# Residential Building Inspection Report

## AnyStreet Drive, Pittsburgh, PA 15237

**Inspection Date:** 02/28/2019

Prepared For: Valued Client

**Prepared By:** 

Guardian Home Inspection, LLC.
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Report Number: 0228190205JB

Inspector: Jason Boni ASHI #253401



Home Inspection, LLC. **724.777.9019** 

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CERTIFIED

**Inspection Address**: AnyStreet Drive, Pittsburgh, PA 15237

Report Number: 0228190205JB

Dear Valued Client,

Thank you for choosing our company to perform an inspection at AnyStreet Drive, Pittsburgh, PA 15237. Guardian Home Inspection, LLC. is pleased to submit the following report. The report is a professional opinion based on visual inspection of the accessible components of the property. The information provided in this report is solely for your use.

Please understand that there are limitations to this inspection. Many components of the property are not visible during the inspection and very little historical information is provided in advance of the inspection. While we can reduce your risk of purchasing a property, we cannot eliminate it.

Please read over the report in its entirety and feel free to call us at any time if you'd like to discuss the information in more detail, remember we want to be your building consultant for as long as you own the home. Your satisfaction is very important to us, so please let us know how we can improve our services to you by filling out our survey that will be emailed to you in the next few days.

Thank you again for selecting our company,

Regards,

Jason C. Boni, Owner

ASHI #253401

Radon PA Certified # 2745

Wood Destroying Insects BU10517

Guardian Home Inspection, LLC.

Office: (724) 777-9019

http://www.guardian-homeinspection.com guardianhi@guardian-homeinspection.com This report has been prepared based upon the Standards of Practice established by the State of Pennsylvania and the American Society of Home Inspectors, ® Inc. All components designated for inspection in the ASHI® Standards of Practice are inspected, except as may be noted in the "Limitations of Inspection" sections within this report. Please review the Limitations of the Inspection at the end of each section to become familiar with what could not be inspected or is not inspected as part of a general home inspection. Familiarizing yourself with these limitations will provide you the opportunity to have those excluded items inspected by individuals whom are considered professionals in their respective trade prior to purchasing the home.

A home inspection is intended to assist in evaluation of the overall condition of the dwelling. It is the goal of the inspection to put a home buyer in a better position to make a buying decision. Not all improvements and/or repairs will be identified during this inspection; unexpected repairs should still be anticipated. The inspection should not be considered a guarantee or warranty of any kind. Representative samples of building components are viewed in areas that are readily accessible at the time of inspection. The inspection is based on observation of the visible and apparent condition of the structure and its components on the date of inspection. This inspection is visual only. No destructive testing or dismantling of building components is performed. The purpose of this inspection is to identify and disclose visually observable deficiencies of the inspected systems and items at the time of the inspection. The results of this home inspection are not intended to make any representation regarding the presence or absence of latent or concealed defects that are not reasonably ascertainable in a competently performed home inspection. Detached structures or buildings are not included.

This inspection is not intended to be technically exhaustive nor is it considered a guarantee or warranty, expressed or implied, regarding the conditions of the property, items and systems inspected. The inspection and report should not be relied on as such. The inspector shall not be held responsible or liable for any repairs or replacements with regard to this property, systems, components, or the contents therein. Guardian Home Inspection, Inc. is neither a guarantor nor insurer. Not all improvements and/or repairs will be identified during this inspection; unexpected repairs should still be anticipated.

If the person conducting your home inspection is not a professional structural engineer or other professional whose license authorizes the rendering of an opinion as to the structural integrity of a building or its other component parts, you may be advised to seek a professional opinion as to any defects or concerns mentioned in the report. The inspection and related report do not address and not intended to address code and/or regulation compliance, mold, mildew, indoor air quality, asbestos, radon gas, lead paint, urea formaldehyde, soils contamination and any other indoor or outdoor substances. The client is urged to contact a competent specialist if information, identification or testing of the above is desired.

The acceptance of this report by the client acknowledges the client's agreement to all of the terms and conditions of the inspection contract. Please refer to the pre-inspection contract for a full explanation of the scope of the inspection. This inspection report shall not be transferred or relied upon by any other person or company without the written consent of Guardian Home Inspection, LLC. This home inspection report is not to be construed as an appraisal and may not be used as such for any purpose.

Home inspectors in Pennsylvania are not allowed to perform repairs on properties they have inspected. We do not include price estimates in our property inspection reports, as it is considered a conflict of interest. Guardian Home Inspection, LLC. has developed a list to serve as a guideline and to provide estimates for all common repair items. The list is provided upon request.

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## Report Overview

## THE HOUSE IN PERSPECTIVE

This is a two-story single-family home that is approximately 94 years old. Overall, the home is in sound condition albeit with some structural deficiencies noted. Those items, as well as others, are addressed in more detail within the body of the report. It is highly recommended that the report is read in its entirety; the summary section in the front of the report only prioritizes and briefly describes the issues discovered during the inspection. In addition, please review the 'Scope of the Inspection' at the beginning of this report to understand there are limitations to a visual only inspection and the home may still contain unreported latent or concealed defects. Please keep in mind that there is no such thing as a perfect home. As with all homes, ongoing maintenance is required and improvements to the systems of the home will be needed over time.



## REPORTING CONVENTIONS USED IN THIS REPORT - \*\*\*PLEASE REVIEW\*\*\*

For your convenience, the following conventions have been used in this Report:

- Major Repair Item: an individual system or component which is considered significantly deficient
  and sometimes also unsafe. Significant deficiencies need to be corrected and are likely to involve
  significant expense.
- Safety Related Repair Item: denotes a condition that is presently or potentially unsafe and requires immediate attention.
- General Repair Item: denotes a system or component which is damaged, no longer functioning as intended and/or requires corrective action to assure proper and reliable function.
- Investigate: denotes a system or component needing further investigation <u>prior to your inspection</u> reply deadline in order to determine if repairs are necessary.
- Monitor: denotes a system or component that exhibits the potential for repair; however, further monitoring over time is needed in order to determine if repairs are necessary.
- Improve: denotes improvements which are recommended but are not imperative.
- Deferred Cost Item: denotes items that are reaching their normal life expectancy or exhibits indications that they may require repair or replacement anytime during the next several years.
- FYI: denotes a recommendation/advice in regard to maintaining and/or prolonging the life of a household component or system.

## RECOMMENDATIONS / FINAL SUMMARY

The following is a synopsis of the adverse conditions that were discovered during the inspection. Please refer to the body of this report for further details on these recommendations. It is highly recommended that the following conditions are corrected by individuals whom are considered professionals in their respective trade. Whenever possible all recommendations should be performed prior to the 'reply to inspection' deadline to identify other latent defects which were not readily apparent or visible at the time of inspection. This is a visual inspection only. Other significant improvements, outside the scope of this inspection, may also be necessary. Please refer to the scope of the inspection, the inspection limitations at the end of each respective section and to the standards of practice at the end of this report.

## **MAJOR REPAIR ITEMS**

#### **Exterior Window & Door Framing**

• Major Repair Item: Most of the exterior wood window trim, framing and sills are significantly moisture rotted and should be replaced, painted and caulked. You should consult with a qualified carpenter to discuss options and approximate costs for replacement. Maintaining the window and door exteriors on an annual basis will extend their lifespan.

#### **SAFETY RELATED REPAIR ITEMS**

#### **Main Electrical Panel**

• Safety Related Repair Item: There is one oversized circuit breaker in the main electrical panel (20-amp breaker servicing 14-gauge wire - see photo). Oversized breakers have the potential to allow overheating to occur and create a fire hazard. The Inspector recommends this condition be corrected by a qualified electrician.

#### **Electrical Outlets**

- Safety Related Repair Item: The home lacks *adequate* Ground Fault Circuit Interrupter (GFCI) outlet protection in the powder room, along the exterior walls, in the unfinished basement, and within 6 feet of the laundry sink. Although GFCI protection may not have been required at certain locations at the time the home was built, for safety reasons, you should consider upgrading the electrical system to include GFCI protection where it is now required. This condition should be repaired by a qualified electrician.
- Safety Related Repair Item: The ground fault circuit interrupter (GFCI) outlet, along the left-hand side of the kitchen sink, was inoperative (not tripping/resetting) at the time of inspection. This condition should be repaired by a qualified electrician.
- Safety Related Repair Item: Several of the three-prong electrical outlets, in the home, are ungrounded and have been labeled with red stickers. The third prong on an outlet is commonly referred to as 'the ground', and it provides an alternate path for electricity that may stray from an appliance or product. Without this protection, your risk of electrical shock is greater and surge protectors cannot protect your electrical equipment, such as televisions, computers, stereos, and other devices. This condition should be repaired by a qualified electrician.
- Safety Related Repair Item: One three-prong electrical outlet, along the basement stairway, has reversed polarity (i.e. the hot and neutral wires are wired backwards). The outlet requiring repair has been labeled with a red sticker. Outlets near water with this problem are especially dangerous and could result in a shock hazard. This condition should be repaired by a qualified electrician.

#### Stairwavs

• Safety Related Repair Item: As there is a danger of falling, a step railing should be provided along at least one side of the basement stairway. Open sides of stairs with a total rise of more than 30 inches above the floor or grade below shall have guards not less than 34 inches in height measured vertically from the nosing of the treads with balusters no greater than 4" apart on center. This condition may be hazardous to small children.

## **GENERAL REPAIR ITEMS**

### Structural Roof Framing

• **General Repair Item:** A wooden roof rafter, along the south facing slope of the attic, has cracked the extent of its depth. The rafter should be reinforced or replaced to reinstate the original structural integrity. If left uncorrected, this condition may result in sagging of the overhead roof plane. Consult a qualified carpenter for further evaluation and repair options.

#### Structural Floor Framing

- General Repair Item: A wooden floor joist, along the basement ceiling (above the furnace) has been excessively notched (see photo). Maximum notch depth should not exceed 1/6 of the joist depth. This condition reduces the overall structural strength of the floor joist. Reinforcement of the affected floor joist is recommended. Consult a qualified carpenter for repairs.
- General Repair Item: An area of the sub-flooring, along the basement ceiling (below the north facing entry door), exhibits evidence of moisture related rot. The damaged materials should be replaced by a qualified carpenter.

#### **Fencing**

• **General Repair Item:** The gate and latch hardware on the fence is in poor operating condition. A qualified fencing contractor can perform repairs.

