Residential Building Inspection Report

123 Any Road, Pittsburgh, PA 15123

Inspection Date:
01/29/2011

Prepared For:
Valued Customer

Prepared By:
Guardian Home Inspection, LLC.
Office: (877)-321-5501
PO Box 882
Wexford, PA 15090

Report Number:
0135110912

Inspector:
Jason Boni
NAHI #10-19035

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NATIONAL ASSOCIATION OF HOME INSPECTORS, INC.

Inspection Address: 123 Any Road, Pittsburgh, PA 15123
Report Number: 0135110912

Dear Mr. Customer,

Thank-you for choosing our company to perform an inspection at 123 Any Road, Pittsburgh, PA 15123. 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

NAHI #10-19035
Radon PA Certified # 2745
Wood Destroying Insects BU10517
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THE SCOPE OF THE INSPECTION

This report has been prepared based upon the Standards of Practice established by the State of Pennsylvania and the National Association of Home Inspectors, Inc. All components designated for inspection in the NAHI® Standards of Practice are inspected, except as may be noted in the "Limitations of Inspection" sections within this report.

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 licensed 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, milder, 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 well built Cape Cod style brick home that is approximately 60 years old. Overall the building is structurally sound and the major components of the house have been relatively well maintained. However, there are a number of repairs and/or improvements that are recommended. Those issues are addressed in 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. As with all homes, ongoing maintenance is required and improvements to the systems of the home will be needed over time. ***The improvements that are recommended in this report are not considered unusual for a home of this age and location.*** Please remember that there is no such thing as a perfect home.

CONVENTIONS USED IN THIS REPORT

For your convenience, the following conventions have been used in this report.

- **Major Concern:** ***a system or component which is considered significantly deficient or is unsafe. Significant deficiencies need to be corrected and, except for some safety items, are likely to involve significant expense.***
- **Safety Issue:** ***denotes a condition that is unsafe and in need of prompt attention.***
- **Repair:** ***denotes a system or component which is missing or which needs corrective action to assure proper and reliable function.***
- **Monitor/Investigate:** ***denotes a system or component needing further investigation and/or monitoring in order to determine if repairs are necessary.***
- **Improve:** ***denotes improvements which are recommended but not required.***
- **Deferred Cost:** ***denotes items that have reached or are reaching their normal life expectancy or show indications that they may require repair or replacement anytime during the next several years.***
- **FYI:** ***denotes a recommendation/advice in regard to maintaining and/or prolonging the life of a household component or system.***

IMPROVEMENT RECOMMENDATIONS / FINAL SUMMARY

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

MAJOR CONCERNS

None

ITEMS TO MONITOR/INVESTIGATE

Wood Boring Insects

- **Monitor/Investigate:** Evidence of termite activity and damage was observed along the subflooring materials in the basement furnace room (see photo). The infestation does not appear active and the property shows evidence of treatment for termites (drill marks in slab). It appears that the floor framing and subflooring materials were replaced to account for the termite damage; however there is risk of additional hidden damage. You should confirm that the property was treated in the past for termites and obtain a copy of the paperwork provided during the initial treatment for termites. Confirm when the property was treated and whether a guarantee is in place; otherwise treatment for eastern subterranean termites is recommended.

Basement Leakage/Moisture

- **Monitor/Investigate:** The front and rear foundation walls show evidence of active moisture penetration. The visible evidence is **typical** for a home of this age, construction and location. Depending on your plans for the basement, you may wish to have the basement evaluated further by a qualified waterproofing company to discuss options for improvement. ***It should be understood that it is impossible to predict the severity or frequency of moisture penetration on a one time visit to a home.*** Virtually all basements exhibit signs of moisture penetration and virtually all basements will indeed leak at some point in time. Further monitoring of the foundations will be required to determine what improvements, if any, will be required.

SAFETY ISSUES

Ductwork

- **Safety Issue:** The inactive/inoperable electronic air filter, in the garage should be either completely sealed/insulated or removed (see photo). If left uncorrected this condition could pose a potential carbon monoxide hazard inside the home (if a car is left running in the garage). This condition is also allowing unnecessary heat/cooling loss to occur.

REPAIR ITEMS

Gutters & Downspouts

- **Repair:** The gutters require cleaning to avoid spilling roof runoff around the building – a potential source of water entry or water damage.

Chimneys

- **Repair:** The protimeter (moisture meter) detected active moisture along the interior ceiling areas adjacent to both chimneys (see Interior Section). The cause of this moisture is most likely due to the chimney flashings failing to adequately direct water away from the interior living space. The chimney flashings should be resealed; consult a qualified roofer for repairs.

Retaining Wall

- **Repair:** The retaining wall, along the front of the home, shows evidence of limited movement and cracking (see photo). The damaged areas should be repaired by a qualified mason. In addition, the installation of weep-holes at its base or some other drainage provision to relieve pressure from behind would be a logical improvement. You should consult with a mason or landscape contractor before the expiration of your Inspection Objection Deadline to discuss various options and costs for repair or replacement.

Exterior Brick Veneer Walls

- **Repair:** A limited amount of step type cracking was observed along the mortar joints on the exterior brick veneer walls where several windows and the garage door exist (see photos). The cause of this type of separation is due to the supporting steel lintels rusting and expanding in volume. This jacking action on the surrounding block ultimately causes fractures and deterioration of the mortar in contact with the lintels. The cracks should be tuck-pointed and the lintels should be painted with a rust-inhibiting paint and caulked annually. Consult a qualified mason for further information and repair options.
- **Repair:** A limited amount of cracking was observed along the front right exterior corner of the brick veneer (see photo). This type of cracking is most likely due to a limited amount of settlement that has occurred. The rate of movement cannot be predicted during a one time inspection; however these cracks should be repaired and monitored closely for additional movement. If movement continues, more significant repairs may be required. Consult a qualified mason for repairs.

Exterior Window & Door Frames

- **Repair:** The window and door frames, throughout the exterior of the home, require caulking to prevent moisture intrusion of the interior wall assembly (see photo). Maintaining window exteriors on an annual basis will extend their lifespan.

Electrical Outlets

- **Repair:** One three-prong outlet, along the right facing interior foyer hallway, is ungrounded (see photo). This outlet and the circuit should be investigated and repaired as necessary by a qualified licensed electrician. In some cases a ground wire may be present in the electrical box and simply needs to be connected. If no ground is present “repair”, some electrical codes allow the installation of a ground fault circuit interrupter (GFCI) type outlet where grounding is not provided. In this case the GFCI may work but can’t be tested by normal means.

Electrical Sub-Panel

- **Repair:** The 30 amp cartridge fuses, servicing the air conditioning unit, are undersized (see photo). The service tag on the AC unit requires a minimum of 35 amp fuses.
- **Repair:** One opening was observed along the top of the electrical sub-panel (see photo). Unfilled holes or knockouts in the electrical service sub-panel may allow persons to come into contact with energized electrical components. This condition is a potential shock/electrocution hazard and should be corrected by a qualified electrical contractor.

Electrical Distribution Wiring

- **Repair:** The damaged exterior electrical branch wiring, servicing the air conditioning unit, should be replaced (see photo). The Inspector recommends correction by a qualified electrical contractor.
- **Repair:** The unsecured electrical branch wiring in the garage should be properly secured (see photo). According to the NEC (National Electrical Code) wiring should be stapled to wood framing members or secured with hangers within 12” on both sides of all enclosures (panels, junction boxes, switches, outlets, and fixtures). Wiring beyond the first secured point next to enclosures should be stapled or secured every 4 ½’ along the length of the circuit. Recommend that this repair be done by a certified electrician.

Lights/Ceiling Fans

- **Repair:** The light fixture, along the rear left bedroom ceiling, would not operate at the time of inspection (see photo). If the bulbs are not blown, the circuit should be repaired.

Plumbing Fixtures

- **Repair:** The toilet, on the second floor, is loose from the floor (see photo). A moderate tightening of the bolts will usually eliminate all movement. 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 dryrot repairs, replacement of the wax seal is a wise precautionary procedure when repairing loose toilets.
- **Repair:** The kitchen faucet was actively dripping at the time of inspection (see photo). Dripping usually occurs when the O-ring inside the faucet's aerator has worn out or broken. Left unchecked, a dripping kitchen faucet can have a significant impact on the water bill. Consult a qualified plumber for repairs.

Stairways

- **Repair:** The second floor stairway hand and guard rail is loose/not well secured and may pose a safety concern (see photo).

Interior Finishes (Walls/Ceilings/Trim)

- **Repair:** Active moisture staining was observed and tested utilizing a protimeter (moisture meter) along the interior second floor bathroom wall/ceiling area and along the upper right corner of the interior chimney chase in the step down living room (see photos). Both areas are adjacent to the chimneys indicating a problem with the chimney flashings failing to adequately direct rainwater away from the home's interior. Repairs to the chimney flashings are needed; consult a qualified roofer for repairs.
- **Repair:** Active moisture staining was observed and tested utilizing a protimeter (moisture meter) along the interior front facing kitchen wall (below the bay window - see photo). The cause of the moisture appears to be due to openings along the exterior window frame (see also Exterior Section).
- **Repair:** Active moisture staining was observed and tested utilizing a protimeter (moisture meter) along the interior front facing cedar closet in the basement (see photo). The exact cause of the moisture could not be identified; however it is most likely due to a combination of conditions such as the exterior retaining wall/planter area (which is retaining moisture), deteriorated exterior caulking along the window frames, and the clogged/ice filled gutters. Repairs and/or improvements to the aforementioned items will help to prevent further moisture penetration.

