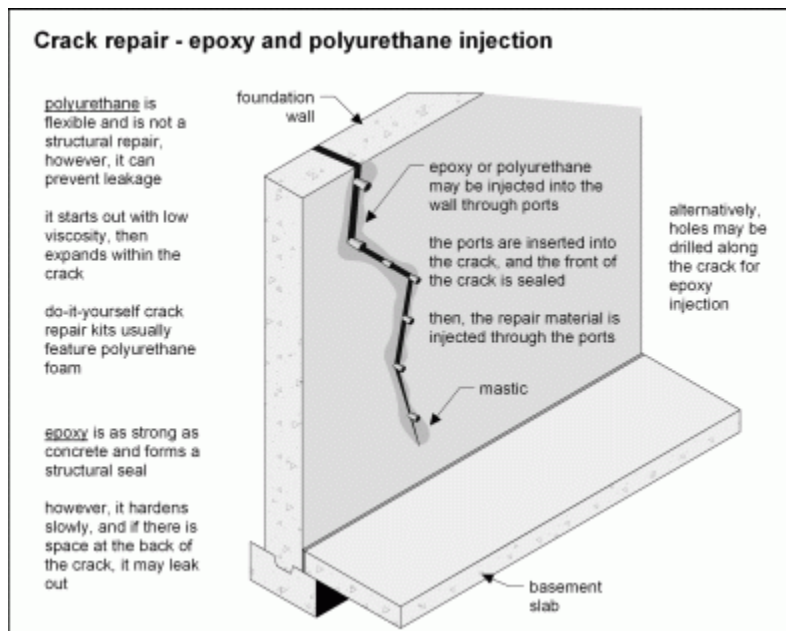
53. Condition: • [Leakage - Read these articles before undertaking any action](#)

54. Condition: • [Cracks](#)

Leak stain (dry) evident at a hairline foundation crack in the furnace room (north wall) and active leak evident at the main sewer drain in the circuit breaker room (basement). Injection-sealing can be used to stop leaks. Also, need to maintain outside drainage (especially on the north side of the house - see other report items for information about minimizing chance for basement leaks) so rain doesn't drain against the house - to minimize chance for basement leaks.

Time: Priority

Cost: +/- \$350 to injection-seal each location.



Click on image to enlarge.



28. Active leak at main drain near water meter.



29. Leak stains at foundation crack.

APPLIANCES \ Oven

55. Condition: • Inoperative

- One of three wall ovens is inoperable - repair or replacement needed.

END OF REPORT

The links below connect you to a series of documents that will help you understand your home and how it works. The body of the report contains specific information about your home. Many report items have related links that provide you more information about that particular component or issue.

This Library is a broad reference tool. For example, if you want to know the difference between asphalt shingles and wood shingles, you can look in here. If you have a conventional furnace and are trying to decide whether to upgrade to a mid-efficiency or high-efficiency furnace, this information may be helpful. If your home does not have air conditioning, but you are thinking about adding it, there is helpful information for you in here.

The Library is broken into nine house systems: Roofing, Exterior, Structure, Electrical, Heating, Cooling, Insulation, Plumbing and Interior. Click on any link to read about that system.

- [1. Roofing and Chimney](#)
- [2. Exterior](#)
- [3. Structure](#)
- [4. Electrical](#)
- [5. Heating](#)
- [6. Cooling](#)
- [7. Insulation](#)
- [8. Plumbing](#)
- [9. Interior](#)