#### **Exterior Decking**

• General Repair Item: Several of the wood planks, on the exterior decking, exhibit signs of moisture related rot. Replacement of the damaged planking is recommended. A qualified decking contractor can perform repairs.

#### **Exterior Guardrails**

• **General Repair Item:** The wood guard railing, on the deck, is significantly loose (next to entry door) and should be adequately resecured (see photo). A qualified decking contractor can perform repairs.

## **Electrical Distribution Wiring**

• General Repair Item: The electrical branch wiring, servicing the exterior electrical outlets, is not rated for outdoor use. Outdoor electrical wiring should be protected by a conduit or Type UF cable (Type UF is covered by heavy plastic sheathing). If left uncorrected, this condition will result in premature deterioration of the exposed wiring. A qualified electrician can provide repair.

#### **Knob & Tube Wiring**

• General Repair Item: Active knob & tube wiring was observed in the attic covered with insulation. Knob and tube wiring will dissipate heat and covering the wiring with insulation is not recommended. Active knob & tube wiring should not be within 6" of insulation. Consult a qualified electrician for further evaluation and repair.

### **Asphalt Roofing**

• General Repair Item: The asphalt composition shingles, on the east facing roof overhang, were installed on a roof with a slope of less than 2 inches of rise within 12 inches of horizontal run. Generally accepted current standards require that the underlying roofing felt, under the shingles, be doubled when asphalt composition shingles are installed on a roof with a slope of less than 2/12. If left uncorrected, this condition will be prone to leakage. A qualified roofer can provide repair.

### **Gutters & Downspouts**

• **General Repair Item:** The gutter downspout, at the northeast exterior corner of the home, should discharge further away from the foundation. Downspouts should discharge water at least five (5) feet from the house, where possible. Storm water should be encouraged to flow away from the building at the point of discharge to help prevent water infiltration from occurring along the interior foundation.

#### **Clothes Dryer**

General Repair Item: The dryer exhaust vent is discharging at ground level. This condition may result in a blocked
dryer exhaust pipe which prevents moist air from adequately venting to the exterior and may also create a potential fire
hazard due to dryer lint accumulation.

#### **Dishwasher**

• General Repair Item: The dishwasher's discharge line has no visible high-loop installed. A high loop or air gap must be used to prevent potential backflow contamination of the dishwasher. Local plumbing codes generally dictate the requirements in your area. Listed airgaps shall be installed with the flood level (FL) marking at or above the flood level of the sink or drainboard, whichever is higher, or separately trapped with the air break located on the stand pipe.

#### **Windows**

- General Repair Item: A window pane, along the north facing basement wall, is damaged and requires replacement.
- **General Repair Item:** The tilt latches, on the 2<sup>nd</sup> floor southeast facing bedroom window, are broken. The tilt latch keeps the sash within the frame when opening the window and also allows the window to be tilted inward for cleaning purposes.

#### Interior Finishes (Walls/Ceilings/Trim)

• **General Repair Item:** Some areas of missing grout were observed along the floor tiles in the 2<sup>nd</sup> floor hallway. You should consult with a qualified flooring contractor for repairs.

## **Stairways**

• General Repair Item: The handrail, on the first-floor stairway, is loose/unsecured; repair is recommended.

## **Interior & Entry Doors**

- General Repair Item: The 2<sup>nd</sup> floor west facing bedroom door does not open/close smoothly and should be trimmed or adjusted as necessary.
- **General Repair Item:** The locking hardware, on the west facing entry door, is need of repair (the dead bolt, latch and striker plate are misaligned preventing the door from locking). This is a security concern and should be corrected.
- General Repair Item: The door handle hardware, on the north facing storm door, is damage/missing.

#### Cabinets/Drawers

• **General Repair Item:** The retaining clip, on the cabinet face plate along the front of the kitchen sink, is damaged and in need or replacement (see photo).

#### **Flooring**

• **General Repair Item:** The wall tile, in the 2<sup>nd</sup> floor bathroom, has separated from the floor tile against the north facing wall (see photo). This condition may be the result of a poor installation or the result of some underlying settlement or sagging of the underlying floor framing. A qualified floor tile specialist can provide repair.

#### **Basement Leakage/Moisture**

• General Repair Item: The interior north facing basement foundation wall exhibited evidence of moisture infiltration and staining/efflorescence. This condition indicates that moisture has accumulated in that area in the past; however, the severity or frequency could not be determined during a one-time inspection of the home. The vast majority of basement leakage problems are the result of insufficient control of storm water along the exterior of the home. As a first step in eliminating any future moisture infiltration; gutters should be cleaned and the underground downspouts snaked thoroughly to check for blockage and/or leakage. In addition, the use of a dehumidifier would also be wise. You should also review the sellers' disclosure and consult with the sellers in regard to the severity and/or frequency of moisture infiltration in the basement during periods of extended rainfall.

#### **Attic Ventilation**

• General Repair Item: The bathroom exhaust fan is exhausting into the attic. This condition, if left uncorrected, may create unnecessary moisture accumulation, mildew, and possible mold conditions in the attic space. All exhaust vent pipes should be insulated and vented to the building exterior through the roof or immediately adjacent to any roofing ventilation (gable, ridge, roof vents).

#### **Plumbing Fixtures**

- General Repair Item: The pedestal sink, in the powder room, is not well seated into the underlying pedestal.
- General Repair Item: The second-floor hallway bathroom sink and cabinet are not well secured to the adjacent wall.
- General Repair Item: The toilet, in the powder room, is loose from the floor. A moderate tightening of the bolts will usually eliminate all movement; however, loose toilet fixtures often conceal leakage at the seal. If the subfloor is constructed of wood, moisture seepage at the seal can result is serious damage to wood members. To ensure against fungus and dry rot repairs, replacement of the wax seal and inspection of the connecting flange is recommended when repairing loose toilets.

## Plumbing Waste/Vent/Drain Piping

- **General Repair Item:** The drain piping, under the utility sink in the basement, was actively leaking at the time of inspection. The Inspector recommends correction by a qualified plumbing contractor.
- General Repair Item: The drain lines, under the kitchen sink, are double trapped. Only one P-trap per trap arm is permitted. To have two traps, you would need two trap arms, each one properly vented. This condition may result in drainage problems if air becomes trapped between the two traps as water drains. Consult a qualified plumber for further evaluation and repair options.

## **Supply Pluming**

• **General Repair Item:** The water distribution piping, along the basement ceiling, is poorly supported in some areas. Generally-accepted current standards require that copper pipes of this diameter be supported a minimum of every 6 feet

and/or located at intervals so as to prevent sagging, damage and vibration. Well supported piping systems last longer and are quieter in use. The Inspector recommends correction by a qualified plumbing contractor.

#### **Sump Pump**

• General Repair Item: The sump pump has no visible check valves installed along its discharge piping. Check valves prevent water from spilling back into the sump pump well from the overhead discharge line. If left uncorrected, this condition may lead to over use (short cycling) of the sump pump leading to premature failure.

#### **Forced Air Gas Furnace**

• General Repair Item: The dirty air filter, serving the furnace and air conditioner, should be replaced. A dirty filter will cause excessive strain on your furnace, air conditioner or heat pump. Check the air filter in your furnace or fan coil every 3 to 4 weeks and replace as necessary. The prefilter and collection cells of an electronic air cleaner should be cleaned at least two or three times per year.

#### **Supply Air Ductwork**

• General Repair Item: The disconnected supply ductwork, along the basement ceiling, should be reconnected to prevent air leakage and to improve overall balancing of the system.

#### **FURTHER INVESTIGATION IS RECOMMENDED**

#### **Knob & Tube Wiring**

• Investigate: Active knob & tube wiring was observed within the attic space. Knob-and-tube wiring was an early standardized method of electrical wiring in buildings, in common use in North America from about 1880 to the 1940s. The system is now considered obsolete and can be a safety hazard, although some of the fear associated with it is undeserved. All visible knob & tube wiring appeared to be in satisfactory physical condition; however, you may wish to have the condition of the non-visible knob & tube wiring evaluated further by a qualified electrician.

## Structural Floor Framing

• Investigate: The floor framing, along the basement ceiling, has been reinforced in several locations with central support framing. The dimensions of the central horizontal support framing, along the west end of the basement, appears unusual and inadequate. In addition, the vertical support posts do not appear to have underlying concrete footers installed. You should ask the seller to produce documentation confirming that the reinforcements have been installed according to the specifications of a structural engineer. If no documentation exists, the Inspector recommends further evaluation by a structural engineer.

#### **Environmental Concerns**

• Investigate: Based on the age of this home, there is a possibility the peeling paint, on the floor joists along the basement ceiling, may contain some lead-based paint. This can only be confirmed by laboratory analysis. Lead based paint was in use until approximately 1978. An evaluation of lead in paint is beyond the scope of this inspection. For more information, consult the Environmental Protection Agency (E.P.A.) for further guidance and a list of testing labs in your area.

#### **Flooring**

• **Investigate:** Areas of the flooring, along the first floor (at the base of the 1<sup>st</sup> floor stairway), are unlevel and sloping. This condition is not unusual in a home of this age and may be due to the result of some settling or sagging of the underlying floor framing (see also Structure Section).

## **ITEMS TO MONITOR**

#### None

#### **IMPROVEMENT ITEMS**

## **Supply Plumbing**

• Improve: The exterior hose faucet lacks and anti-siphon device. Anti-siphon devices are essentially one-way valves designed to stop the flow of potentially contaminated water back into the drinkable (potable) water supply. A qualified plumber can provide installation.

## **Air Conditioning Unit**

• **Improve:** The condensing coil fins, on the exterior AC unit, are significantly dirty. This condition may limit their ability to dissipate heat and reduce of the overall operating efficiency of the unit. This condition should be improved by a HVAC technician.

#### **Exterior Decking**

• Improve: The deck railings are sagging in the middle due to a lack of spacer support. Long handrails on decks and porches tend to sag in the middle, especially after they've been subjected to the weight of people sitting on them. You should consider installation of deck railing spacers to prevent further sagging.

#### **Attic Insulation**

• Improve: Insulation levels, in the attic, are typically low for a home of this age and should be improved to provide a more efficient thermal barrier. The modern recommended value for ceilings, in this area of the country, is R-38 (~12" of fiberglass batt); however, the cost of improving insulation levels should be weighed against the cost of savings over the anticipated length of occupancy.

#### **DEFERRED COST ITEMS**

None

Need help finding repair quotes? Check out our affiliate partner – RepairPricer.com. They can turn any inspection report into an incredibly accurate repair estimate in less than 24 hours.

