VBINSPECT.COM

Date

**HOME BUYER REPORT**

Buyer Name
Buyer Address
Pittsburgh, PA 15220

Copy: Buyer's Agent

| | |
|---|---|
| **Date and time of inspection:** | **Inspection Date and Time** |
| **Property location:** | **Inspection Address** |
| **Inspector:** | Jason Greenawalt |
| **Inspection Fees:** | **$XXX Total Fee**<br>$XXX for general inspection<br>$XXX for wood destroying insect inspection<br>$XXX for radon inspection |
| **Payment status:** | **Paid - online** |
| **Contract status:** | **Yes - emailed** |

This report contains the following:

- General Information
- The Scope of this Inspection
- Conclusions and Recommendations
- Description of Components
- General Limitations and Exclusions

The inspection was performed according to the American Society of Home Inspectors' Standards of Practice (ASHI). These Standards were made available to you when the inspection was scheduled (prior to the inspection). The purpose of the inspection is to provide the client with information regarding the condition of the systems and components of the home as observed at the time of the inspection. Some areas of this report may have been compiled with voice-to-text technology. Please pardon any spelling or grammatical errors. If there are concerns with this, please contact our office. It is important to read the entire report.

Please do not hesitate to call us if you have any questions regarding the inspection procedures or this report. Thank you for employing us.

Sincerely,

Jason Greenawalt
Inspector, VBInspect.com, Inc.
Certified ASHI Member # 254456


## GENERAL INFORMATION

| | |
|---|---|
| Approximate age: | 87 years |
| Main entry faces: | southeast |
| Building type: | single family house |
| Space below grade: | full basement |
| Utility status: | water, gas, electric – all on |
| Weather during inspection: | 34° - 37°F. and cloudy |
| Garage: | one car integral |
| House vacant: | yes |
| Present during inspection: | buyer, buyer's agent, buyer's parents, sewer contractor |
| Accompanied inspector during inspection: | buyer |
| Starting time: | 12:00 pm |
| Completion time: | 4:30 pm |

## THE SCOPE OF THE INSPECTION

Please understand that this is not a cosmetic inspection. While some cosmetic defects or flaws may be mentioned in this report, it should be understood that the scope of this inspection is an evaluation of the construction standards and functionality of the building components such as the electrical, heating, cooling and plumbing systems. No attempt will be made to inspect for and report on all the cosmetic flaws and minor wear and tear items; doing so is beyond the scope of this inspection and also beyond the scope of industry standards.

This inspection report is a summary of findings at the time of the inspection. It is possible that alterations to the property after the inspection can create new defects or reveal conditions that were not visible at that time. Also, it is beyond the scope of this inspection to predict any future conditions that could result from changes in the weather, movement in soil, future repairs or renovations, effects from a neighboring property, or other unforeseeable variables. This is a visual inspection of easily accessible areas only. As per the ASHI Standards of Practice, any inaccessible areas were not observed during this inspection and should be further evaluated by a professional at a later time. Inspectors are not permitted to move stored items. It is also important to remember that finishing (ceilings, walls, flooring, etc.) restricts view of many components to the building. Many defects can be hidden and may not be observed during the inspection.

It is important to remember that this type of inspection is a “snap-shot” of the property within a relatively short period of time. It is not possible to identify every single defect, especially if the property is occupied and visibility is obstructed by the owner’s items. The main purpose of this inspection report is to get a general idea of the property’s condition. There will certainly be unobserved flaws that you may find once you occupy the property long term and as seasonal conditions change. If defects are observed once you occupy the building, it is important to contact the appropriate contractor regarding further evaluation and repair.

## CONCLUSION AND RECOMMENDATIONS

The conclusions and recommendations listed below are based on the observation and operation procedures that are outlined in the ASHI Standards of Practice. This information was included in the pre-inspection packet that was made available to you prior to the inspection. Items listed below will include recommendations for monitoring and repairs, important specific maintenance items, further evaluation by others, precautionary and informational items, and items that are considered significantly deficient or near the end of their economic service life. Please be advised that conclusions and recommendations are based on the opinion and past experience of the inspector, and it is possible that other inspectors, contractors, municipal building enforcement officials, and experts may

disagree with the conclusions and recommendations listed below. In general, as per the ASHI Standards of Practice, the methods, materials, and costs of correction should be determined by the appropriate contractor or specific tradesperson. You may also decide that repairs/replacements are not cost effective - it is up to you to decide what to do with the information that we, and others, provide.