DEFERRED COST ITEMS

Supply Plumbing

- **Deferred Cost:** The shut-off valve and pressure regulator above the water heater are heavily corroded and should be monitored closely for future leakage. Ultimately, repair or replacement of the shut-off valves will be necessary.

IMPROVEMENT ITEMS

Landscaping

- **Improve:** The tree branches, overhanging the roof, should be trimmed back to prevent debris from clogging gutters (see photo).

Supply Plumbing

- **Improve:** The copper supply piping, along the rear side of the home, should be insulated to prevent possible freezing damage (see photo).

Interior Finishes (Walls/Ceilings/Trim)

- **Improve:** Minor cosmetic cracking was observed along the bedroom ceiling and right facing living room walls (see photos). These cracks are most likely due to a limited amount of settling that has occurred in the past (see also Exterior Section) and pose no structural concern. Improvements will be necessary prior to painting.

Fireplace

- **Improve:** The fireplace damper is not seated correctly and requires adjustment for proper operation (see photo).

Building Orientation

DESCRIPTION OF BUILDING ORIENTATION

Front: North

Rear: South

BUILDING ORIENTATION OBSERVATIONS

The front of the building faces north. This information is provided to help orient you to observations throughout the report which give locational information relative to the orientation of the building.

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.

WEATHER CONDITIONS

Winter weather conditions prevailed at the time of the inspection.
The estimated outside temperature was 27 degrees F.

RECENT WEATHER CONDITIONS

Heavy snowfall has been experienced in the days leading up to the inspection.

Photo Journal

Figure 1 The retaining wall, along the front of the home, shows evidence of limited movement and cracking (see photo).

Figure 2 The tree branches, overhanging the roof, should be trimmed back to prevent debris from clogging gutters (see photo).

Figure 3 The gutters require cleaning to avoid spilling roof runoff around the building – a potential source of water entry or water damage.

Figure 4 The window and door frames, throughout the exterior of the home, require caulking to prevent moisture intrusion of the interior wall assembly (see photo). Maintaining window exteriors on an annual basis will extend their lifespan.

Figure 5 The window and door frames, throughout the exterior of the home, require caulking to prevent moisture intrusion of the interior wall assembly (see photo). Maintaining window exteriors on an annual basis will extend their lifespan.

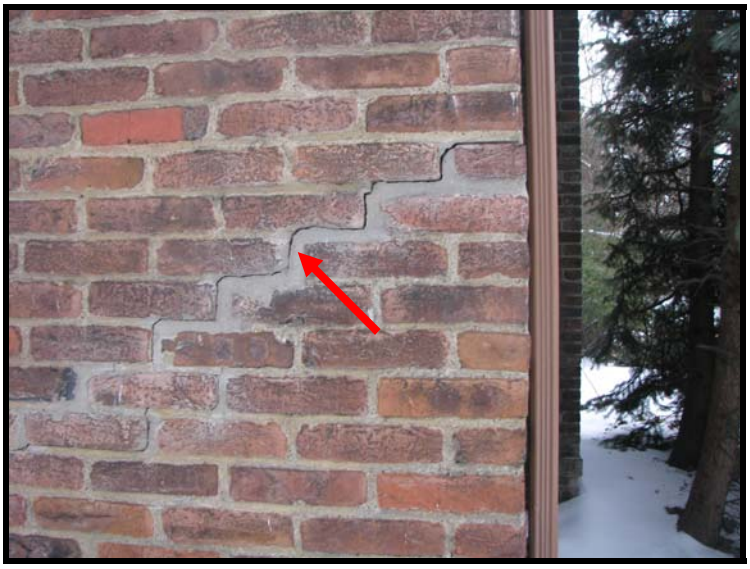

Figure 6 A limited amount of cracking was observed along the front right exterior corner of the brick veneer (see photo). This type of cracking is most likely due to a limited amount of settlement that has occurred.

Figure 7 A limited amount of step type cracking was observed along the mortar joints on the exterior brick veneer walls where several windows and the garage door exist (see photos).

Figure 8 Separation has occurred along the mortar joints in the garage due to the rusting and consequential expanding steel lintel.

Figure 9 All visible roof components appeared to be in serviceable condition at the time of the inspection.

Figure 10 The 30 amp cartridge fuses, servicing the air conditioning unit, are undersized (see photo). The service tag on the AC unit requires a minimum of 35 amp fuses.

Figure 11 The unsecured electrical branch wiring in the garage should be properly secured (see photo).

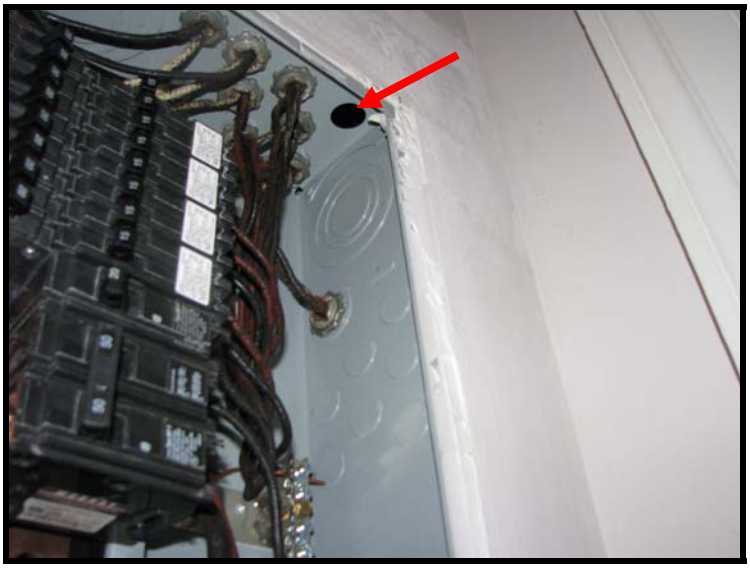

Figure 12 One opening was observed along the top of the electrical sub-panel (see photo). Unfilled holes or knockouts in the electrical service sub-panel may allow persons to come into contact with energized electrical components.

Figure 13 The light fixture, along the rear left bedroom ceiling, would not operate at the time of inspection (see photo). If the bulbs are not blown, the circuit should be repaired.

Figure 14 Active moisture staining was observed and tested utilizing a protimeter (moisture meter) along the interior front facing cedar closet in the basement (see photo).

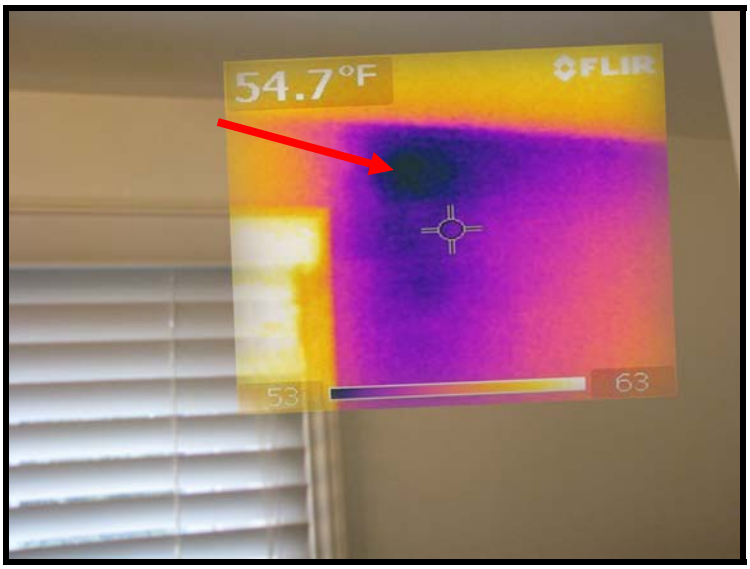

Figure 15 Active moisture staining was observed and tested utilizing a protimeter (moisture meter) along the interior second floor bathroom wall/ceiling area (the purple area, on thermal image, showing where active moisture exists behind the wall).

Figure 16 The chimney flashings in this area are in need of resealing.

Figure 17 Active moisture staining was observed and tested utilizing a protimeter (moisture meter) along the upper right corner of the interior chimney chase in the step down living room (see photos).

Figure 18 Active moisture staining was observed and tested utilizing a protimeter (moisture meter) along the interior front facing kitchen wall (below the bay window - see photo). The cause of the moisture appears to be due to openings along the exterior window framing.

Figure 19 The fireplace damper is not seated correctly and requires adjustment for proper operation.

Figure 20 The second floor stairway hand and guard rail is loose/not well secured and may pose a safety concern (see photo).

Figure 21 The kitchen faucet was actively dripping at the time of inspection (see photo). Dripping usually occurs when the O-ring inside the faucet's aerator has worn out or broken.