## **Building Orientation**



## **DESCRIPTION OF BUILDING ORIENTATION**

Front: North Rear: South

## **RECOMMENDATIONS / OBSERVATIONS**

**FYI:** The south facing portion of the building will receive the most sunlight, your roofing materials, vinyl siding, windows, doors, etc. will deteriorate and fade quicker on this side. The north facing side is more prone to mildew growth along the vinyl siding and moss growth on the roofing materials due to decreased sunlight/evaporation. This information is provided to help orient you to observations throughout the report which give locational information relative to the orientation of the building.

## **WEATHER CONDITIONS**

Winter weather conditions prevailed at the time of the inspection. The estimated outside temperature was 32° F.

## **RECENT WEATHER CONDITIONS**

Occasional rainfall has been experienced in the days leading up to the inspection.

## **Photo Journal**



Figure 1 The gate and latch hardware on the fence is in poor operating condition.



Figure 2 The gate and latch hardware on the fence is in poor operating condition.



Figure 3 Several of the wood planks, on the exterior decking, exhibit signs of moisture related rot.

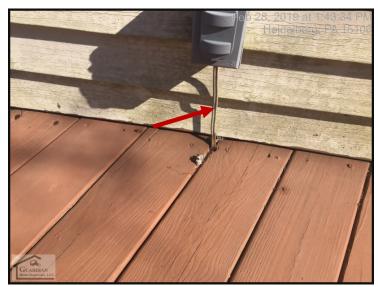


Figure 4 The electrical branch wiring, servicing the exterior electrical outlets, is not rated for outdoor use.



Figure 5 The wood guard railing, on the deck, is significantly loose (next to entry door) and should be adequately resecured.



Figure 6 The gutter downspout, at the northeast exterior corner of the home, should discharge further away from the foundation.



Figure 7 The exterior hose faucet lacks and anti-siphon device.



Figure 8 A window pane, along the north facing basement wall, is damaged and requires replacement.



Figure 9 The condensing coil fins, on the exterior AC unit, are significantly dirty.



Figure 10 The condensing coil fins, on the exterior AC unit, are significantly dirty.



Figure 11 The asphalt composition shingles, on the east facing roof overhang, were installed on a roof with a slope of less than 2 inches of rise within 12 inches of horizontal run.



Figure 12 The dryer exhaust vent is discharging at ground level.



Figure 13 Most of the exterior wood window trim, framing and sills are significantly moisture rotted and should be replaced, painted and caulked.



Figure 14 Most of the exterior wood window trim, framing and sills are significantly moisture rotted and should be replaced, painted and caulked.



Figure 15 Some areas of missing grout were observed along the floor tiles in the  $2^{nd}$  floor hallway.



Figure 16 The handrail, on the first-floor stairway, is loose/unsecured; repair is recommended.



Figure 17 Several of the three-prong electrical outlets, in the home, are ungrounded and have been labeled with red stickers.



Figure 18 The 2<sup>nd</sup> floor west facing bedroom door does not open/close smoothly and should be trimmed or adjusted as necessary.



Figure 19 The second-floor hallway bathroom sink and cabinet are not well secured to the adjacent wall.



Figure 20 The tilt latches, on the 2<sup>nd</sup> floor southeast facing bedroom window, are broken.



Figure 21 The wall tile, in the  $2^{nd}$  floor bathroom, has separated from the floor tile against the north facing wall



Figure 22 Active knob & tube wiring was observed within the attic space.



Figure 23 Active knob & tube wiring was observed in the attic covered with insulation.



Figure 24 The bathroom exhaust fan is exhausting into the attic.



Figure 25 A wooden roof rafter, along the south facing slope of the attic, has cracked the extent of its depth.



Figure 26 The floor framing, along the basement ceiling, has been reinforced in several locations with central support framing.



Figure 27 The reinforcing vertical support posts do not appear to have underlying concrete footers installed.



Figure 28 The interior north facing basement foundation wall exhibited evidence of moisture infiltration and staining/efflorescence.



Figure 29 An area of the sub-flooring, along the basement ceiling (below the north facing entry door), exhibits evidence of moisture related rot.



Figure 30 The home lacks adequate Ground Fault Circuit Interrupter (GFCI) outlet protection in the unfinished basement.



Figure 31 Based on the age of this home, there is a possibility the peeling paint, on the floor joists along the basement ceiling, may contain some lead based paint.

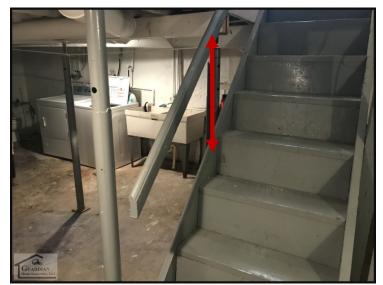


Figure 32 As there is a danger of falling, a step railing should be provided along at least one side of the basement stairway.



Figure 33 A wooden floor joist, along the basement ceiling (above the furnace) has been excessively notched.

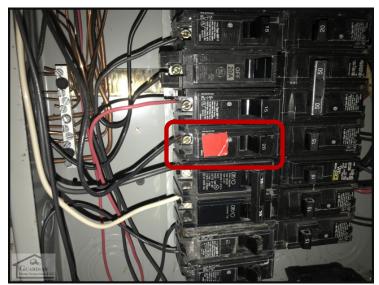


Figure 34 There is one oversized circuit breaker in the main electrical panel (20-amp breaker servicing 14-gauge wire).



Figure 35 One three-prong electrical outlet, along the basement stairway, has reversed polarity (i.e. the hot and neutral wires are wired backwards).



Figure 36 The dirty air filter, serving the furnace and air conditioner, should be replaced.



Figure 37 The disconnected supply ductwork, along the basement ceiling, should be reconnected to prevent air leakage and to improve overall balancing of the system.



Figure 38 The sump pump has no visible check valves installed along its discharge piping.



Figure 39 The drain piping, under the utility sink in the basement, was actively leaking at the time of inspection.



Figure 40 Because back-up or blockage in the drain lines sometimes takes extended periods of time to develop it is highly recommended that the overall inspection of the plumbing system includes a sewer cam inspection of the underground sewer lateral.



Figure 41 The water distribution piping, along the basement ceiling, is poorly supported in some areas.



Figure 42 Several of the three-prong electrical outlets, in the home, are ungrounded and have been labeled with red stickers.



Figure 43 The pedestal sink, in the powder room, is not well seated into the underlying pedestal.



Figure 44 The home lacks adequate Ground Fault Circuit Interrupter (GFCI) outlet protection in the powder room.



Figure 45 The toilet, in the powder room, is loose from the floor.



Figure 46 Areas of the flooring, along the first floor (at the base of the 1st floor stairway), are unlevel and sloping.



Figure 47 The locking hardware, on the west facing entry door, is need of repair (the dead bolt, latch and striker plate are misaligned preventing the door from locking).



Figure 48 The ground fault circuit interrupter (GFCI) outlet, along the left hand side of the kitchen sink, was inoperative (not tripping/resetting) at the time of inspection.



Figure 49 The dishwasher's discharge line has no visible high-loop installed.



Figure 50 The drain lines, under the kitchen sink, are double trapped.



Figure 51 The retaining clip, on the cabinet face plate along the front of the kitchen sink, is damaged and in need or replacement.





Figure 52 The door handle hardware, on the north facing storm door, is damage/missing.

# **Exterior**

# **DESCRIPTION OF EXTERIOR**

Wall Covering:

Overhead Garage Door(s):

Entry Walkways and Patios:

Porches/Stairways

Decking/Balcony:

•Vinyl Siding

•Not Applicable

•Concrete

•Concrete

•Wood Decking

**Entry Driveways:** •Concrete (Parking Pad)

# **EXTERIOR OBSERVATIONS**

#### RECOMMENDATIONS / OBSERVATIONS

# **Exterior Window & Door Framing**

• Major Repair Item: Most of the exterior wood window trim, framing and sills are significantly moisture rotted and should be replaced, painted and caulked. You should consult with a qualified carpenter to discuss options and approximate costs for replacement. Maintaining the window and door exteriors on an annual basis will extend their lifespan.

## **Fencing**

• **General Repair Item:** The gate and latch hardware on the fence is in poor operating condition. A qualified fencing contractor can perform repairs.

#### **Exterior Guardrails**

• **General Repair Item:** The wood guard railing, on the deck, is significantly loose (next to entry door) and should be adequately resecured (see photo). A qualified decking contractor can perform repairs.

# **Exterior Decking**

- **General Repair Item:** Several of the wood planks, on the exterior decking, exhibit signs of moisture related rot. Replacement of the damaged planking is recommended. A qualified decking contractor can perform repairs.
- Improve: The deck railings are sagging in the middle due to a lack of spacer support. Long handrails on decks and porches tend to sag in the middle, especially after they've been subjected to the weight of people sitting on them. You should consider installation of deck railing spacers to prevent further sagging.

# LIMITATIONS OF EXTERIOR INSPECTION

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

- A representative sample of exterior components was inspected rather than every occurrence of components.
- The inspection does not include an assessment of soil, geological, geotechnical, or hydrological conditions, or environmental hazards.
- Sprinkler systems, underground pet fencing, and koi ponds are not inspected.
- Screening, shutters, awnings, or similar seasonal accessories, fences, play-sets, recreational facilities, pools, erosion control and earth stabilization measures are not inspected.

# Roofing

## **DESCRIPTION OF VISIBLE ROOFING**

**Roof Covering:** •Asphalt Shingle (Dimensional)

Method of Inspection:

Roof Drainage System:

● Walked Roof • Viewed from within attic

• Aluminum Gutters w/ Downspouts

Chimneys: •Masonry

# **ROOFING OBSERVATIONS**

## **General Comments**

The roofing materials, gutters, and/or flashings, along the east slope of the roof, were not visible due to accessibility, and safety. This condition has limited the inspection of the exterior roofing components.

## **RECOMMENDATIONS / OBSERVATIONS**

# **Gutters & Downspouts**

• **General Repair Item:** The gutter downspout, at the northeast exterior corner of the home, should discharge further away from the foundation. Downspouts should discharge water at least five (5) feet from the house, where possible. Storm water should be encouraged to flow away from the building at the point of discharge to help prevent water infiltration from occurring along the interior foundation.