## UNSAFE ITEMS:

***Unsafe is defined by the ASHI Standards of Practice as:***

> ***"A condition in a readily accessible, installed system or component that is judged to be a significant risk of bodily injury during normal, day-to-day use; the risk may be due to damage, deterioration, improper installation, or a change in accepted residential construction standards."***

***Please note that almost all electrical issues are considered to be unsafe or potentially unsafe. Additionally, items that are potentially unsafe are also in this category. You may decide that you can live with the risk and it is not cost effective to perform repairs/replacements – it is up to you.***

## ELECTRICAL SYSTEM

**The following information is regarding the electrical system.**

1. Evaluation of the electrical system includes the main service wire, the main electric panel, any subpanels, wiring (where visible and accessible), outlets and lights. During the course of the inspection all electrical panel covers were removed where accessible (unless noted below). Some items below may be less significant; however, all electrical issues are grouped together. Some electrical items may be easily repaired by the homeowner, but you should consult with an electrician before performing any electrical repairs. There are problems and concerns with the electric system, which include the following:

a. The garage outlets and some of the kitchen outlets are not GFI protected. It is recommended that ground fault protection (GFI) devices be installed for all outlets in wet, or potentially wet, areas such as kitchen, bathroom, basement, garage and exterior outlets. A GFI device provides an additional measure of safety at wet areas where there is a risk of shock. Please consult with the Technical Links portion of our website for more information regarding GFI locations.

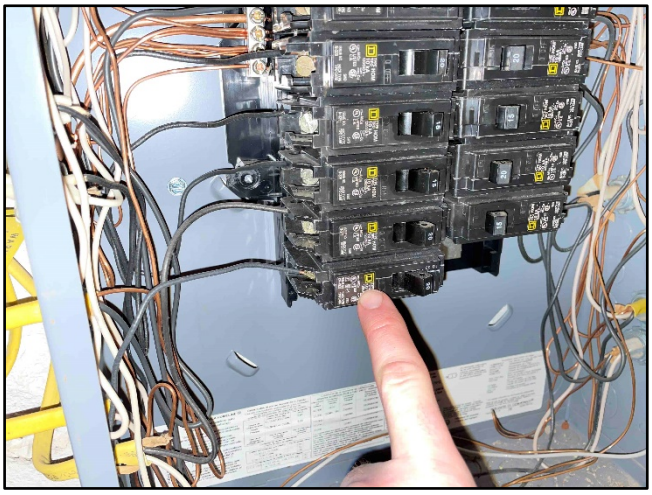
b. An ungrounded three prong outlet was observed at the back right of the living room. All three prong outlets should be properly grounded. If proper grounding cannot be achieved, the outlets should be replaced with a two prong outlet. As a note, there were several two prong outlets seen throughout the house. This may suggest that original wiring is still in use.

c. There was reverse polarity on an outlet at the back left of the living room. Reverse polarity occurs when the hot and neutral wires are reversed at the outlet. Rewiring/repair is recommended.

d. When the GFI outlet in the basement bathroom (next to the sink) was tripped, this did not cut power. It is recommended for this be evaluated and repaired. This did, however, cut power to the tub. As a note, typically the jetted tub would be on its own dedicated circuit.

e. The front left outlet in the front bedroom was loose from the wall. It is recommended that this be repaired.

f. There is a 120-V circuit at the left side of the main electric panel where what appears to be #14 gauge wire is connected to a 20-amp breaker. Typically, #14 gauge wire should be protected at no more than 15amps. Replacement of the oversized breakers is recommended. This condition is illustrated in the accompanying photo.



g. The electric service mount and weather-head were pulled loose from the house. It is recommended that these be reattached to the side of the house. This condition is illustrated in the accompanying photo.

h. The duct seal at the top of the electric meter socket is cracked and deteriorated. Replacement is recommended to help prevent water entry into the electric service.

i. The electric service cable consisted of a cloth sheathed wire. This had been painted in the past. There were a couple suspected nicks in the wire near the top.