Figure 22 The toilet, on the second floor, is loose from the floor (see photo). A moderate tightening of the bolts will usually eliminate all movement.

Figure 23 Minor cosmetic cracking was observed along the bedroom ceiling and right facing living room walls (see photos).

Figure 24 Minor cosmetic cracking was observed along the bedroom ceiling and right facing living room walls (see photos).

Structure

DESCRIPTION OF STRUCTURE

Foundation:	•Concrete Block •Basement Configuration •~80% of Foundation Was Not Visible (finished)
Columns:	•Not Visible
Floor Structure:	•Concrete
Wall Structure:	•Wood Frame, Brick Veneer
Ceiling Structure:	•Joist
Roof Structure:	•Not Visible

STRUCTURE OBSERVATIONS

Positive Attributes

The construction of the home is good quality. The materials and workmanship, where visible, are good. The visible joist spans appear to be within typical construction practices. The inspection did not discover evidence of substantial structural movement.

General Comments

The visible portions of the Concrete Masonry Unit (CMU) foundation walls appeared to be in serviceable condition at the time of the inspection. Cracks appear for a wide variety of reason, some of which may not be apparent at the time of the inspection. Cracks less than ¼-inch which do not exhibit displacement are typically not considered to be structural issues unless they appear in conjunction with another condition.

RECOMMENDATIONS / OBSERVATIONS

Wood Boring Insects

- **Monitor/Investigate:** Evidence of termite activity and damage was observed along the subflooring materials in the basement furnace room (see photo). The infestation does not appear active and the property shows evidence of treatment for termites (drill marks in slab). It appears that the floor framing and subflooring materials were replaced to account for the termite damage; however there is risk of additional hidden damage. You should confirm that the property was treated in the past for termites and obtain a copy of the paperwork provided during the initial treatment for termites. Confirm when the property was treated and whether a guarantee is in place; otherwise treatment for eastern subterranean termites is recommended.
- ***FYI:*** *Termites are insects that feed on wood and serve an important function in nature by converting dead trees into organic matter. Unfortunately, the wood in buildings is equally appetizing to termites and they cause serious damage to residential and commercial buildings. Subterranean termites are found in the Northeast. Subterranean termites are ground-inhabiting, social insects that live in colonies. A colony or nest of subterranean termites may be up to 18-20 feet below the soil surface to protect it from extreme weather conditions. These termites travel through mud tubes to reach food sources above the soil surface.*

Foundation

- ***FYI:*** *Cracks that are less then ¼" in width and exhibiting no displacement of the block foundation wall normally indicate that no structural movement is apparent. If cracks develop along the foundation wall, they should be repaired ASAP. If the crack is narrower than 1/8-inch to 1/4-inch, then you should opt for an epoxy repair system. These are specially made for foundation cracks and do a good job. You can hire a service to come in and do the work, or you'll find do-it-yourself kits available. For cracks wider than 1/4-inch, use some polyurethane caulking. This is an extremely durable formulation made by several different companies. It sticks well and remains very flexible for years. A good method for monitoring foundational cracking involves gluing a piece of glass perpendicular across the crack and then monitor for cracking of the glass over time.*

Roofing

DESCRIPTION OF ROOFING

Roof Covering:	•Slate •Composite - Asphalt Shingle (3-Tab) •Roll Roofing
Roof Flashings:	•Metal
Chimneys:	•Masonry
Roof Drainage System:	•Aluminum •Downspouts discharge below grade
Skylights:	•None
Method of Inspection:	•Viewed from Ground with Camera •Walked on Roof •Viewed from Eaves •Viewed from Window

ROOFING OBSERVATIONS

Positive Attributes
The chimneys have been lined and are in good physical condition. The installation of the roofing materials has been performed in a professional manner. Better than average quality materials have been employed as roof coverings.

General Comments
Inspection of the roofing materials was limited due to existing snow cover. All **visible** roof components appeared to be in serviceable condition at the time of the inspection. Roof inspection typically includes examination of the following:

- Roof-covering material
- Presence of an underlying membrane
- Permanent structures such as chimneys
- Flashing of all roof covering penetrations such as vents and chimneys, junctions with dissimilar materials, valleys, any extreme changes in the slope of the roof
- Gutter and downspout condition
- Fastener and mounting penetrations for any roof-mounted equipment such as any solar equipment, HVAC equipment or supports for structures such as chimneys or combustion vents or flues.
- Condition of any installed skylights
- Visible roof framing

RECOMMENDATIONS / OBSERVATIONS

Gutters & Downspouts
- **Repair:** The gutters require cleaning to avoid spilling roof runoff around the building – a potential source of water entry or water damage.

Chimneys
- **Repair:** The protimeter (moisture meter) detected active moisture along the interior ceiling areas adjacent to both chimneys (see Interior Section). The cause of this moisture is most likely due to the chimney flashings failing to adequately direct water away from the interior living space. The chimney flashings should be resealed; consult a qualified roofer for repairs.

Asphalt Roofing
- ***FYI****: There are a few things that a homeowner can do to inspect and maintain a 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, so if you know the year the roofing was installed; it is easy to calculate whether the roofing may be about due for replacement.

Slate Roofing

- ***FYI:*** *The slate roofing materials are most likely Vermont Slate. Vermont slates have life expectancy of 100-200 years. It is typically green with purple, black, and red available. Vermont green slate is the most abundant, with well developed cleavage (easy to split into roofing slates), with good "fissibility" (relatively easy to work), making it the most common variety used. Slate from Vermont is lower in lime content than the Pennsylvania variety. Chemical composition of slates varies of course by quarry as does slate color. Slates are available in both fading and non-fading varieties. In Vermont slate fading color is not considered an indication of deterioration. Rather it's an aesthetic factor.*

  Because the actual composition of slate affects its durability (and cost), the identification of the source of existing slates is useful in evaluating the condition and future life of a roof. Common sources of roofing slates used in the US and Canada are Pennsylvania, Virginia, and Vermont. California, Georgia, Michigan, New York and Maine also have or had slate quarries. Common slate names have British origins. Identification of the slate source by visual inspection is difficult by other than experienced slate handlers or laboratories. However as the slate source has such a dramatic effect on the expected life of the material, any anecdotal, historical, or visual clues are useful. Readers are cautioned not to assume that slates in their area necessarily came only from the nearest slate quarry. Though that's a reasonable bet in many cases, one might find Virginia slate or Maine slate on roofs as distant from the quarries as British Columbia. Vermont Structural Slate Co. will identify slates if you mail them a 1.5"x1.5" triangular sample.

  Replacement slates are available from a variety of slate quarries, slate suppliers, and slate roofing companies. Slate "look alike" products are also available using cementious materials. If the building owner cannot afford to repair a slate roof where most slates are intact, 'holding action' slate roof repairs should be followed, such as simply sliding metal flashing up under broken or missing slates on the roof. The following is a list of slate sources:

  - *Vermont Structural Slate Co., PO Box 98 Fair Haven, VT 05743 802/265-4933 802/265-3865 FAX (Green, purple, unfading red, and Spanish imported black.)*
  - *Rising & Nelson Slate Co., West Pawlet, VT 05775; 802/645-0150 (all VT colors plus Buckingham Gray from VA and blacks from PA.)*
  - *Evergreen Slate Co., 68 Potter Ave., Granville, NY 12832; 518/642-2530. Vermont slates in 10 colors.*
  - *Hilltop Slate Co., Middle Granville, NY 12849; 518/642-2270 (all VT colors plus imported Spanish Black)*
  - *Structural Slate Co., Pen Argyl, PA 18072; 215/863-4145 (PA black)*
  - *Buckingham Slate Co., 4110 Fitzhugh Ave., Richmond, VA 23230; 805/355-4351 (VA Buckingham Grey)*

  Stainless steel slate hooks should be used for holding loose or replacement slates in place. The fastener end of the hook is nailed roughly 3" up from what will be the lower edge of the replacement slate. The slate is slid up over the hook and seated.

Exterior

DESCRIPTION OF EXTERIOR

Wall Covering:	•Brick •Wood Siding
Eaves, Soffits, And Fascias:	•Aluminum •Wood
Exterior Doors:	•Metal •Solid Wood •Sliding Glass
Window/Door Frames and Trim:	•Metal-Covered
Entry Driveways:	•Concrete
Entry Walkways And Patios:	•Concrete
Porches, Decks, Steps, Railings:	•Concrete •None •Concrete •None
Overhead Garage Door(s):	•Steel •Automatic Opener Installed
Surface Drainage:	•Level Grade •Graded Away From House (front)
Retaining Walls:	•Stone •Brick
Fencing:	•Steel/Iron

EXTERIOR OBSERVATIONS

Positive Attributes

There is no significant wood/soil contact around the perimeter of the house, thereby reducing the risk of insect infestation or rot. The house has brick constructed exterior walls. Window frames are clad, for the most part, with a low maintenance material. The aluminum soffits and fascia are a low-maintenance feature of the exterior of the home. The decking appears to be constructed from pressure treated wood. The garage is completely finished. The auto reverse mechanism on the overhead garage door responded properly to testing. The lot drainage was good, conducting surface water away from the building. The driveway and walkways are in good condition.