# **Asphalt Roofing**

- General Repair Item: The asphalt composition shingles, on the east facing roof overhang, were installed on a roof with a slope of less than 2 inches of rise within 12 inches of horizontal run. Generally accepted current standards require that the underlying roofing felt, under the shingles, be doubled when asphalt composition shingles are installed on a roof with a slope of less than 2/12. If left uncorrected, this condition will be prone to leakage. A qualified roofer can provide repair.
- FYI: There are a few things that a homeowner can do to inspect and maintain an asphalt roof. Many homeowners wonder when to re-roof. This decision starts by inspecting the roofing each spring and fall to check for storm damage. If you cannot climb on the roof, use a pair of binoculars to closely observe the entire roof structure. Check the rain gutters to be sure they were not loosened at the eaves. Replace or repair windblown shingles, apply roof mastic around any chimney or vent flashings and valleys, and check in gutters and downspouts for signs of loose shingle granules. As the asphalt shingles dry out the ceramic granules will come loose and will wash down the roof deck. A buildup of shingle granules or brittle, broken or curled shingles indicates that the roofing is due for replacement. Older shingle roofs were installed using shingles with a 15-20-year warranty while the more recent type dimensional shingles usually have a 40-year life span, so if you know the year the roofing was installed; it is easy to calculate whether the roofing may be about due for replacement.

# LIMITATIONS OF ROOFING INSPECTION

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

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

# **Cooling**

## **DESCRIPTION OF COOLING / HEAT PUMPS**

**Energy Source**: •240 Volt Power Supply

Central System Type:

• Air Cooled Central Air Conditioning

•Year of Manufacture: 2004 •Tonnage: 2.0

# **COOLING / HEAT PUMPS OBSERVATIONS**

## **General Comments**

The air conditioning system could not be operated as the outdoor temperature did not exceed 65° F for 24 hours prior to the inspection. Operating the equipment under these conditions risks costly damage to the compressor or other components. Average lifespan of an air conditioning unit in this region of the country is approximately 25-30 Years.

# **RECOMMENDATIONS / OBSERVATIONS**

# **Air Conditioning Unit**

- Improve: The condensing coil fins, on the exterior AC unit, are significantly dirty. This condition may limit their ability to dissipate heat and reduce of the overall operating efficiency of the unit. This condition should be improved by a HVAC technician.
- FYI: Proper maintenance is critical in ensuring that your central air conditioner will operate efficiently and have a long service life. You can do some of the simple maintenance yourself, but you may also want to have a competent service contractor do a periodic inspection of your unit. The best time to service a central air conditioner is just prior to the cooling season. Filter and coil maintenance can have a dramatic impact on system performance and service life. Dirty filters and dirty indoor and outdoor coils and fans reduce airflow through the system. This reduction in airflow decreases system efficiency and capacity and can lead to expensive compressor damage if left for an extended period of time. The outdoor coil should be vacuumed or brushed clean to keep it clear of dirt, leaves, and grass clippings. It can be carefully cleaned with a garden hose after debris is vacuumed off. Consider a qualified cleaning if the outdoor coil becomes badly plugged. Both the furnace fan and outdoor unit fan should be cleaned and lubricated where applicable, following manufacturer's instructions. The furnace fan speed can be checked and adjusted at the same time, to ensure peak performance.

# LIMITATIONS OF COOLING / HEAT PUMPS INSPECTION

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

The air conditioning system cannot be operated if the outdoor temperature was not above 65 degrees F consecutively for 24 hours prior to the inspection. Operating the equipment under these conditions risks costly damage to the compressor or other components.

- Window mounted air conditioning units are not inspected.
- The cooling supply adequacy (tonnage) or distribution balances of ductwork are not inspected.

# **Structure**

# **DESCRIPTION OF VISIBLE STRUCTURE**

Foundation Type:

•Basement Configuration

•Field Stone w/ Parging

Columns: •Wood Post

Floor Structure: •Wood Joist & Girder

•Concrete Slab (Basement)

Wall Structure: •Wood Frame

**Roof Structure:** ●Rafters •Solid Plank Sheathing

# STRUCTURE OBSERVATIONS

## **RECOMMENDATIONS / OBSERVATIONS**

# Structural Roof Framing

• General Repair Item: A wooden roof rafter, along the south facing slope of the attic, has cracked the extent of its depth. The rafter should be reinforced or replaced to reinstate the original structural integrity. If left uncorrected, this condition may result in sagging of the overhead roof plane. Consult a qualified carpenter for further evaluation and repair options.

# **Structural Floor Framing**

- General Repair Item: A wooden floor joist, along the basement ceiling (above the furnace) has been excessively notched (see photo). Maximum notch depth should not exceed 1/6 of the joist depth. This condition reduces the overall structural strength of the floor joist. Reinforcement of the affected floor joist is recommended. Consult a qualified carpenter for repairs.
- General Repair Item: An area of the sub-flooring, along the basement ceiling (below the north facing entry door), exhibits evidence of moisture related rot. The damaged materials should be replaced by a qualified carpenter.
- Investigate: The floor framing, along the basement ceiling, has been reinforced in several locations with central support framing. The dimensions of the central horizontal support framing, along the west end of the basement, appears unusual and inadequate. In addition, the vertical support posts do not appear to have underlying concrete footers installed. You should ask the seller to produce documentation confirming that the reinforcements have been installed according to the specifications of a structural engineer. If no documentation exists, the Inspector recommends further evaluation by a structural engineer.

## **Stone Foundation**

• FYI: The mortar bedded between the bricks and stones of the foundation wall is traditionally lime-based mortar. This "soft" mortar consists primarily of sand and lime. Repointing or other repairs to historic stone or brick walls with modern mortar, containing Portland cement, can cause extensive damage to the old stone or bricks. The old, soft, lime-based mortar between the brick and stone has served as a path for any moisture within the walls to escape. Denser, less permeable Portland cement mortar applied to the joints can force moisture to migrate through the face of the bricks or stone instead. When the moisture evaporates, it leaves soluble salt deposits in the hard "skin" of the bricks. The salts then crystallize, causing the surface of the brick to "spall." Once the soft, inner portion of the brick is exposed to the weather, it can rapidly erode. For repointing old masonry, you'll need limestone that was burned in a kiln to create "quicklime." The quicklime is then "slaked" with water to create lime putty, typically sold wet, in sealed buckets. Natural hydraulic lime is processed in a similar way, but can be supplied in bags as a dry powder. In the last decade, word has really spread about using appropriate mortar for historic buildings, resulting in several suppliers producing the correct lime, and even pre-mixed mortars (already blended with the sand) for restoration and preservation of historic masonry structures.

# LIMITATIONS OF STRUCTURE INSPECTION

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

- Structural components (foundation walls, main support beams, floor joists, vertical support columns, i.e.) concealed behind finished surfaces could not be inspected.
- Only representative samplings of visible structural components were inspected.
- Furniture and/or storage restricted access to some structural components.
- Engineering or architectural services such as calculation of structural capacities, adequacy, or integrity are not part of a home inspection.

# **Electrical**

# **DESCRIPTION OF VISIBLE ELECTRICAL**

Size of Electrical Service:

Service Panel Rating:

•100 Amp Service

•100 Amp Rating

Power Distribution: •120/240 Volt - Single Phase/Three Wire

Main Disconnects: •Breakers •Located: Basement

Service Grounding: •Copper •Water Pipe & Ground Rod Connection

Overcurrent Protection:

Sub-Panel Location(s):

•Circuit Breakers
•None Visible

Distribution Wiring: •Copper ∙Stranded Aluminum

Switches & Receptacles: •3-Prong

Visible Wiring Method: •Romex •Fabric Covered

•Armored Cable (BX) •Knob & Tube

# **ELECTRICAL OBSERVATIONS**

#### **RECOMMENDATIONS / OBSERVATIONS**

### **Main Electrical Panel**

• Safety Related Repair Item: There is one oversized circuit breaker in the main electrical panel (20-amp breaker servicing 14-gauge wire - see photo). Oversized breakers have the potential to allow overheating to occur and create a fire hazard. The Inspector recommends this condition be corrected by a qualified electrician.

## **Electrical Outlets**

- Safety Related Repair Item: The home lacks *adequate* Ground Fault Circuit Interrupter (GFCI) outlet protection in the powder room, along the exterior walls, in the unfinished basement, and within 6 feet of the laundry sink. Although GFCI protection may not have been required at certain locations at the time the home was built, for safety reasons, you should consider upgrading the electrical system to include GFCI protection where it is now required. This condition should be repaired by a qualified electrician.
- Safety Related Repair Item: The ground fault circuit interrupter (GFCI) outlet, along the left-hand side of the kitchen sink, was inoperative (not tripping/resetting) at the time of inspection. This condition should be repaired by a qualified electrician.
- Safety Related Repair Item: Several of the three-prong electrical outlets, in the home, are ungrounded and have been labeled with red stickers. The third prong on an outlet is commonly referred to as 'the ground', and it provides an alternate path for electricity that may stray from an appliance or product. Without this protection, your risk of electrical shock is greater and surge protectors cannot protect your electrical equipment, such as televisions, computers, stereos, and other devices. This condition should be repaired by a qualified electrician.
- Safety Related Repair Item: One three-prong electrical outlet, along the basement stairway, has reversed polarity (i.e. the hot and neutral wires are wired backwards). The outlet requiring repair has been labeled with a red sticker. Outlets near water with this problem are especially dangerous and could result in a shock hazard. This condition should be repaired by a qualified electrician.

# **Electrical Distribution Wiring**

• General Repair Item: The electrical branch wiring, servicing the exterior electrical outlets, is not rated for outdoor use. Outdoor electrical wiring should be protected by a conduit or Type UF cable (Type UF is covered by heavy plastic sheathing). If left uncorrected, this condition will result in premature deterioration of the exposed wiring. A qualified electrician can provide repair.

## **Knob & Tube Wiring**

- General Repair Item: Active knob & tube wiring was observed in the attic covered with insulation. Knob and tube wiring will dissipate heat and covering the wiring with insulation is not recommended. Active knob & tube wiring should not be within 6" of insulation. Consult a qualified electrician for further evaluation and repair.
- Investigate: Active knob & tube wiring was observed within the attic space. Knob-and-tube wiring was an early standardized method of electrical wiring in buildings, in common use in North America from about 1880 to the 1940s. The system is now considered obsolete and can be a safety hazard, although some of the fear associated with it is undeserved. All visible knob & tube wiring appeared to be in satisfactory physical condition; however, you may wish to have the condition of the non-visible knob & tube wiring evaluated further by a qualified electrician.