It is recommended that these be repaired. Given the age and condition, this wire is likely at the end of its typical service life. Replacement should be anticipated.

j. There were uncovered junction boxes seen in the basement. It is recommended that all junction boxes be covered with a cover plate.

k. Several outlets were lacking cover plates. It is recommended that cover plates be installed.

l. There were a few light switches at various areas of the house that could not be identified what fixtures were controlled. It is possible that this is a result of burned out bulbs or unidentified exterior lights. It is recommended to consult with the current owner or an electrician regarding any unidentified switches.

m. It appears that yellow Romex wire (interior wire) had been run around the soffit at the right side exterior above the bay windows likely to provide power at the interior. This should be wrapped with conduit or be updated with exterior wiring.

n. There were old snap-style switches at various areas of the house. It is recommended that these switches be replaced with modern switches as an electrical safety update.

o. There are exposed-bulb light fixtures in some of the closets at various areas of the house. Although common for an older house, this is no longer a recommended installation. Replacement of these fixtures with enclosed-bulb fixtures is recommended as an improvement to safety.

p. There were painted electrical receptacles at several areas throughout the house. This may impede proper contact between an appliance plug and the receptacle. Replacement of the painted outlets is recommended.

It is recommended that you consult with an electrician regarding the exact scope of the appropriate repairs to the above-mentioned items.

## RAILINGS / STEPS / WALKWAYS

**The following information is regarding the steps, railings, and walkways.**

2. Handrails should be installed to all areas where there is a drop off, staircase, landing, etc. Many older homes in this area do not meet today's standards for handrail installations, specifically for height. Some municipalities may require updates to older homes during the course of any future remodeling. Depending on your level of concern, you may wish to have this corrected. The following items are concerns with the steps, railings, and various walkways that could present a potential hazard:

a. The concrete paver walkway and patio at the right and back of the exterior contains offset and uneven areas. This can present tripping hazards, especially for guests. This condition is not uncommon for this type of paver, and in most cases is self-apparent. Guests should be cautioned. You may wish to consider re-installation or re-leveling any pavers where offsets are excessive.

b. Some of the stair treads appeared to be loose below the carpet leading to the second floor. It is recommended that this be repaired.

c. There is low headroom clearance along the basement staircase. This can present a concern for taller people.

d. The stair treads to the basement staircase and second floor staircase were narrow which may present a tripping hazard. There is no easy corrective solution for this aside from rebuilding the steps. It is recommended to use caution.

e. The railing around the second floor landing was loose. It is recommended this be repaired.

The above-mentioned items are considered to be potentially unsafe, particularly for guests, small children and the elderly. Repair/modification is recommended.

## MISCELLANEOUS SAFETY ITEMS

**The following information is regarding safety items that do not fit into the categories above:**

3. A gas line appliance connector had been used to run through the floor to the stove in the kitchen. This was observed in the basement. This type of connector is not designed for installations through floors or walls. It is recommended that this be updated with hard metal pipe.

Gas lines, where accessible, were checked with a TIF 8900 gas leak detector. A leaking fitting was observed on the appliance connector above the hot water tank leading to the stove. It is recommended that the leaking fitting be repaired.

It was also suspected that there may be a gas leak near the dryer. The gas lines were checked, however, no leaks were observed at this area. It is possible that a component on the inside of the dryer may be leaking. It is recommended that this be evaluated.

4. There is an opening in the wall/ceiling at the back of the garage that constitutes a breach in the fire separation between the garage and the house. It is recommended that the hole be patched with fire-rated sheet rock or other fire stop material.

5. Several smoke alarms were seen in the house as mentioned below. Modern smoke alarms are recommended for all levels, in all sleeping areas, and in any hallways adjacent to sleeping areas. Installation of carbon monoxide alarm is also recommended. Any existing smoke alarms should be tested upon settlement and on a regular basis

thereafter. Batteries should be changed on a regular basis. Smoke alarms should be updated / replaced after approximately 10 years.

6. In the basement there are several areas of low hanging pipes, wires, ductwork or framing which can present a hazard, especially for tall persons. It is recommended that padding, streamers or a contrasting colored stripe be placed at these areas to help draw attention. Guests should be cautioned.