General Comments

The exterior of the home is generally in good condition and shows normal wear and tear for a home of this age; however some repairs and/or improvements are recommended.

RECOMMENDATIONS / OBSERVATIONS

Landscaping

- **Improve:** The tree branches, overhanging the roof, should be trimmed back to prevent debris from clogging gutters (see photo).

Retaining Wall

- **Repair:** The retaining wall, along the front of the home, shows evidence of limited movement and cracking (see photo). The damaged areas should be repaired by a qualified mason. In addition, the installation of weep-holes at its base or some other drainage provision to relieve pressure from behind would be a logical improvement. You should consult with a mason or landscape contractor before the expiration of your Inspection Objection Deadline to discuss various options and costs for repair or replacement.

Exterior Brick Veneer Walls

- **Repair:** A limited amount of step type cracking was observed along the mortar joints on the exterior brick veneer walls where several windows and the garage door exist (see photos). The cause of this type of separation is due to the supporting steel lintels rusting and expanding in volume. This jacking action on the surrounding block ultimately causes fractures and deterioration of the mortar in contact with the lintels. The cracks should be tuck-pointed and the lintels should be painted with a rust-inhibiting paint and caulked annually. Consult a qualified mason for further information and repair options.
- **Repair:** A limited amount of cracking was observed along the front right exterior corner of the brick veneer (see photo). This type of cracking is most likely due to a limited amount of settlement that has occurred. The rate of movement cannot be predicted during a one time inspection; however these cracks should be repaired and monitored closely for

additional movement. If movement continues, more significant repairs may be required. Consult a qualified mason for repairs.

Exterior Window & Door Frames

- **Repair:** The window and door frames, throughout the exterior of the home, require caulking to prevent moisture intrusion of the interior wall assembly (see photo). Maintaining window exteriors on an annual basis will extend their lifespan.

Electrical

DESCRIPTION OF ELECTRICAL

Size of Electrical Service:	•120/240 Volt Main Service - Service Size: 150 Amps
Service Drop:	•Overhead
Service Entrance Conductors:	•Aluminum
Service Equipment & Main Disconnects:	•Main Service Rating: 150 Amps •Breakers •Located: Garage
Service Grounding:	•Copper •Water Pipe Connection
Service Panel & Overcurrent Protection:	•Panel Rating: 150 Amps •Breakers •Fuses
Sub-Panel(s):	•None Visible
Distribution Wiring:	•Copper •Multi-Strand Aluminum
Wiring Method:	•Non-Metallic Cable "Romex" •Fabric-Covered •Armored Cable "BX"
Switches & Receptacles:	•Grounded and Ungrounded
Ground Fault Circuit Interrupters:	•Bathroom(s)
Smoke Detectors:	•Present

ELECTRICAL OBSERVATIONS

Positive Attributes

The size of the electrical service is sufficient for typical single family needs. Overall, the electrical system is in good order. Most outlets and light fixtures that were tested operated satisfactorily and were appropriately grounded. The distribution of electricity within the home is good. Ground fault circuit interrupter (GFCI) devices have been provided in some areas of the home. These devices are extremely valuable, as they offer an extra level of shock protection. All GFCI's that were tested responded properly. Dedicated 220 volt circuits have been provided for all 220 volt appliances within the home. All visible wiring within the home is copper; this is a good quality electrical conductor.

General Comments

Inspection of the electrical system revealed the need for repairs. ***Unsafe electrical conditions represent a shock hazard***. A licensed electrician should be consulted to undertake the repairs recommended below.

RECOMMENDATIONS / OBSERVATIONS

Electrical Outlets

- **Repair:** One three-prong outlet, along the right facing interior foyer hallway, is ungrounded (see photo). This outlet and the circuit should be investigated and repaired as necessary by a qualified licensed electrician. In some cases a ground wire may be present in the electrical box and simply needs to be connected. If no ground is present "repair", some electrical codes allow the installation of a ground fault circuit interrupter (GFCI) type outlet where grounding is not provided. In this case the GFCI may work but can't be tested by normal means.

Electrical Sub-Panel

- **Repair:** The 30 amp cartridge fuses, servicing the air conditioning unit, are undersized (see photo). The service tag on the AC unit requires a minimum of 35 amp fuses.
- **Repair:** One opening was observed along the top of the electrical sub-panel (see photo). Unfilled holes or knockouts in the electrical service sub-panel may allow persons to come into contact with energized electrical components. This condition is a potential shock/electrocution hazard and should be corrected by a qualified electrical contractor.

Electrical Distribution Wiring

- **Repair:** The damaged exterior electrical branch wiring, servicing the air conditioning unit, should be replaced (see photo). The Inspector recommends correction by a qualified electrical contractor.
- **Repair:** The unsecured electrical branch wiring in the garage should be properly secured (see photo). According to the NEC (National Electrical Code) wiring should be stapled to wood framing members or secured with hangers within 12"

on both sides of all enclosures (panels, junction boxes, switches, outlets, and fixtures). Wiring beyond the first secured point next to enclosures should be stapled or secured every 4 ½' along the length of the circuit. Recommend that this repair be done by a certified electrician.

Lights/Ceiling Fans

- **Repair:** The light fixture, along the rear left bedroom ceiling, would not operate at the time of inspection (see photo). If the bulbs are not blown, the circuit should be repaired.

Heating

DESCRIPTION OF HEATING

Energy Source:	•Natural Gas
Heating System Type:	•Forced Air Furnace •Manufacturer: Rheem •Year of Manufacture: 1998
Vents, Flues, Chimneys:	•Plastic
Heat Distribution Methods:	•Ductwork
Other Components:	•Condensate Pump

HEATING OBSERVATIONS

Positive Attributes

This is a high efficiency heating system; heating a home with this type of heating system should be relatively economical. Adequate heating capacity and distribution within the home is adequate. The heating system is controlled by a programmable thermostat; this type of thermostat, if set up correctly, helps reduce heating costs.

General Comments

The heating system is in satisfactory condition and shows no visible evidence of major defects; however minor improvements and/or repairs are recommended. All furnace components appeared to be in serviceable condition at the time of the inspection.

RECOMMENDATIONS / OBSERVATIONS

Ductwork

- **Safety Issue:** The inactive/inoperable electronic air filter, in the garage should be either completely sealed/insulated or removed (see photo). If left uncorrected this condition could pose a potential carbon monoxide hazard inside the home (if a car is left running in the garage). This condition is also allowing unnecessary heat/cooling loss to occur.

Furnace

- ***FYI:*** *Check the air filter in your furnace or fan coil every 3 to 4 weeks. A dirty filter will cause excessive strain on your furnace, air conditioner or heat pump. Replace your filter when necessary, or clean it if you have the reusable type. (If you have a reusable filter, make sure it's completely dry before you re-install it.) The prefilter and collection cells of an electronic air cleaner should be cleaned at least two or three times per year.*

Cooling

DESCRIPTION OF COOLING / HEAT PUMPS

Energy Source:	•Electricity
Central System Type:	•Air Cooled Central Air Conditioning •Manufacturer: Rheem •Cooling Capacity: 4 Tons •Date of Manufacture: 1998
Through-Wall Equipment:	•Not Present
Other Components:	•Condensate Pump

COOLING / HEAT PUMPS OBSERVATIONS

Positive Attributes
The capacity and configuration of the systems should be sufficient for the home.

General Comments
The air conditioning system could not be operated as the outdoor temperature was not above 60 degrees F consecutively for 24 hours; however all visible components of the air-conditioning system appeared to be in serviceable condition at the time of the inspection. Inspection of the air-conditioning system typically includes examination of the following:

- Compressor housing exterior and mounting condition
- Refrigerant line condition
- Proper disconnect (line of sight)
- Proper operation (outside temperature permitting)
- Proper condensate discharge

RECOMMENDATIONS / OBSERVATIONS

No repairs or improvements to the cooling system were needed at the time of inspection.

Air Conditioning Unit
- ***FYI:*** *The power to the central unit should be shut off when the cooling season ends. Most central air conditioners have a small electric heater on the compressor to keep refrigerant out of the lubricating oil. Flip the circuit breaker to turn this heater off.* ***To prevent damage to the compressor, don't forget to turn the power back on a day or two before you need to operate the central air conditioner.*** *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 professional 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.*

Plumbing

DESCRIPTION OF PLUMBING

Water Supply Source:	•Public Water Supply
Service Pipe to House:	•Copper
Main Water Valve Location:	•Front Wall of Basement
Interior Supply Piping:	•Copper
Waste System:	•Public Sewer System
Drain, Waste, & Vent Piping:	•Plastic •Copper •Cast Iron •Steel
Water Heater:	•Gas •Approximate Capacity (in gallons): 40 •Manufacturer: RUUD •Year of Manufacture: 2006
Fuel Shut-Off Valves:	•Natural Gas Main Valve At Exterior
Other Components:	•Pressure Regulator on Main Line •Expansion Tank

PLUMBING OBSERVATIONS

Positive Attributes

The plumbing system is in overall satisfactory condition. Home water supply pressure was within the acceptable limits of 40-60 pounds per square inch (PSI) at the time of the inspection.