# LIMITATIONS OF ELECTRICAL INSPECTION

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

- Electrical components concealed behind finished surfaces are not inspected.
- Only a representative sampling of outlets and light fixtures were tested.
- Exterior pole light fixtures, with an active dusk-to-dawn component, are not inspected.
- Furniture and/or storage restricted access to some electrical components which may not be inspected.
- The inspection does not include remote control devices, alarm systems and components, low voltage wiring, systems, and components, ancillary wiring, systems, and other components which are not part of the primary electrical power distribution system.

# **Heating**

# **DESCRIPTION OF HEATING**

Energy Source: •Natural Gas

**Heating System Type:** •Forced Air Gas Furnace

•Year of Manufacture: 2016

Vents, Flues, Chimneys: 
•Polyvinyl Chloride (PVC)

**Heat Distribution Methods:** • Ductwork

# **HEATING OBSERVATIONS**

#### **General Comments**

Upon acquiring possession of the home, replace all the air filters and panel evaporators in the heating and air conditioning units. In most systems, the air filters will require replacement monthly; however, check the manufacturer's recommendations. A dirty air filter will restrict air flow and may cause the furnace to malfunction. In addition, you'll save on your utility bills and extend the life of your furnace too. Average lifespan of a gas forced air furnace in this region of the country is approximately 30-35 Years.

## **RECOMMENDATIONS / OBSERVATIONS**

# **Supply Air Ductwork**

• **General Repair Item:** The disconnected supply ductwork, along the basement ceiling, should be reconnected to prevent air leakage and to improve overall balancing of the system.

# **Forced Air Gas Furnace**

- General Repair Item: The dirty air filter, serving the furnace and air conditioner, should be replaced. A dirty filter will cause excessive strain on your furnace, air conditioner or heat pump. Check the air filter in your furnace or fan coil every 3 to 4 weeks and replace as necessary. The prefilter and collection cells of an electronic air cleaner should be cleaned at least two or three times per year.
- FYI: A qualified HVAC inspection is the most accurate way to know for sure if your furnace's heat exchanger is sound. Electronic "gas sniffers" can help find bad heat exchangers, but it is important that they never be used as the reason to condemn a furnace. They can be fooled and are wrong in a great many circumstances. Many HVAC companies offer an inspection service. However, these include very little, if any, actual cleaning of the furnace, and typically take only about 20 to 30 minutes. This type of program may provide a feeling of confidence in your equipment, but it doesn't make your furnace run any better. A better investment is a complete tune-up and cleaning that includes a heat exchanger inspection. When comparing prices, it is important to know that a good tune-up should take technicians anywhere from 1 to 2 hours, and will always include the removal and cleaning of the furnace blower. If ever your heat exchanger is found to be faulty, knowing how to verify the problem may save you from unnecessary expense and grief. Unfortunately, without the knowledge, trusting homeowners can sometimes be misled by unscrupulous companies into replacing their entire furnace.

# LIMITATIONS OF HEATING INSPECTION

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

- The furnace heat exchanger, humidifier or dehumidifier function, and electronic air filters are not inspected.
- The adequacy of heat supply (BTU's) or distribution balance of ductwork is not inspected.
- The interior of flues or chimneys, which are not readily accessible, are not inspected.
- Solar space heating equipment/systems are not inspected.

# **Plumbing**

# **DESCRIPTION OF VISIBLE PLUMBING**

Service Pipe to House:

•Copper Interior Supply Piping:
•Copper

Water Supply Source:

Main Water Valve Location:

Waste System:

• Public Water Supply

• North Wall of Basement

• Public Sewer System

**Drain, Waste, & Vent Piping:** •Polyvinyl Chloride (PVC) •Terra-Cotta Clay Tile

•Acrylonitrile Butadiene Styrene (ABS)

Fuel Shut-Off Valves:

•Natural Gas Meter along Exterior

•Conventional Storage Tank-Natural Gas

Year of Manufacture: 2015Capacity (in gallons): 40

# **PLUMBING OBSERVATIONS**

### **General Comments**

The inspection of the plumbing system is limited to the visual components only. This does not include any part of the plumbing system (drain lines, supply lines, etc.) that are located below ground or behind concealed finishes (walls, ceilings, etc.). Because back-up or blockage in the drain lines sometimes takes extended periods of time to develop it is highly recommended that the overall inspection of the plumbing system includes a sewer cam inspection of the underground sewer lateral. This type of inspection is beyond the scope of a general home inspection and will involve additional costs.

# **RECOMMENDATIONS / OBSERVATIONS**

## **Plumbing Fixtures**

- General Repair Item: The pedestal sink, in the powder room, is not well seated into the underlying pedestal.
- General Repair Item: The second-floor hallway bathroom sink and cabinet are not well secured to the adjacent wall.
- General Repair Item: The toilet, in the powder room, is loose from the floor. A moderate tightening of the bolts will usually eliminate all movement; however, loose toilet fixtures often conceal leakage at the seal. If the subfloor is constructed of wood, moisture seepage at the seal can result is serious damage to wood members. To ensure against fungus and dry rot repairs, replacement of the wax seal and inspection of the connecting flange is recommended when repairing loose toilets.

# Plumbing Waste/Vent/Drain Piping

- **General Repair Item:** The drain piping, under the utility sink in the basement, was actively leaking at the time of inspection. The Inspector recommends correction by a qualified plumbing contractor.
- General Repair Item: The drain lines, under the kitchen sink, are double trapped. Only one P-trap per trap arm is permitted. To have two traps, you would need two trap arms, each one properly vented. This condition may result in drainage problems if air becomes trapped between the two traps as water drains. Consult a qualified plumber for further evaluation and repair options.

## **Sump Pump**

• **General Repair Item:** The sump pump has no visible check valves installed along its discharge piping. Check valves prevent water from spilling back into the sump pump well from the overhead discharge line. If left uncorrected, this condition may lead to over use (short cycling) of the sump pump leading to premature failure.

## **Supply Pluming**

• **General Repair Item:** The water distribution piping, along the basement ceiling, is poorly supported in some areas. Generally-accepted current standards require that copper pipes of this diameter be supported a minimum of every 6 feet

- and/or located at intervals so as to prevent sagging, damage and vibration. Well supported piping systems last longer and are quieter in use. The Inspector recommends correction by a qualified plumbing contractor.
- Improve: The exterior hose faucet lacks and anti-siphon device. Anti-siphon devices are essentially one-way valves designed to stop the flow of potentially contaminated water back into the drinkable (potable) water supply. A qualified plumber can provide installation.

## **Water Heater**

• FYI: Your water heater generally is an easy-care appliance. There are three regular maintenance tasks to remember to increase the life of your water heater: Once every six months, drain one gallon of water from the tank. If you have hard water, do this every month. This reduces the amount of sediment collecting in the bottom of the tank, which can make the burner or heating coils work harder. Once every two years, have your water heater inspected by a service technician. This will help keep it in peak operating condition, and will prevent dangerous carbon monoxide problems. Once every five years, have a service technician replace the anode rod. This small metal device sacrifices itself for the good of the entire unit: instead of attacking the tank itself, the corrosive chemicals in the water are drawn to the anode rod. Before doing any maintenance on your water heater shut-off power at the service panel and read your owner's manual.

# LIMITATIONS OF PLUMBING INSPECTION

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

- Underground sewer lines are not inspected and are not part of a general home inspection.
- Portions of the plumbing system concealed by finishes and/or storage (below sinks, etc.), below the structure, or beneath the ground surface are not inspected.
- Water quantity and quality are not tested, unless explicitly contracted-for and discussed in this or a separate report.
- Clothes washing machine connections which are not readily accessible are not inspected.
- Interiors of flues or chimneys which are not readily accessible are not inspected.
- Water conditioning/softening systems, solar water heaters, fire and lawn sprinkler systems, and private waste disposal systems are not inspected unless explicitly contracted-for and discussed in this or a separate report.

# Insulation / Ventilation

# **DESCRIPTION OF VISIBLE INSULATION / VENTILATION**

Attic Insulation: •Loose Fill Cellulose

**Exterior Wall Insulation:** •Not Visible **Basement Wall Insulation:** •None Visible **Crawl Space Insulation:** Not Applicable

**Roof Ventilation:** •Ridge Vents •Soffit Vents **Exhaust Fan/vent Locations:** •Bathroom •Kitchen •Dryer

# **INSULATION / VENTILATION OBSERVATIONS**

## **RECOMMENDATIONS / ENERGY SAVING SUGGESTIONS**

#### **Attic Ventilation**

General Repair Item: The bathroom exhaust fan is exhausting into the attic. This condition, if left uncorrected, may create unnecessary moisture accumulation, mildew, and possible mold conditions in the attic space. All exhaust vent pipes should be insulated and vented to the building exterior through the roof or immediately adjacent to any roofing ventilation (gable, ridge, roof vents).

## **Attic Insulation**

Improve: Insulation levels, in the attic, are typically low for a home of this age and should be improved to provide a more efficient thermal barrier. The modern recommended value for ceilings, in this area of the country, is R-38 (~12" of fiberglass batt); however, the cost of improving insulation levels should be weighed against the cost of savings over the anticipated length of occupancy.

# LIMITATIONS OF INSULATION / VENTILATION INSPECTION

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

- The inspection of power ventilators is limited by their accessibility and/or ambient temperatures in the attic.
- Insulation/ventilation type and levels in concealed areas, such as behind walls, are not inspected. Insulation and vapor barriers are not disturbed and no destructive tests (such as cutting openings in walls to look for insulation) are performed.
- Potentially hazardous materials such as Asbestos and Urea Formaldehyde Foam Insulation (UFFI) cannot be positively identified without a detailed inspection and laboratory analysis. This is beyond the scope of the inspection.
- An analysis of indoor air quality is not part of our inspection unless explicitly contracted-for and discussed in this or a separate report.
- Any estimates of insulation R values or depths are rough average values.

# **Interior**

## DESCRIPTION OF INTERIOR

Wall and Ceiling Materials: •Drywall

Floor Surfaces: •Carpet •Tile •Wood

Window Type(s) & Glazing: •Double Paned •Double Hung •Awning

Interior Doors:

Smoke/CO Detectors:

•Wood-Hollow Core
•Present/Absent

# INTERIOR OBSERVATIONS

## **RECOMMENDATIONS / OBSERVATIONS**

# **Stairways**

- Safety Related Repair Item: As there is a danger of falling, a step railing should be provided along at least one side of the basement stairway. Open sides of stairs with a total rise of more than 30 inches above the floor or grade below shall have guards not less than 34 inches in height measured vertically from the nosing of the treads with balusters no greater than 4" apart on center. This condition may be hazardous to small children.
- General Repair Item: The handrail, on the first-floor stairway, is loose/unsecured; repair is recommended.