## NOT INSPECTED:

***The following systems/components were present in the home and not inspected or evaluated as these were not included in the ASHI Standards of Practice OR were designated to be inspected as per the ASHI Standards of Practice, and were present at the time of the inspection but were unable to be inspected:***

7. The majority of the basement was finished with walls, flooring and fixed ceilings. This restricted view of the foundation walls and floor framing to the first floor. This also restricts view of possible infestation of termites or carpenter ants to this area. Due to the finished walls, this limits the observation for moisture infiltration into the foundation walls as well as any water proofing techniques that may have been used during installation. It is also not possible to view the foundation wall at the finished area for cracks, bulging, or other signs of movement. It is recommended that these areas be further evaluated during the course of any remodeling or repairs. The walls should be monitored for any signs of moisture infiltration.

8. In older homes, the underground utility services may be nearing the end of their useful service life. It is recommended that insurance be obtained (from your utility companies) for coverage of sewer, gas-, and water- service pipes. Evaluation of underground pipes is beyond the scope of this inspection. Excavation costs can affect the cost of repairs to these pipes.

The house was constructed when sewers of terra cotta pipe or cast iron pipe were common. Sewer lines in particular may be subject to damage from tree roots or soil movement over time. In addition to insuring the pipe, you may wish to consult with a sewer cleaning contractor regarding a sewer camera test in order to determine the location and exact condition of the sewer.

9. It is not in the scope of this inspection to inspect fences. There is a fence around the backyard. This appeared to be in reasonable condition when viewed from the yard, however, further evaluation is recommended if you have any concerns with the fence.

10. It was not possible to locate a floor drain in the basement and it is possible that a drain may be located below the carpet in the finished area. You should consult with the current owners regarding the location of the floor drain. Further evaluation is recommended whenever the house is vacant. Water should periodically be added to the drain to prime the trap, to ensure that the trap holds water to prevent sewer gases from entering the house.

11. An attic access hatch could not be located for the upper space above the second floor. It was therefore not possible to access or observe the attic (framing, underside of the roof deck, wiring, presence/amount of insulation, etc.). Because of the design to the ceiling, there is likely minimal attic space, if any. Updating attic insulation is often a cost effective improvement to comfort and heating costs. If you have plans to make energy improvements to the property you should consult with a home energy auditor regarding a full evaluation of the home's current performance, and specific recommendations for improvement.

## END OF LIFE:

***The following systems/components that may still be functional or semi-functional, but are statistically close to failure or have already served their typical economic life:***

## ROOFING SYSTEM

**The following information is regarding the roof:**

12. The roof covering is the umbrella protecting the home from rain, snow, etc. In this area, there are a wide range of roof covering types from flat roof membranes, metal roofs, slate or tile roofs, to asphalt shingles. There can be a wide variety of concerns with a roof, some more significant than others. The roof is visually evaluated for installation errors, defects, ageing conditions, etc. The following information was observed:

a. The roof covering consists of a 3-tab asphalt shingle estimated to be approximately 20 - 24 years old. The roof was viewed with a ladder at the eaves and by walking the back porch. Granule loss and cracks were observed throughout the roof covering. The roof was wet at the time of the inspection due to the rain earlier in the day. This can limit some view of cracks and deterioration.

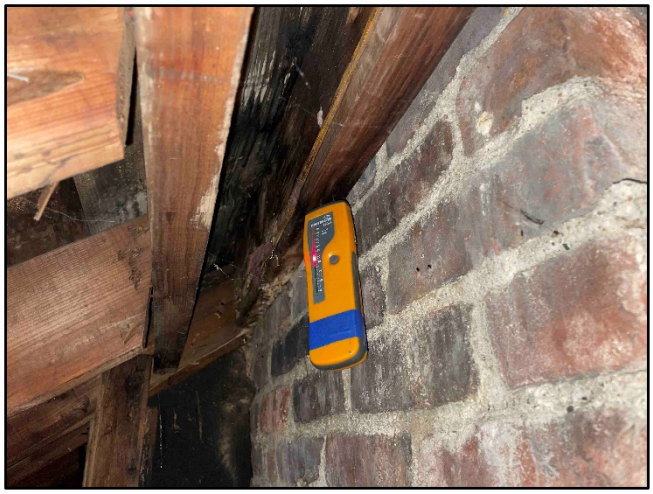
b. Several shingles had been replaced or repaired along the lower right side roof above one of the bay windows. This suggests past damage. It is recommended that this area be monitored for any signs of ongoing leakage. This condition is illustrated in the accompanying photo.