General Comments

The visible portion of the plumbing system is in generally good condition; however some typical minor improvements and/or repairs are recommended. The main water supply shut-off was located in the basement. The visible water distribution pipes appeared to be in serviceable condition at the time of the inspection. The visible drain, waste and vent pipes appeared to be in serviceable condition at the time of the inspection. Fuel for gas-fired appliances was provided by natural gas. The visible portions of the gas supply pipes appeared to be in serviceable condition at the time of the inspection.

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 drain lines leading into the public or private sewer/septic system. This type of inspection is beyond the scope of a general home inspection and will involve additional costs.

RECOMMENDATIONS / OBSERVATIONS

Plumbing Fixtures

- **Repair:** The toilet, on the second floor, is loose from the floor (see photo). A moderate tightening of the bolts will usually eliminate all movement. 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 dryrot repairs, replacement of the wax seal is a wise precautionary procedure when repairing loose toilets.
- **Repair:** The kitchen faucet was actively dripping at the time of inspection (see photo). Dripping usually occurs when the O-ring inside the faucet's aerator has worn out or broken. Left unchecked, a dripping kitchen faucet can have a significant impact on the water bill. Consult a qualified plumber for repairs.

Supply Plumbing

- **Improve:** The copper supply piping, along the rear side of the home, should be insulated to prevent possible freezing damage (see photo).
- **Deferred Cost:** The shut-off valve and pressure regulator above the water heater are heavily corroded and should be monitored closely for future leakage. Ultimately, repair or replacement of the shut-off valves will be necessary.

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.*

Insulation / Ventilation

DESCRIPTION OF INSULATION / VENTILATION

Attic Insulation:	•Not Visible
Roof Cavity Insulation:	•Not Applicable
Exterior Wall Insulation:	•Not Accessible
Basement Wall Insulation:	•Not Visible
Floor Cavity Insulation:	•Not Accessible
Vapor Retarders:	•None Visible
Roof Ventilation:	•Cupola •Roof Vents •Gable Vents
Exhaust Fan/vent Locations:	•Bathroom •Kitchen •Dryer

INSULATION / VENTILATION OBSERVATIONS

General Comments

No access to the attic space was provided. The attic was not inspected. Because attics contain may contain potential fire or health hazards, other safety defects, or defects which have the potential to cause damage to the home, the Inspector recommends an access hatch be installed for future inspection.

RECOMMENDATIONS / ENERGY SAVING SUGGESTIONS

Attic Insulation

- ***FYI:*** *The resistance to heat moving through insulation is measured as "R-value", the higher the R-value, the greater the resistance to heat flow through the insulation. The recommended R-value in our area of the country is R-38. Insulation is measured in R-values—the higher the R-value, the better your walls and roof will resist the transfer of heat. DOE recommends ranges of R-values based on local heating and cooling costs and climate conditions in different areas of the nation. State and local codes in some parts of the country may require lower R-values than the DOE recommendations, which are based on cost effectiveness.*

Attic Ventilation

- ***FYI:*** *It is generally required that one square foot of free vent area be provided for every one hundred and fifty square feet of ceiling area. Proper ventilation will help to keep the home and garage cooler during warm weather and extend the life of the roofing materials. Proper ventilation will also help reduce the potential for heat build-up and condensation within the attic. The standard approach to attic ventilation in temperate climates is to thermally isolate the attic space from the living space using some type of thermal insulation. The attic is then ventilated using ventilation devices which allow natural air movement to carry away excess heat before it can radiate into the living space, increasing cooling costs and reducing comfort levels, or before heat originating in the living space can create roof problems such as ice damming.*

Interior

DESCRIPTION OF INTERIOR

Wall And Ceiling Materials:	•Drywall •Plaster
Floor Surfaces:	•Carpet •Tile •Vinyl/Resilient •Concrete
Window Type(s) & Glazing:	•Double/Single Hung •Casement •Double Pane
Doors:	•Wood-Solid Core

INTERIOR OBSERVATIONS

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

General Condition of Windows and Doors
The majority of the doors and windows are good quality.

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

RECOMMENDATIONS / OBSERVATIONS

Stairways
- **Repair:** The second floor stairway hand and guard rail is loose/not well secured and may pose a safety concern (see photo).

Interior Finishes (Walls/Ceilings/Trim)
- **Repair:** Active moisture staining was observed and tested utilizing a protimeter (moisture meter) along the interior second floor bathroom wall/ceiling area and along the upper right corner of the interior chimney chase in the step down living room (see photos). Both areas are adjacent to the chimneys indicating a problem with the chimney flashings failing to adequately direct rainwater away from the home's interior. Repairs to the chimney flashings are needed; consult a qualified roofer for repairs.
- **Repair:** Active moisture staining was observed and tested utilizing a protimeter (moisture meter) along the interior front facing kitchen wall (below the bay window - see photo). The cause of the moisture appears to be due to openings along the exterior window frame (see also Exterior Section).
- **Repair:** Active moisture staining was observed and tested utilizing a protimeter (moisture meter) along the interior front facing cedar closet in the basement (see photo). The exact cause of the moisture could not be identified; however it is most likely due to a combination of conditions such as the exterior retaining wall/planter area (which is retaining moisture), deteriorated exterior caulking along the window frames, and the clogged/ice filled gutters. Repairs and/or improvements to the aforementioned items will help to prevent further moisture penetration.
- **Improve:** Minor cosmetic cracking was observed along the bedroom ceiling and right facing living room walls (see photos). These cracks are most likely due to a limited amount of settling that has occurred in the past (see also Exterior Section) and pose no structural concern. Improvements will be necessary prior to painting.

Basement Leakage/Moisture
- **Monitor/Investigate:** The front and rear foundation walls show evidence of active moisture penetration. The visible evidence is **typical** for a home of this age, construction and location. Depending on your plans for the basement, you may wish to have the basement evaluated further by a qualified waterproofing company to discuss options for improvement. ***It should be understood that it is impossible to predict the severity or frequency of moisture penetration on a one time visit to a home.*** Virtually all basements exhibit signs of moisture penetration and virtually all basements will indeed leak at some point in time. Further monitoring of the foundations will be required to determine what improvements, if any, will be required.

Environmental Issues

- ***FYI:*** *Radon is a naturally occurring, inert, radioactive gas, derived from naturally occurring uranium deposits in the earth. It is colorless, odorless, and tasteless. A danger exists when the gas percolates through the ground and enters a tightly enclosed structure (such as a home). Long term exposure to high levels of radon gas can cause cancer.* ***The Environmental Protection Agency (E.P.A.) states that a radon reading of more than 4.0 picocuries per liter of air represents a health hazard.*** *For more information, consult the Environmental Protection Agency (E.P.A.) for further guidance and a list of testing labs in your area.*
- ***FYI:*** *Carbon monoxide is a colorless, odorless gas that can result from a faulty fuel burning furnace, range, water heater, space heater or wood stove. Proper maintenance of these appliances is the best way to reduce the risk of carbon monoxide poisoning. For more information, consult the Consumer Product Safety Commission at 1-800-638-2772 (C.P.S.C.) for further guidance. It would be wise to install carbon monoxide detectors within the home.*

Fireplaces / Wood Stoves

DESCRIPTION OF FIREPLACES / WOOD STOVES

Fireplaces:	•Metal Firebox
Vents/Flues:	•Masonry Flue
Wood/Coal Stoves:	•None

FIREPLACES / WOOD STOVES OBSERVATIONS

General Comments

On the whole, the fireplace and its components are in satisfactory condition. Inspection of wood-burning fireplaces typically includes visual examination of the following:

- Adequate hearth
- Firebox condition
- Operable damper
- Visible flue condition
- Ember barrier
- Exterior condition

RECOMMENDATIONS / OBSERVATIONS

Fireplace

- **Improve:** The fireplace damper is not seated correctly and requires adjustment for proper operation (see photo).
- ***FYI:*** *Gas fireplaces don't need a lot of maintenance, but you should inspect your unit before each burning season. See if there's been any change to the shape or color of the flames. A properly adjusted gas fireplace should produce blue flames with yellowish tips. (If your flames don't match, find the control panel and adjust the primary air shutter... if that doesn't fix the problem, you'll need to consult a specialist.) Also check to see if soot has formed on the logs or windows. If this is the case, you should check with your gas supplier to find out if the composition of the gas has changed.*

Gas Fueled Ventless Fireplaces

- ***FYI:*** *Most gas-burning fixtures, whether furnaces, water heaters, or fireplaces, vent combustion exhaust to the exterior. "Unvented" fireplaces vent exhaust to the interior of the building. Fortunately, there have been very few reported problems with these fixtures. They are at odds with the common sense of gas safety, and their safety should not be taken for granted. If gas combustion is incomplete for any reason, soot and carbon monoxide are produced. Carbon monoxide, commonly recognized as an odorless, lethal gas, causes no harm when vented to the exterior of the dwelling. When vented into a home, it can cause debilitating sickness or death. For this reason, unvented gas log fireplaces are specially designed to maximize gas combustion. They are also equipped with carbon monoxide sensors, an oxygen depletion sensor, and a complex system of safety shutoff devices. As long as these safety features function perfectly, unvented gas fireplaces can operate without posing a threat to the health and safety of occupants. These are all way beyond the inspection capabilities of a home inspector. It is possible for well-designed backup systems to fail, no matter how carefully manufactured. Nothing in the realm of human invention is 100% safe. The risks inherent in unvented gas fireplaces may be small, but are not nonexistent.*

Appliances

DESCRIPTION OF APPLIANCES

Appliances Tested:	•Stove & Range •Dishwasher •Waste Disposer •Refrigerator •Clothes Washer •Clothes Dryer
Laundry Facility:	•240 Volt Circuit for Dryer •120 Volt Circuit for Washer •Hot and Cold Water Supply for Washer •Washer Discharges to Laundry Sink
Other Components Tested:	•Cooktop Exhaust Vent/Fan

APPLIANCES OBSERVATIONS

Positive Attributes
The appliances are in satisfactory operating condition, all appliances that were tested responded satisfactorily.