## **Windows**

- General Repair Item: A window pane, along the north facing basement wall, is damaged and requires replacement.
- **General Repair Item:** The tilt latches, on the 2<sup>nd</sup> floor southeast facing bedroom window, are broken. The tilt latch keeps the sash within the frame when opening the window and also allows the window to be tilted inward for cleaning purposes.

# Interior Finishes (Walls/Ceilings/Trim)

• **General Repair Item:** Some areas of missing grout were observed along the floor tiles in the 2<sup>nd</sup> floor hallway. You should consult with a qualified flooring contractor for repairs.

## **Interior & Entry Doors**

- **General Repair Item:** The 2<sup>nd</sup> floor west facing bedroom door does not open/close smoothly and should be trimmed or adjusted as necessary.
- General Repair Item: The locking hardware, on the west facing entry door, is need of repair (the dead bolt, latch and striker plate are misaligned preventing the door from locking). This is a security concern and should be corrected.
- General Repair Item: The door handle hardware, on the north facing storm door, is damage/missing.

### Cabinets/Drawers

• General Repair Item: The retaining clip, on the cabinet face plate along the front of the kitchen sink, is damaged and in need or replacement (see photo).

# **Basement Leakage/Moisture**

- General Repair Item: The interior north facing basement foundation wall exhibited evidence of moisture infiltration and staining/efflorescence. This condition indicates that moisture has accumulated in that area in the past; however, the severity or frequency could not be determined during a one-time inspection of the home. The vast majority of basement leakage problems are the result of insufficient control of storm water along the exterior of the home. As a first step in eliminating any future moisture infiltration; gutters should be cleaned and the underground downspouts snaked thoroughly to check for blockage and/or leakage. In addition, the use of a dehumidifier would also be wise. You should also review the sellers' disclosure and consult with the sellers in regard to the severity and/or frequency of moisture infiltration in the basement during periods of extended rainfall.
- FYI: It should be understood that it is impossible to predict the severity or frequency of moisture infiltration on a one-time visit to a home. Virtually all basements exhibit signs of moisture infiltration and virtually all basements will indeed leak at some point in time. The vast majority of basement leakage problems are the result of insufficient control of storm

water at the surface. The ground around the house should be sloped to encourage water to flow away from the foundations. Gutters and downspouts should act to collect roof water and drain the water at least five (5) feet from the foundation, or into a functional storm sewer. Downspouts that are clogged or broken below grade level, or that discharge too close to the foundation, are the most common source of basement leakage.

# Flooring

- **General Repair Item:** The wall tile, in the 2<sup>nd</sup> floor bathroom, has separated from the floor tile against the north facing wall (see photo). This condition may be the result of a poor installation or the result of some underlying settlement or sagging of the underlying floor framing. A qualified floor tile specialist can provide repair.
- **Investigate:** Areas of the flooring, along the first floor (at the base of the 1<sup>st</sup> floor stairway), are unlevel and sloping. This condition is not unusual in a home of this age and may be due to the result of some settling or sagging of the underlying floor framing (see also Structure Section).

## **Environmental Concerns**

• Investigate: Based on the age of this home, there is a possibility the peeling paint, on the floor joists along the basement ceiling, may contain some lead-based paint. This can only be confirmed by laboratory analysis. Lead based paint was in use until approximately 1978. An evaluation of lead in paint is beyond the scope of this inspection. For more information, consult the Environmental Protection Agency (E.P.A.) for further guidance and a list of testing labs in your area.

# LIMITATIONS OF INTERIOR INSPECTION

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

- Furniture, storage, appliances, personal items, and/or wall hangings will not be moved to permit inspection and may block defects.
- Carpeting, window treatments and screens, central vacuum systems, elevators, chair lifts, household appliances, recreational facilities, steam generating appliances, paint, wallpaper, and other finish treatments are not inspected.

# **Appliances**

# **DESCRIPTION OF APPLIANCES**

**Kitchen Appliances:**Dishwasher •Waste Disposer •Refrigerator •Electric Range
Laundry Facility:
◆Clothes Washer & Dryer •240 Volt Circuit for Dryer (&)

•Gas Piping for Dryer

# **APPLIANCES OBSERVATIONS**

## **RECOMMENDATIONS / OBSERVATIONS**

# **Clothes Dryer**

• General Repair Item: The dryer exhaust vent is discharging at ground level. This condition may result in a blocked dryer exhaust pipe which prevents moist air from adequately venting to the exterior and may also create a potential fire hazard due to dryer lint accumulation.

## **Dishwasher**

• General Repair Item: The dishwasher's discharge line has no visible high-loop installed. A high loop or air gap must be used to prevent potential backflow contamination of the dishwasher. Local plumbing codes generally dictate the requirements in your area. Listed airgaps shall be installed with the flood level (FL) marking at or above the flood level of the sink or drainboard, whichever is higher, or separately trapped with the air break located on the stand pipe.

# LIMITATIONS OF APPLIANCES INSPECTION

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

- Door bells, thermostats, timers and other specialized or ancillary features and controls are not tested.
- The temperature calibration, functionality of timers, effectiveness, efficiency and overall performance of appliances is outside the scope of this inspection.

# **Maintenance Advice**

# **UPON TAKING OWNERSHIP**

	er taking possession of a new home, there are some maintenance and safety concerns that should be addressed nediately. The following checklist should help you undertake these improvements:
	Change the locks on all exterior entrances, for improved security.
	Check that all windows and doors are secure. Improve window hardware as necessary. Security rods can be added to sliding windows and doors. Consideration could also be given to a security system.
	Install smoke detectors on each level of the home. Ensure that there is a smoke detector outside all sleeping areas. Replace batteries on any existing smoke detectors and test them. Make a note to replace batteries again in one year.
	Create a plan of action in the event of a fire in your home. Ensure that there is an operable window or door in every room of the house. Consult with your local fire department regarding fire Safety Concerns and what to do in the event of fire.
	Examine driveways and walkways for trip hazards. Undertake repairs where necessary.
	Examine the interior of the home for trip hazards. Loose or torn carpeting and flooring should be repaired.
	Undertake improvements to all stairways, decks, porches and landings where there is a risk of falling or stumbling.
	Review your home inspection report for any items that require immediate improvement or further investigation. Address these areas as required.
	Install rain caps and vermin screens on all chimney flues, as necessary.
	Investigate the location of the main shut-offs for the plumbing, heating and electrical systems. If you attended the home inspection, these items would have been pointed out to you.
RE	EGULAR MAINTENANCE
ΕV	ERY MONTH
	Check that fire extinguisher(s) are fully charged. Re-charge if necessary.
	Examine heating/cooling air filters and replace or clean as necessary.
	Inspect and clean humidifiers and electronic air cleaners.
	If the house has hot water heating, bleed radiator valves.
	Clean gutters and downspouts. Ensure that downspouts are secure, and that the discharge of the downspouts is appropriate. Remove debris from window wells.
	Carefully inspect the condition of shower enclosures. Repair or replace deteriorated grout and caulk. Ensure that water is not escaping the enclosure during showering. Check below all plumbing fixtures for evidence of leakage.
	Repair or replace leaking faucets or shower heads.
	Secure loose toilets, or repair flush mechanisms that become troublesome.
SP	RING AND FALL
	Examine the roof for evidence of damage to roof coverings, flashings and chimneys.
	Look in the attic (if accessible) to ensure that roof vents are not obstructed. Check for evidence of leakage, condensation or vermin activity. Level out insulation if needed.
	Trim back tree branches and shrubs to ensure that they are not in contact with the house.
	Inspect the exterior walls and foundation for evidence of damage, cracking or movement. Watch for bird nests or other vermin or insect activity.
	Survey the basement and/or crawl space walls for evidence of moisture seepage.
	Look at overhead wires coming to the house. They should be secure and clear of trees or other obstructions.
	Ensure that the grade of the land around the house encourages water to flow away from the foundation.

	AnyStreet Drive, Pittsburgh, PA 15237 Page 54 of 69 Inspect all driveways, walkways, decks, porches, and landscape components for evidence of deterioration, movement or safety hazards.				
	Clean windows and test their operation. Improve caulking and weather-stripping as necessary. Watch for evidence of r in wood window frames. Paint and repair window sills and frames as necessary.				
	Test all ground fault circuit interrupter (GFCI) devices, as identified in the inspection report.				
	Shut-off isolating valves for exterior hose bibs in the fall, if below freezing temperatures are anticipated.				
	Test the Temperature and Pressure Relief (TPR) Valve on water heaters.				
	Inspect for evidence of wood boring insect activity. Eliminate any wood/soil contact around the perimeter of the home.				
	Test the overhead garage door opener, to ensure that the auto-reverse mechanism is responding properly. Clean and lubricate hinges, rollers and tracks on overhead doors.				
	Replace or clean exhaust hood filters.				
	Clean, inspect and/or service all appliances as per the manufacturer's recommendations.				
	Once every six months, drain one gallon of water from the tank. If you have hard water, do this every month. This reduces the amount of sediment collecting in the bottom of the tank, which can make the burner or heating coils work harder.				
ΑN	ANNUALLY				
	Replace smoke detector batteries.				
	Have the heating, cooling and water heater systems cleaned and serviced.				
	Have chimneys inspected and cleaned. Ensure that rain caps and vermin screens are secure.				
	Examine the electrical panels, wiring and electrical components for evidence of overheating. Ensure that all components are secure. Flip the breakers on and off to ensure that they are not sticky.				
	If the house utilizes a well, check and service the pump and holding tank. Have the water quality tested. If the property has a septic system, have the tank inspected (and pumped as needed).				
	If your home is in an area prone to wood destroying insects (termites, carpenter ants, etc.), have the home inspected by a qualified specialist. Preventative treatments may be recommended in some cases.				

# PREVENTION IS THE BEST APPROACH

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

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

# Information about Radon

# **EPA RADON RISK INFORMATION**

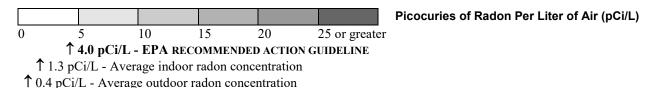
Fifty-five percent of our exposure to natural sources of radiation usually comes from radon. Radon is a colorless, tasteless, and odorless gas that comes from the decay of uranium found in nearly all soils. Levels of radon vary throughout the country. Radon is found all over the United States and scientists estimate that nearly one out of every 15 homes in this country has radon levels above recommended action levels.