c. Several deeper cracks were observed to the shingle tabs particularly around the plumbing vent flashings. This condition is illustrated in the accompanying photo above left. This may suggest the plumbing vent flashings have been updated or repaired in the past. This condition is illustrated in the accompanying photo above right. At each of the plumbing vent flashings there was also a layer of tar or roof cement around the flashings suggesting an effort to control past leakage.


d. There were numerous nail popped shingle tabs along the right and left side roof. There were also several loose shingle tabs along the left side roof. These shingles will likely pull completely loose in the near future. This condition is illustrated in the accompanying photos above.

e. The granule loss and cracking was more prominent suggesting the roof is at the end of its typical service life. Given the conditions observed, replacement should be anticipated. You should consult with a roofer regarding the above mentioned items.

f. There was daylight shining around the chimney flashing as seen in the knee-wall space. This can allow water penetration. When checking the framing and brick work around the chimney, this was damp / wet at the time of the inspection. This may also be aggravating the damage seen to the kitchen ceiling as well. The flashings should be repaired or replaced during roof replacement. This condition is illustrated in the accompanying photo.



g. There are asphalt shingles installed on the low-sloped roof over the back porch. Most asphalt shingle manufacturers do not recommend installing 3-tab shingles on roofs with a pitch shallower than 3-in-12. This roof may be susceptible to leakage, particularly during periods of ice and snow. No signs of leakage were observed below. This area should be monitored. If leakage becomes problematic, replacement of the shingles with a roof covering suitable for low slope applications may be needed.

You should consult with a roofer regarding the above mentioned items. This assessment of the roof coverings does not preclude the possibility of future leakage. Leakage can develop at any time and may depend on rain intensity, wind direction, ice build-up, condition of flashings, etc. It is also not in the scope of this inspection to determine an estimated remaining service life.

With proper maintenance, many common roof problems can be prevented. Routinely clear gutters and downspouts of debris. If you don't, standing water in the gutters can seep underneath the bottom edge causing decay at the roof decking. Any tree limbs that overhang the roof should be trimmed back to avoid damage from falling branches. It is best to inspect your roof each spring and fall for minor problems giving you an opportunity to correct them before they become major problems.

## GUTTERS / DOWNSPOUT SYSTEM

**The following information is regarding the downspout and gutter system:**

13. The gutter and downspout system is designed to divert storm water drainage away from the home. This is to minimize water penetration into the foundation, prevent erosion, protect the siding, etc. There are several types of gutter systems in this area because of the wide range of home types and age of architecture. Some gutters are easily removable when problems occur, while others are built into the house framing. It is not uncommon for basement water issues to be related to gutter and downspout defects. In addition to

the gutter and downspouts, areas of any flashings were also observed for signs of defects. The following are concerns with the gutter and downspouts:

a. There were moisture stains on the wall below the gutter to the right side of the enclosed front porch. This suggests water bypassing the gutter system. This may be the result of a missing kick out flashing. This condition is illustrated in the accompanying photo. It is recommended that a kick-out or diverter flashing be installed at the bottom of the roof-to-wall intersection where the front porch gutters connect to the house at the left and right sides. This can help to ensure that water running along the roof/wall intersection does not bypass behind the gutter. You should consult with a roofing contractor regarding this.

b. There were stains and moisture where the sump pump discharge pipe connects to the downspout at the front right corner of the house. This may suggest leakage from this fitting. It is recommended that this be evaluated and resealed as needed. This condition is illustrated in the accompanying photo.

c. Slight leakage was observed from the flashing to the fascia behind the right gutter to the front porch. This may suggest water bypassing the back side of the gutter system. It is recommended that this be evaluated and repaired.

d. The downspout at the front left corner of the house was minimally supported to the wall. It is recommended that the support strap be reattached.

e. The gutter along the left side of the front porch was pulling loose. It is recommended that this be reattached.

f. There were dark seams at several areas of the gutter and downspout system. Leakage was observed from some of these areas. It is recommended that any leaking fittings be repaired. This condition is illustrated in the accompanying photo.

g. The downspout at the back of the back porch discharges next to the support post and concrete slab. This condition is illustrated in the accompanying photo. This could allow possible settlement from excess water penetration below. It is recommended at all downspouts discharge at least 5' away from any exterior wall or support post. As a future improvement, underground drain pipe should be used.

It is recommended that you consult with a roofer regarding the exact scope of appropriate repairs to the above-mentioned items. Given the age and conditions seen, you may find eventual replacement more cost effective, particularly when the roof is replaced.