General Comments
The appliances are middle aged. As such, they will become slightly more prone to breakdowns.

RECOMMENDATIONS / OBSERVATIONS

No repairs or improvements to the appliances were needed at the time of inspection.

Inspection Limitations

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 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.

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

LIMITATIONS OF ROOFING INSPECTION

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

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

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

LIMITATIONS OF EXTERIOR INSPECTION

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

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

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

LIMITATIONS OF ELECTRICAL INSPECTION

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

- Electrical components concealed behind finished surfaces are not inspected.
- Only a representative sampling of outlets and light fixtures were tested.
- Furniture and/or storage restricted access to some electrical components which may not be inspected.

- The inspection does not include remote control devices, alarm systems and components, low voltage wiring, systems, and components, ancillary wiring, systems, and other components which are not part of the primary electrical power distribution system.

LIMITATIONS OF HEATING INSPECTION

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

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

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

LIMITATIONS OF COOLING / HEAT PUMPS INSPECTION

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

- Window mounted air conditioning units are not inspected.
- The cooling supply adequacy or distribution balances are not inspected.

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

LIMITATIONS OF INSULATION / VENTILATION INSPECTION

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

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

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

LIMITATIONS OF PLUMBING INSPECTION

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

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

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

LIMITATIONS OF INTERIOR INSPECTION

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

- Furniture, storage, appliances and/or wall hangings are not moved to permit inspection and may block defects.
- Carpeting, window treatments, central vacuum systems, household appliances, recreational facilities, paint, wallpaper, and other finish treatments are not inspected.

LIMITATIONS OF APPLIANCES INSPECTION

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

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

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

LIMITATIONS OF FIREPLACES / WOOD STOVES INSPECTION

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

- The interiors of flues or chimneys are not inspected.
- Firescreens, fireplace doors, appliance gaskets and seals, automatic fuel feed devices, mantles and fireplace surrounds, combustion make-up air devices, and heat distribution assists (gravity or fan-assisted) are not inspected.
- The inspection does not involve igniting or extinguishing fires nor the determination of draft.
- Fireplace inserts, stoves, or firebox contents are not moved.

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

Maintenance Advice

UPON TAKING OWNERSHIP

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

- ❑ Change the locks on all exterior entrances, for improved security.
- ❑ Check that all windows and doors are secure. Improve window hardware as necessary. Security rods can be added to sliding windows and doors. Consideration could also be given to a security system.
- ❑ Install smoke detectors on each level of the home. Ensure that there is a smoke detector outside all sleeping areas. Replace batteries on any existing smoke detectors and test them. Make a note to replace batteries again in 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 issues and what to do in the event of fire.
- ❑ Examine driveways and walkways for trip hazards. Undertake repairs where necessary.
- ❑ Examine the interior of the home for trip hazards. Loose or torn carpeting and flooring should be repaired.
- ❑ Undertake improvements to all stairways, decks, porches and landings where there is a risk of falling or stumbling.
- ❑ Review your home inspection report for any items that require immediate improvement or further investigation. Address these areas as required.
- ❑ Install rain caps and vermin screens on all chimney flues, as necessary.
- ❑ Investigate the location of the main shut-offs for the plumbing, heating and electrical systems. If you attended the home inspection, these items would have been pointed out to you.

REGULAR MAINTENANCE

EVERY MONTH

- ❑ Check that fire extinguisher(s) are fully charged. Re-charge if necessary.
- ❑ Examine heating/cooling air filters and replace or clean as necessary.
- ❑ Inspect and clean 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.

SPRING 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.
- ❑ Inspect all driveways, walkways, decks, porches, and landscape components for evidence of deterioration, movement or safety hazards.
- ❑ Clean windows and test their operation. Improve caulking and weather-stripping as necessary. Watch for evidence of rot in wood window frames. Paint and repair 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.

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 licensed specialist. Preventative treatments may be recommended in some cases.

PREVENTION IS THE BEST APPROACH

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

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

Picocuries of Radon Per Liter of Air (pCi/L)

0 5 10 15 20 25 or greater

↑ **4.0 pCi/L - EPA RECOMMENDED ACTION GUIDELINE**

↑ 1.3 pCi/L - Average indoor radon concentration

↑ 0.4 pCi/L - Average outdoor radon concentration

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

What do radon test results mean?

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

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

NOTE: All tests should meet EPA technical protocols.

Chart 1: Radon Test Conducted Outside Real Estate Transaction

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

* If your first short term test is several times greater that 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**

* 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 ar 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, thee 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 sine 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 heavily-leaded paint. Some homes built after 1960 also contain heavily-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.

NATIONAL ASSOCIATION OF HOME INSPECTORS, INC.
STANDARDS OF PRACTICE & CODE OF ETHICS

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STANDARDS OF PRACTICE

1. Purpose, Scope and General Statements

1.1 The Standards of Practice (Standards) provide the minimum standards of performance for a written report on a residential home inspection performed by and for the exclusive use of members of the National Association of Home Inspectors, Inc. (NAHI™).

1.2 The Standards define and clarify the purpose, conditions, limitations, exclusions, and certain terms relating to an inspection.

1.3 The Standards describe those items, components, and systems included in the scope of an inspection.

1.4 The Standards apply only to the inspection of buildings with one (1) to four (4) dwelling units.

1.5 The Standards apply to a visual inspection of the readily accessible areas of the included items, components, and systems to determine if, at the time of the inspection, they are performing their intended function without regard to life expectancy.

1.6 The purpose of the inspection is to identify visible defects and/or conditions that, in the judgment of the Inspector, adversely affect the function and/or integrity of the items, components, and systems.

1.7 Inspections performed under the Standards are basically visual and rely upon the opinion, judgment, and experience of the Inspector, and are not intended to be technically exhaustive.

1.8 Inspections shall be performed in a time period sufficient to allow compliance with the provisions of the Standards.

1.9 Inspections performed under the Standards shall not be construed as a compliance inspection of any code, governmental regulation, or manufacturer's installation instructions or procedures. In the event a law, statute, or ordinance prohibits a procedure recommended in the Standards, the Inspector is relieved of the obligation to adhere to the prohibited part of the Standards.

1.10 Inspections performed under the Standards are not an expressed or implied warranty or a guarantee of the adequacy, performance, or useful life of any item, component, or system in, on, or about the inspected property.

1.11 Detached building(s) and detached garage(s) located on the property will be inspected under these Standards only if specifically listed in the inspection report.

1.12 The National Association of Home Inspectors recommends that its members perform inspections in accordance with these Standards, the Code of Ethics, and applicable law(s). The Standards are not intended to limit members from performing "additional inspection services."

1.13 The inspector shall report on any system and component included in these standards of practice which were present at the time of the home inspection but were not inspected and provide the reason they were not inspected.

2. General Limitations and Exclusions

2.1 Inspections performed under the Standards exclude any item(s) concealed or not readily accessible to the Inspector. The Inspector is not required to move furniture, personal, or stored items; lift floor coverings; move attached wall, ceiling coverings, or panels; or perform any test(s) or procedures(s) which could damage or destroy the item(s) being evaluated.

2.2 The following are excluded and not limited to: appliances, recreational facilities, alarms, intercoms, speaker systems, radio controlled devices, security devices and lawn irrigation systems.

2.3 The determination of the presence of or damage caused by termites or any other wood-damaging insects or organism is excluded.

2.4 Also excluded from a standard home inspection is the determination of the indoor air quality or sickness of any building including, but not limited to, the presence or absence of all manner of biological activity, such as molds, insects, birds, pets, mammals, and other flora and fauna, and their consequent physical damage, toxicity, odors, waste products, and noxiousness.

2.5 Use of special instruments or testing devices, such as amp meters, pressure gauges, moisture meters, gas detectors and similar equipment is not required.

2.6 The inspection is not required to include information from any source concerning previous property, geological, environmental or hazardous waste conditions, manufacturer recalls or conformance of proper manufacturer's installation of any component or system, or information contained in Consumer Protection Bulletin. The inspection is not required to include information from any source concerning past or present violations of codes, ordinances, or regulations.

2.7 The inspection and report are opinions only, based upon visual observation of existing conditions of the inspected property at the time of the inspection. **THE REPORT IS NOT INTENDED TO BE, OR TO BE CONSTRUED AS, A**

GUARANTEE, WARRANTY, OR ANY FORM OF INSURANCE. The Inspector will not be responsible for any repairs or replacements with regard to the property or the contents thereof.