Radon usually moves from the ground up and migrates into homes and other buildings through cracks and other holes in their foundations. The buildings trap radon inside, where it accumulates and may become a health hazard if the building is not properly ventilated.

When you breathe air containing a large amount of radon, the radiation can damage your lungs and eventually cause lung cancer. Scientists believe that radon is the second leading cause of lung cancer in the United States. It is estimated that 7,000 to 30,000 Americans die each year from radon-induced lung cancer. Only smoking causes more lung cancer deaths and smokers exposed to radon are at higher risk than nonsmokers. Testing your home is the only way to know if you and your family are at risk from radon.

# Testing for Radon.

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



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

## What do radon test results mean?

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

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

NOTE: All tests should meet EPA technical protocols.

## **Chart 1: Radon Test Conducted Outside Real Estate Transaction**

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

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

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

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

<sup>\*</sup> Use two passive short-term tests and average the results.

# What should I do after testing?

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

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

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

# **Information about Carbon Monoxide**

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

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

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

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

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

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

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

# How many people die from CO poisoning each year?

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

# How many people are poisoned from CO each year?

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

# How can production of dangerous levels of CO be prevented?

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

# Maintenance:

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

# Installation:

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

# Appliance Use:

Follow manufacturer's directions for safe operation.

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

## Are there signs that might indicate improper appliance operation?

Yes, these are:

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

# Are there visible signs that might indicate a CO problem?

Yes, these are:

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

## Are there other ways to prevent CO poisoning?

Yes, these are:

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

## Can CO be detected?

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

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

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

## Where should the detector be installed?

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

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

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

# Are there other CO detectors that are less expensive?

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

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

# Information about Lead Based Paint

# Lead-based paint is hazardous to your health.

Lead-based paint is a major source of lead poisoning for children and can also affect adults. In children, lead poisoning can cause irreversible brain damage and can impair mental functioning. It can retard mental and physical development and reduce attention span. It can also retard fetal development even at extremely low levels of lead. In adults, it can cause irritability, poor muscle coordination, and nerve damage to the sense organs and nerves controlling the body. Lead poisoning may also cause problems with reproduction (such as a decreased sperm count). It may also increase blood pressure. Thus, young children, fetuses, infants, and adults with high blood pressure are the most vulnerable to the effects of lead.

## Children should be screened for lead poisoning.

In communities where the houses are old and deteriorating, take advantage of available screening programs offered by local health departments and have children checked regularly to see if they are suffering from lead poisoning. Because the early symptoms of lead poisoning are easy to confuse with other illnesses, it is difficult to diagnose lead poisoning without medical testing. Early symptoms may include persistent tiredness, irritability, loss of appetite, stomach discomfort, reduced attention span, insomnia, and constipation. Failure to treat children in the early stages can cause long-term or permanent health damage.

The current blood lead level which defines lead poisoning is 10 micrograms of lead per deciliter of blood. However, since poisoning may occur at lower levels than previously thought; various federal agencies are considering whether this level should be lowered further so that lead poisoning prevention programs will have the latest information on testing children for lead poisoning.

## Consumers can be exposed to lead from paint.

Eating paint chips is one-way young children are exposed to lead. It is not the most common way that consumers, in general, are exposed to lead. Ingesting and inhaling lead dust that is created as lead-based paint "chalks," chips, or peels from deteriorated surfaces can expose consumers to lead. Walking on small paint chips found on the floor, or opening and closing a painted frame window, can also create lead dust. Other sources of lead include deposits that may be present in homes after years of use of leaded gasoline and from industrial sources like smelting. Consumers can also generate lead dust by sanding lead-based paint or by scraping or heating lead-based paint.

Lead dust can settle on floors, walls, and furniture. Under these conditions, children can ingest lead dust from hand-to-mouth con-tact or in food. Settled lead dust can re-enter the air through cleaning, such as sweeping or vacuuming, or by movement of people throughout the house.

## Older homes may contain lead based paint.

Lead was used as a pigment and drying agent in "alkyd" oil based paint. "Latex" water based paints generally have not contained lead. About two-thirds of the homes built before 1940 and one-half of the homes built from 1940 to 1960 contain significantly-leaded paint. Some homes built after 1960 also contain significantly-leaded paint. It may be on any interior or exterior surface, particularly on woodwork, doors, and windows. In 1978, the U.S. Consumer Product Safety Commission lowered the legal maximum lead content in most kinds of paint to 0.06% (a trace amount). Consider having the paint in homes constructed before the 1980s tested for lead before renovating or if the paint or underlying surface is deteriorating. This is particularly important if infants, children, or pregnant women are present.

# Consumers can have paint tested for lead.

There are do-it-yourself kits available. However, the U.S. Consumer Product Safety Commission has not evaluated any of these kits. One home test kit uses sodium sulfide solution. This procedure requires you to place a drop of sodium sulfide solution on a paint chip. The paint chip slowly turns darker if lead is present. There are problems with this test, however, Other metals may cause false positive results, and resins in the paint may prevent the sulfide from causing the paint chip to change color. Thus, the presence of lead may not be correctly indicated. In addition, the darkening may be detected only on very light-colored paint.

Another in-home test requires a trained professional who can operate the equipment safely. This test uses X-ray fluorescence to determine if the paint contains lead. Although the test can be done in your home, it should be done only by professionals

trained by the equipment manufacturer or who have passed a state or local government training course, since the equipment contains radioactive materials. In addition, in some tests, the method has not been reliable.

Consumers may choose to have a testing laboratory test a paint sample for lead. Lab testing is considered more reliable than other methods. Lab tests may cost from \$20 to \$50 per sample. To have the lab test for lead paint, consumers may:

- Get sample containers from the lab or use re-sealable plastic bags. Label the containers or bags with the consumer's name and the location in the house from which each paint sample was taken. Several samples should be taken from each affected room (see HUD Guidelines discussed below).
- Use a sharp knife to cut through the edges of the sample paint. The lab should tell you the size of the sample needed. It will probably be about 2 inches by 2 inches.
- Lift off the paint with a clean putty knife and put it into the container. Be sure to take a sample of all layers of paint, since only the lower layers may contain lead. Do not include any of the underlying wood, plaster, metal, and brick.
- Wipe the surface and any paint dust with a wet cloth or paper towel and discard the cloth or towel.

The U.S. Department of Housing and Urban Development (HUD) recommends that action to reduce exposure should be taken when the lead in paint is greater than 0.5% by lab testing or greater than 1.0 milligrams per square centimeter by X-ray fluorescence. Action is especially important when paint is deteriorating or when infants, children, or pregnant women are present. Consumers can reduce exposure to lead-based paint.

# If you have lead-based paint, you should take steps to reduce your exposure to lead.

You can:

## 1. Have the painted item replaced.

You can replace a door or other easily removed item if you can do it without creating lead dust. Items that are difficult to remove should be replaced by professionals who will control and contain lead dust.

## 2. Cover the lead-based paint.

You can spray the surface with a sealant or cover it with gypsum wallboard. However, painting over lead-based paint with non-lead paint is not a long-term solution. Even though the lead-based paint may be covered by non-lead paint, the lead-based paint may continue to loosen from the surface below and create lead dust. The new paint may also partially mix with the lead-based paint, and lead dust will be released when the new paint begins to deteriorate.

# 3. Have the lead-based paint removed.

Have professionals trained in removing lead-based paint do this work. Each of the paint-removal methods (sandpaper, scrapers, chemicals, sandblasters, and torches or heat guns) can produce lead fumes or dust. Fumes or dust can become airborne and be inhaled or ingested. Wet methods help reduce the amount of lead dust. Removing moldings, trim, window sills, and other painted surfaces for professional paint stripping outside the home may also create dust. Be sure the professionals contain the lead dust. Wet-wipe all surfaces to remove any dust or paint chips. Wet-clean the area before re-entry.

You can remove a small amount of lead-based paint if you can avoid creating any dust. Make sure the surface is less than about one square foot (such as a window sill). Any job larger than about one square foot should be done by professionals. Make sure you can use a wet method (such as a liquid paint stripper).

## 4. Reduce lead dust exposure.

You can periodically wet mop and wipe surfaces and floors with a high phosphorous (at least 5%) cleaning solution. Wear waterproof gloves to prevent skin irritation. Avoid activities that will disturb or damage lead based paint and create dust. This is a preventive measure and is not an alternative to replacement or removal.

Contact your state and local health department's lead poisoning prevention programs and housing authorities for information about testing labs and contractors who can safely remove lead-based paint. The U.S. Department of Housing and Urban Development (HUD) prepared guidelines for removing lead-based paint. Ask contractors about their qualifications, experience removing lead-based paint, and plans to follow these guidelines.

# **ASHI Standards of Practice**

## 1. INTRODUCTION

1.1 The American Society of Home Inspectors (ASHI) is a not-for-profit professional society established in 1976. Membership in ASHI is voluntary and its members include private, fee-paid home inspectors. ASHI's objectives include promotion of excellence within the profession and continual improvement of its members' inspection services to the public.

## 2. PURPOSE AND SCOPE

2.1 The purpose of these Standards of Practice is to establish a minimum and uniform standard for private, fee-paid home inspectors who are members of the American Society of Home Inspectors. Home Inspections performed to these Standards of Practice are intended to provide the client with information regarding the condition of the systems and components of the home as inspected at the time of the Home Inspection.

## 2.2 Inspectors shall:

## A. Inspect:

- 1. Readily accessible systems and components of homes listed in these Standards of Practice.
- 2. Installed systems and components of homes listed in these Standards of Practice.

# B. Report:

- 1. On those systems and components inspected which, in the professional opinion of the inspector, are significantly deficient or are near the end of their service lives.
- 2. A reason why, if not self-evident, the system or component is significantly deficient or near the end of its service life.
- 3. The inspector's recommendations to correct or monitor the reported deficiency.
- 4. On any systems and components designated for inspection in these Standards of Practice which were present at the time of the Home Inspection but were not inspected and a reason they were not inspected.
- 2.3 These Standards of Practice are not intended to limit inspectors from:
  - C. Including other inspection services, systems or components in addition to those required by these Standards of Practice.
  - D. Specifying repairs provided the inspector is appropriately professional and willing to do so.
  - E. Excluding systems and components from the inspection if requested by the client.