2.8 The Inspector is not required to determine property boundary lines or encroachments.

2.9 The inspector is not required to provide an inspection of any condominium common component, system or evaluate condominium reserve accounts.

3. Site

3.1 Components for Inspection.

3.1.1 Building perimeter, land grade, and water drainage directly adjacent to the foundation.

3.1.2 Trees and vegetation that adversely affect the structure.

3.1.3 Walks, grade steps, driveways, patios, and retaining walls contiguous with the structure.

3.2 Procedures for Inspection.

The Inspector will:

3.2.1 Describe **the type of** material and inspect the condition of the driveways, walkways, grade steps, patios, and other items contiguous with the inspected structure.

3.2.2 Observe the drainage, grading, and vegetation for conditions that adversely affect the structure.

3.3 Limitations.

*The Inspector is **not** required to:*

3.3.1 Inspect fences or privacy walls.

3.3.2 Evaluate the condition of trees, shrubs, and or other vegetation.

3.3.3 Evaluate or determine soil or geological conditions, site engineering, or property boundaries.

4. Foundations

4.1 Components for Inspection.

4.1.1 Foundation walls, first-floor systems, other support and sub-structure components, stairs.

4.1.2 Ventilation (when applicable).

4.1.3 Grade slab and/or floor slab.

4.2 Procedures for Inspection.

The Inspector will:

4.2.1 Describe the type of structure and material comprising the structure and other items inspected.

4.2.2 Observe the condition and serviceability of visible, exposed areas of foundation walls, grade slab, bearing walls, posts, piers, beams, joists, trusses, subfloor, chimney foundations, stairs, and other similar structural components.

4.2.3 Inspect foundations for indications of flooding, moisture, or water penetration.

4.2.4 Observe subfloor crawl space ventilation and vapor barriers.

4.2.5 Operate the sump pump when present.

4.2.6 Inspect the visible and accessible wooden members.

4.2.7 Observe the visible condition of floor slab when present.

4.3 Limitations.

*The Inspector is **not** required to:*

4.3.1 Enter subfloor crawl spaces with headroom of less than 3 feet, obstructions, or other detrimental conditions.

4.3.2 Move stored items or debris or perform excavation to gain access.

4.3.3 Enter areas which, in the inspector's opinion, may contain conditions or materials hazardous to the health and safety of the Inspector.

4.3.4 Operate sump pumps equipped with internal/water dependent switches.

5. Exterior

5.1 Components for Inspection.

5.1.1 Visible structural components.

5.1.2 Wall covering, trim, and protective coating.

5.1.3 Windows and doors.

5.1.4 Attached porches, decks, steps, balconies, handrails, guardrails, and carports.

5.1.5 Visible exterior portions of chimneys.

5.2 Procedures for Inspection.

The Inspector will:

5.2.1 Describe the type and material comprising the exterior components inspected.

5.2.2 Observe the condition of the components from the ground level.

5.2.3 Observe the condition of a representative number of visible windows and doors.

5.2.4 Inspect attached porches, decks, steps, balconies, handrails, and guardrails.

5.3 Limitations.

*The Inspector is **not** required to:*

5.3.1 Inspect buildings, decks, patios, retaining walls, and other structures detached from the house.

5.3.2 Evaluate function of shutters, awnings, storm doors, storm windows and similar accessories.

5.3.3 Inspect or test the operation of security locks, devices, or systems.

5.3.4 Evaluate the presence, extent, and type of insulation and vapor barriers in the exterior walls.

5.3.5 Examine the interior of the chimney flues or determine the presence or absence of flu liners.

5.3.6 Inspect for safety type glass or the integrity of thermal window seals or damaged glass.

6. Roof Coverings, Flashings, Gutters, Downspouts and Roof Ventilation

6.1 Components for Inspection.

6.1.1 Roof covering material.

6.1.2 Rain gutter and downspout system.

6.1.3 Visible portions of roof flashings.

6.1.4 Roof ventilation.

6.1.5 Roof soffits and fascias.

6.1.6 Roof skylights and other roof accessories.

6.2 Procedures for Inspection.

The Inspector will:

6.2.1 Describe the type of roofing and gutters.

6.2.2 Observe the condition of visible roof material, rain gutter and downspout systems, visible portions of roof flashings, roof soffits and fascias, roof vents, skylights and other roof accessories visible from the exterior.

6.2.3 If possible, inspect the roof surface and components from arms-length distance or with binoculars from the ground.

6.2.4 Inspect flat roofs where internal accessibility is readily and safely available.

6.2.5 Report presence of roof ventilation.

6.3 Limitations.

*The Inspector is **not** required to:*

6.3.1 Walk on or access a roof where it could damage the roof or roofing material or be unsafe for the Inspector.

6.3.2 Remove snow, ice, debris or other conditions that prohibit the observation of the roof surfaces.

6.3.3 Inspect internal gutter and downspout systems and related underground drainage piping.

6.3.4 Inspect antennas, lightning arresters, or similar attachments.

6.3.5 Operate powered roof ventilators.

6.3.6 Determine remaining life expectancy of roof coverings, presence or absence of hail damage; manufacturers' defects, exceptions, installation methods or recalls; or number of layers.

6.3.7 Determine adequacy of roof ventilation.

7. Roof Structure, Attic and Insulation

7.1 Components for Inspection.

7.1.1 Roof framing, sheathing and decking.

7.1.2 Attic insulation.

7.2 Procedures for Inspection.

The Inspector will:

7.2.1 Describe the type of material comprising the roof structure in the visible attic area.

7.2.2 Observe the condition of the visible roof structure and attic components where readily and safely accessible.

7.2.3 Investigate evidence of the presence of water penetration.

7.2.4 Determine the presence of attic insulation and its approximate thickness.

7.3 Limitations.

*The Inspector is **not** required to:*

7.3.1 Enter attic spaces with headroom of less than 5 feet, with insulation covering the ceiling joist, or bottom truss cord, or if there are obstructions, trusses, or other detrimental conditions.

7.3.2 Break or otherwise damage the surface finish or weather seal on or around access panels and covers.

8. Attached Garage(s)/Carport(s)

8.1 Components for Inspection.

8.1.1 Exterior and interior walls and ceilings, floors, windows, doors, roof, and foundation.

8.1.2 Electrical system and components.

8.1.3 Plumbing system and components.

8.1.4 Heating systems or units.

8.2 Procedures for Inspection.

The Inspector will:

8.2.1 Describe the type and material of door(s), exterior walls, roof (if applicable), and other items to be inspected.

8.2.2 Observe the condition and function of listed components; electric, plumbing, heating and similar systems.

8.2.3 Inspect vehicle doors for type, general condition, and intended function by manual operation or by the use of permanently affixed opener(s).

8.3 Limitations.

*The Inspector is **not** required to:*

8.3.1 Inspect or operate equipment housed in the garage area except as otherwise addressed in the Standards.

8.3.2 Verify or certify safe operation of any auto reverse or related safety function(s) of a vehicle door.

9. Electrical

9.1 Components for Inspection.

9.1.1 Entrance of the primary service from masthead to main panel.

9.1.2 Main and sub-panels including feeders.

9.1.3 Branch circuits, connected devices, and lighting fixtures.

9.2 Procedures for Inspection.

The Inspector will:

9.2.1 Describe the type and location of primary service (overhead or underground), voltage, amperage, and over-current protection devices (fuses or breakers).

9.2.2 Observe the existence of a connected grounding conductor when readily accessible.

9.2.3 Inspect the main and branch circuit conductors for proper over current protection and condition by visual observation after removal of the readily accessible main and sub electric panel cover(s).

9.2.4 Report the presence of aluminum branch circuit wiring at the main and sub-panels.

9.2.5 Verify operation of a representative number of accessible switches, receptacles and light fixtures.

9.2.6 Verify grounding and polarity of a representative number of receptacles in proximity to plumbing fixtures or on the exterior.

9.2.7 Verify operation of ground fault circuit interrupters (GFCI), if present.

9.2.8 Observe the general condition of visible branch circuit conductors that may constitute a hazard to the occupant or the structure by reason of improper use or installation of electrical components.

9.3 Limitations.

*The Inspector is **not** required to:*

9.3.1 Insert any tool, probe or testing device into the main or sub-panels.

9.3.2 Activate electrical systems or branch circuits which are not energized.

9.3.3 Operate overload protection devices.

9.3.4 Inspect ancillary systems, including but not limited to: burglar alarms, home protection systems, low voltage relays, smoke/heat detectors, antennas, electrical

de-icing tapes, lawn sprinkler wiring, swimming pool wiring, or any systems controlled by timers.

9.3.5 Move any objects, furniture, or appliances to gain access to any electrical component.

9.3.6 Test every switch, receptacle, and fixture.

9.3.7 Remove switch and outlet cover plates.

9.3.8 Inspect electrical equipment not readily accessible or dismantle any electrical device or control.

9.3.9 Verify continuity of connected service ground(s).

10. Plumbing

10.1 Components for Inspection.

10.1.1 Visible water supply lines.

10.1.2 Visible waste/soil and vent lines.

10.1.3 Fixtures and faucets.

10.1.4 Domestic hot water system and fuel source.

10.2 Procedures for Inspection.

The Inspector will:

10.2.1 Describe the material of the main line and water supply lines.

10.2.2 Verify the presence of a main water supply valve.

10.2.3 Describe the type of sanitary waste piping.

10.2.4 Describe the type and capacity of domestic water heating unit(s).

10.2.5 Inspect the condition of accessible and visible water and waste lines.

10.2.6 Inspect and operate fixtures and faucets.

10.2.7 Inspect and operate the domestic hot water system.

10.2.8 Inspect and operate drain pumps and waste ejector pumps when possible.

10.2.9 Test the water supply for functional flow.

10.2.10 Test waste lines from sinks, tubs and showers for functional drainage.

10.3 Limitations.

*The Inspector is **not** required to:*

10.3.1 Operate any main, branch or fixture valve, except faucets, or determine water temperature.

10.3.2 Inspect any system that is shut-down or secured.

10.3.3 Inspect any plumbing components not readily accessible.

10.3.4 Inspect any exterior plumbing components or interior or exterior drain systems.

10.3.5 Inspect interior fire sprinkler systems.

10.3.6 Evaluate the potability of any water supply.

10.3.7 Inspect water conditioning equipment, including softener and filter systems.

10.3.8 Operate freestanding or built-in appliances.

10.3.9 Inspect private water supply systems.

10.3.10 Test shower pans, tub and shower surrounds, or enclosures for leakage.

10.3.11 Inspect gas supply system for materials, installation or leakage.

10.3.12 Evaluate the condition and operation of water wells and related pressure tanks and pumps; the quality or quantity of water from on-site water supplies; or the condition and operation of on-site sewage disposal systems such as cesspools, septic tanks, drain fields, related underground piping, conduit, cisterns, and equipment.

10.3.13 Inspect and operate fixtures and faucets if the flow end of the faucet is connected to an appliance.

10.3.14 Record location of any on-site visible fuel tanks within or directly adjacent to structure.

11. Central Heating

11.1 Components for Inspection.

11.1.1 Fuel source.

11.1.2 Heating equipment.

11.1.3 Heating distribution.

11.1.4 Operating controls.

11.1.5 Flue pipes, chimneys and venting.

11.1.6 Auxiliary heating units.

11.2 Procedures for Inspection.

The Inspector will:

11.2.1 Describe the type of fuel, heating equipment, and heating distribution system.

11.2.2 Operate the system using normal readily accessible control devices.

11.2.3 Open readily accessible access panels or covers provided by the manufacturer or installer, if readily detachable.

11.2.4 Observe the condition of normally operated controls and components of the systems.

11.2.5 Observe visible flue pipes, dampers and related components for functional operation.

11.2.6 Observe the condition of a representative number of heat sources in each habitable space of the house.

11.2.7 Inspect the operation of fixed supplementary heat units. See 2.6 for more information.

11.3 Limitations.

*The Inspector is **not** required to:*

11.3.1 Activate or operate heating or other systems that do not respond to normal controls or have been shut-down.

11.3.2 To inspect or evaluate a heat exchanger.

11.3.3 Inspect equipment or remove covers or panels that are not readily accessible.

11.3.4 Dismantle any equipment, controls, or gauges.

11.3.5 Inspect the interior of chimney flues.

11.3.6 Inspect heating system accessories, such as humidifiers, air purifiers, motorized dampers, heat reclaimers, etc.

11.3.7 Inspect solar heating systems.

11.3.8 Activate heating, heat pump systems, or other systems when ambient temperatures or other circumstances are not conducive to safe operation or may damage the equipment.

11.3.9 Evaluate the type of material contained in insulation and/or wrapping of pipes, ducts, jackets and boilers.

11.3.10 Operate digital-type thermostats or controls.

11.3.11 Evaluate the capacity, adequacy, or efficiency of a heating or cooling system.

11.3.12 Test or operate gas logs, built-in gas burning appliances, grills, stoves, space heaters, or solar heating devices.

11.3.13 Determine clearance to combustibles or adequacy of combustion air.

12. Central Air Conditioning

12.1 Components for Inspection.

12.1.1 Cooling equipment.
12.1.2 Cooling distribution.
12.1.3 Operating controls.

12.2 Procedures for Inspection.

The Inspector will:

12.2.1 Describe the type of central air conditioning system and energy sources.
12.2.2 Operate the system using normal control devices.
12.2.3 Open readily accessible access panels or covers provided by the manufacturer or installer, if readily accessible.
12.2.4 Observe the condition of controls and operative components of the complete system, conditions permitting.
12.2.5 Observe the condition of a representative number of the central air cooling outlets in each habitable space of the house.

12.3 Limitations.

*The Inspector is **not** required to:*

12.3.1 Activate or operate cooling or other systems that have been shut-down.
12.3.2 Inspect gas-fired refrigeration systems, evaporative coolers, or wall or window mounted air conditioning units.
12.3.3 Check the pressure of the system coolant or determine the presence of leakage.
12.3.4 Evaluate the capacity, efficiency, or adequacy of the system.
12.3.5 Operate equipment or systems if exterior temperature is below 60° Fahrenheit or when other circumstances are not conducive to safe operation or may damage the equipment.
12.3.6 Remove covers or panels that are not readily accessible.
12.3.7 Dismantle any equipment, controls, or gauges.
12.3.8 Check the electrical current drawn by the unit.
12.3.9 Operate digital-type thermostats or controls.

13. Interior

13.1 Components for Inspection.

13.1.1 Walls, ceilings, floors, windows, and doors.
13.1.2 Steps, stairways, balconies, railings.
13.1.3 Fireplaces.
13.1.4 Electric outlets and fixtures.
13.1.5 Plumbing fixtures and components.
13.1.6 Heating and cooling distribution.

13.2 Procedures for Inspection.

The Inspector will:

13.2.1 Observe the visible condition of the surfaces of walls, ceilings, and floors relative to structural integrity and evidence of water penetration.
13.2.2 Verify the presence of steps, stairways, balconies, handrails and guardrails and observe their condition.

13.2.3 Describe type, material, condition and operation of a representative number of windows, doors and their hardware.
13.2.4 Inspect the exterior condition of the kitchen cabinets and countertops.
13.2.5 Observe the condition of fireplaces, dampers, fire boxes and hearths readily visible.
13.2.6 Locate and observe a representative number of electrical outlets/fixtures and wiring in each room as described in Section 9.
13.2.7 Comment on presence or absence of smoke detectors.
13.2.8 Observe condition and operation of plumbing fixtures and components in each room as described in Section 10.

13.3 Limitations.

*The Inspector is **not** required to:*

13.3.1 Ignite fires in a fireplace or stove to determine the adequacy of draft, perform a chimney smoke test, or inspect any solid fuel device in use.
13.3.2 Evaluate the installation or adequacy of inserts, wood burning stoves, or other modifications in a fireplace, stove, or chimney.
13.3.3 Determine clearance to combustibles in concealed areas.
13.3.4 Determine cosmetic condition of ceilings, walls, floor coverings, and components.
13.3.5 Determine if the bath and/or kitchen vent fan ducting exhausts air to exterior of house.

CODE OF ETHICS

To maintain the integrity and high standards of skill and practice in the home inspection profession, the following rules of conduct and ethics shall be binding upon the use of the Standards of Practice (Standards) of the National Association of Home Inspectors, Inc. (NAHI):

1. The Inspector will act as a disinterested third party and will discharge his duties with integrity and fidelity to the public, with fairness and impartiality to all parties.
2. The Inspector shall uphold the honor and dignity of this profession and avoid association with any enterprise of questionable character or apparent conflict of interest.
3. The Inspector will express an opinion only when it is based on practical experience and honest conviction.
4. The Inspector will always act in good faith toward the client.
5. The Inspector will not disclose any information concerning the results of the inspection without the approval of the client for whom the inspection was performed.
6. The Inspector will not accept compensation, financial or otherwise, from more than one interested party for the same service on the same property without the consent of all interested parties.
7. The inspector will not accept nor offer commissions or allowances, directly or indirectly, from other parties dealing with the client in connection with work that may be required as a result of the home inspection report as defined by the NAHI Standards of Practice.
8. The Inspector may provide “additional inspection services” only after proper disclosure to the client that the “additional inspection services” are not part of the home inspection, as defined by the NAHI Standards of Practice. In addition, the sale of products or corrections of deficiencies are not permitted under this Code of Ethics. The Inspector will promptly disclose to the client any interest in any business which may affect the client, the quality or the result of the inspection.
9. The Inspector shall make every effort to uphold, maintain and improve the professional practice, integrity and reputation of NAHI. He will report all violations of this Code by other members, and any other relevant information, to NAHI for possible remedial action.
10. An appraisal or opinion of the market value of the inspected property will not be expressed by the Inspector within the context of the inspection.
11. Use of the NAHI logo and name is limited to those persons holding the designation of Regular Member. Associate, NAHI CRI, and Affiliate Members may use specifically designated logos in advertising.