## 3. STRUCTURAL SYSTEM

- 3.1 The inspector shall
  - A. Inspect
    - 1. The structural components including foundation and framing.
    - By probing a representative number of structural components where deterioration is suspected or where clear indications of possible deterioration exist. Probing is NOT required when probing would damage any finished surface or where no deterioration is visible.

## B. Describe

- 1. The foundation and report the methods used to inspect the under-floor crawl space
- 2. The floor structure
- 3. The wall structure
- 4. The ceiling structure
- 5. The roof structure and report the methods used to inspect the attic.
- 3.2 The inspector is NOT required to
  - C. provide any engineering service or architectural service
  - D. offer an opinion as to the adequacy of any structural system or component

## 4. EXTERIOR

- 4.1 The inspector shall:
  - A. Inspect:
    - 1. The exterior wall covering, flashing and trim.
    - 2. All Entry Doors.
    - 3. Attached decks, balconies, stoops, steps, porches, and their associated railings.
    - 4. The soffits eaves, and fascia where accessible from the ground level.
    - 5. The vegetation, grading, surface drainage, and retaining walls on the property when any of these are likely to adversely affect the building.
    - 6. Walkways, patios, and driveways leading to dwelling entrances.
  - B. Describe the exterior wall covering.
- 4.2 The inspector is NOT required to:
  - C. Inspect:
    - 1. Screening, shutters, awnings, and similar seasonal accessories.
    - 2. Fences
    - 3. Geological, geotechnical or hydrological conditions.
    - 4. Recreational facilities.
    - 5. Outbuildings
    - 6. Seawalls, break-walls, and docks.
    - 7. Erosion control and earth stabilization measures.

# 5. ROOF SYSTEM

- 5.1 The inspector shall:
  - A. Inspect:

- 1. The roof covering.
- 2. The roof drainage systems.
- 3. The flashings.
- 4. The skylights, chimneys, and roof infiltrations.
- B. Describe the roof covering and report the methods used to inspect the roof.
- 5.2 The inspector is NOT required to:
  - C. Inspect:
    - 1. Antennae.
    - 2. Interiors of flues or chimneys which are not readily accessible.
    - 3. Other installed accessories.

## 6. PLUMBING SYSTEM

- 6.1 The inspector shall:
  - A. Inspect:
    - 1. The interior water supply and distribution systems including all fixtures and faucets.
    - 2. The drain, waste and vent systems including all fixtures.
    - 3. The water heating equipment.
    - 4. The vent systems, flues, and chimneys.
    - 5. The fuel storage and fuel distribution systems.
    - 6. The drainage sumps, sump pumps, and related piping.
  - B. describe:
    - 1. The water supplies, drain, waste, and vent piping materials.
    - 2. The water heating equipment including the energy source.
    - 3. The location of main water and main fuel shut-off valves.
- 6.2 The inspector is NOT required to:
  - A. Inspect:
    - 1. The clothes washing machine connections.
    - 2. The interiors of flues or chimneys which are not readily accessible.
    - 3. Wells, well pumps, or water storage related equipment.
    - 4. Water conditioning systems.
    - 5. Solar water heating systems.

- 6. Fire and lawn sprinkler systems.
- 7. Private waste disposal systems.

#### B. Determine:

- 1. Whether water supply and waste disposal systems are public or private.
- 2. The quantity or quality of the water supply.
- 3. Operate safety valves or shut-off valves.
- C. Operate safety valves or shut-off valves.

## 7. ELECTRICAL SYSTEM

# 7.1 The inspector shall:

## A. Inspect:

- 1. The service drop.
- 2. The service entrance conductors, cables, and raceways.
- 3. The service equipment and main disconnects.
- 4. The service grounding.
- 5. The interior components of service panels and sub panels.
- 6. The conductors.
- 7. The overcurrent protection devices.
- 8. A representative number of installed lighting fixtures, switches, and receptacles.
- 9. The ground fault circuit interrupters.

## B. Describe:

- 1. The amperage and voltage rating of the service.
- 2. The location of main disconnect(s) and sub panels.
- 3. The wiring methods.

# C. Report:

- 1. On the presence of solid conductor aluminum branch circuit wiring.
- 2. On the absence of smoke detectors.

# 7.2 The inspector is NOT required to:

# A. Inspect:

- 1. The remote control devices unless the device is the only control device.
- 2. The alarm systems and components.

- 3. The low voltage wiring, systems and components.
- 4. The ancillary wiring, systems and components not a part of the primary electrical power distribution system.
- B. measure amperage, voltage, or impedance

## 8. HEATING SYSTEM

- 8.1 The inspector shall:
  - A. Inspect:
    - 1. The installed heating equipment.
    - 2. The vent systems, flues, and chimneys.
  - B. Describe:
    - 1. The energy source.
    - 2. The heating method by its distinguishing characteristics.
- 8.2 The inspector is NOT required to:
  - C. Inspect:
    - 1. The interiors of flues or chimneys which are not readily accessible.
    - 2. The heat exchanger.
    - 3. The humidifier or dehumidifier.
    - 4. The electronic air filter.
    - 5. The solar space heating system.
  - D. Determine heat supply adequacy or distribution balance.

# 9. AIR CONDITIONING SYSTEMS

- 9.1 The inspector shall:
  - A. Inspect the installed central and through-wall cooling equipment.
  - B. Describe:
    - 1. The energy source
    - 2. The cooling method by its distinguishing characteristics.
- 9.2 The inspector is NOT required to:
  - C. Inspect electronic air filters.
  - D. Determine cooling supply adequacy or distribution balance.

# 10. INTERIOR

- 10.1 The inspector shall:
  - A. Inspect:

- 1. The walls, ceilings, and floors.
- 2. The steps, stairways, and railings.
- 3. The countertops and a representative number of installed cabinets.
- 4. A representative number of doors and windows.
- 5. Garage doors and garage door operators.

# 10.2 The inspector is NOT required to:

# B. Inspect:

- 1. The paint, wallpaper, and other finish treatments.
- 2. The carpeting.
- 3. The window treatments.
- 4. The central vacuum systems.
- 5. The household appliances.
- 6. Recreational facilities.

## 11. INSULATION & VENTILATION

# 11.1 The inspector shall:

# A. Inspect:

- 1. The insulation and vapor retarders in unfinished spaces.
- 2. The ventilation of attics and foundation areas.
- 3. The mechanical ventilation systems.

## B. Describe:

- 1. The insulation and vapor retarders in unfinished spaces.
- 2. The absence of insulation in unfinished spaces at conditioned surfaces.

# 11.2 The inspector is NOT required to:

- C. Disturb insulation or vapor retarders.
- D. Determine indoor air quality.

# 12. FIREPLACES AND SOLID FUEL BURNING APPLIANCES

## 12.1 The inspector shall:

## A. Inspect:

- 1. The system components.
- 2. The vent systems, flues, and chimneys.
- B. Describe:

- 1. The fireplaces and solid fuel burning appliances.
- 2. The chimneys.

# 12.2 The Inspector is NOT required to:

# C. Inspect:

- 1. The interiors of flues or chimneys.
- 2. The fire screens and doors.
- 3. The seals and gaskets.
- 4. The automatic fuel feed devices.
- 5. The mantles and fireplace surrounds.
- 6. The combustion make-up air devices.
- 7. The heat distribution assists whether gravity controlled or fan assisted.
- D. Ignite or extinguish fires.
- E. Determine draft characteristics.
- F. Move fireplace inserts or stoves or firebox contents.

## 13. GENERAL LIMITATIONS AND EXCLUSIONS

- 13.1 General limitations:
  - A. Inspections performed in accordance with these Standards of Practice:
    - 1. Are not technically exhaustive.
    - 2. Will not identify concealed conditions or latent defects.
  - B. These Standards of Practice are applicable to buildings with four or fewer dwelling units and their garages or carports.

## 13.2 General exclusions:

- A. The inspector is not required to perform any action or make any determination unless specifically stated in these Standards of Practice, except as may be required by lawful authority.
- B. Inspectors are NOT required to determine:
  - 1. The condition of systems or components which are not readily accessible.
  - 2. The remaining life of any system or component.
  - 3. The strength, adequacy, effectiveness, or efficiency of any system or component.
  - 4. The causes of any condition or deficiency.
  - 5. The methods, materials, or costs of corrections.
  - 6. Future conditions including, but not limited to, failure of systems and components.
  - 7. The suitability of the property for any specialized use.

- 8. Compliance with regulatory requirements (codes, regulations, laws, ordinances, etc.).
- 9. The market value of the property or its marketability.
- 10. The advisability of the purchase of the property.
- 11. The presence of potentially hazardous plants or animals including, but not limited to wood destroying organisms or diseases harmful to humans.
- 12. The presence of any environmental hazards including, but not limited to toxins, carcinogens, noise, and contaminants in soil, water, and air.
- 13. The effectiveness of any system installed or methods utilized to control or remove suspected hazardous substances.
- 14. The operating costs of systems or components.
- 15. The acoustical properties of any system or component.
- C. Inspectors are NOT required to offer:
  - 1. Or perform any act or service contrary to law.
  - 2. Or perform engineering services.
  - 3. Or perform work in any trade or any professional service other than home inspection.
  - 4. Warranties or guarantees of any kind.
- D. Inspectors are NOT required to operate:
  - 1. Any system or component which is shut down or otherwise inoperable.
  - 2. Any system or component which does not respond to normal operating controls.
  - 3. Shut-off valves.
- E. Inspectors are NOT required to enter:
  - 1. Any area which will, in the opinion of the inspector, likely be dangerous to the inspector or other persons or damage the property or its systems or components.
  - 2. The under-floor crawl spaces or attics which are not readily accessible.
- F. Inspectors are NOT required to inspect:
  - 1. Underground items including, but not limited to underground storage tanks or other underground indications of their presence, whether abandoned or active.
  - 2. Systems or components which are not installed.
  - 3. Decorative items.
  - Systems or components located in areas that are not entered in accordance with these Standards of Practice.
  - 5. Detached structures other than garages and carports.
  - 6. Common elements or common areas in multi-unit housing, such as condominium properties or cooperative housing.

# G. Inspectors are NOT required to:

- 1. Perform any procedure or operation which will, in the opinion of the inspector, likely be dangerous to the inspector or other persons or damage the property or its systems or components.
- 2. Move suspended ceiling tiles, personal property, furniture, equipment, plants, soil, snow, ice, or debris.
- 3. Dismantle any system or component, except as explicitly required by these Standards of Practice.