## NOT FUNCTIONING PROPERLY:

***The following items include systems/components that are not functioning properly, or are not installed as they should be and are still functional or semi-functional.***

## PLUMBING SYSTEM

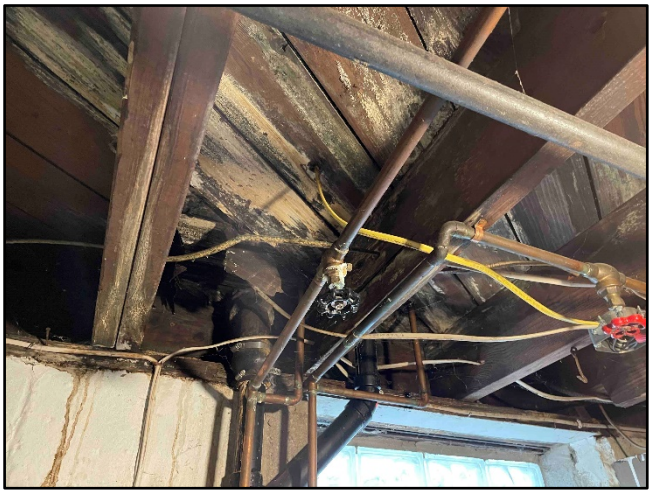
**The following information is regarding the plumbing system:**

14. During the course of the inspection all plumbing fixtures were operated unless notated in this report. Plumbing fixtures were operated under normal controls: toilets flushed,

sinks and showers operated for a few minutes, tubs were filled partially and drained, plumbing appliances operated in a basic normal mode, floor drains flushed with a bucket of water. This type of inspection does not conclude that every mode for the plumbing appliances will function. The cleaning ability of an appliance is also not evaluated in this inspection. In addition, tubs and showers were not operated with the weight of a person inside. The weight of a person can affect the drain connections with ongoing use that may not be observed otherwise, particularly in newer installations or homes that have been vacant for some time. These areas should be monitored during the first week of use when you occupy the home. Any future signs of leakage should be evaluated by a plumber. After operating each of the plumbing fixtures during the inspection, the areas below (where accessible) were checked for stains or signs of leakage. These areas were also scanned with an infrared camera for any signs of leakage. Any signs of leakage will be notated in this report. There are problems and concerns with the plumbing system which include the following:

a. Corrosion was observed on several valves and fittings to the water lines in the basement as well as below sinks at the upper levels. This condition is not uncommon in older homes. It is recommended to monitor these fittings for any signs of future leakage and repair as needed.

b. The older cast-iron drain pipe below the kitchen sink was cracked as seen in the joist bay at the back right side of the basement. It is likely that this is still connected to the plumbing vent that runs to the exterior through the roofline. It is recommended that this be evaluated and repaired. This condition is illustrated in the accompanying photo.



c. The plumbing access hatch was nailed shut for the first floor bathroom. It is recommended that this be opened so the plumbing can be evaluated.

d. The main water shut off valve to turn off all of the water to the house is relatively old. As an added measure of convenience, you may wish to consult with a plumber regarding installation of an additional modern ball valve so that the water can be easily turned off in the event of an emergency.

e. Because of the cold temperatures, the hose bibbs at the exterior (and garage) were not operated. These should be tested during warmer weather to ensure function.

f. The main toilet stack for the house was concealed behind finished walls. It was not possible to view the condition of the pipe. It is recommended to this area be further evaluated.

g. There was lower water pressure to the kitchen sink faucet. It appears that the valves had been turned up completely below. This may be the design of this type of faucet. This could not be determined. You may wish to have this evaluated by a plumber.

h. A Romex connector was lacking from the wire providing power to the garbage disposal. This resulted in the wire resting against the sharp metal edge of the disposal. Installation of the appropriate connector is recommended.

i. There was corrosion on the fitting where the garbage disposal connects to the drain pipe. There was also suspected seepage at this area. This should be evaluated and repaired. This condition is illustrated in the accompanying photo.

j. Leakage was observed from the cold faucet to the tub in the first floor bathroom. It is recommended that this be repaired.

k. The drain stopper did not function to the tub in the first floor bathroom. It is recommended at this be repaired.

l. While operating just the tub filler in the first floor bathroom, water still flowed through the shower. This should be evaluated and repaired to ensure proper function.

m. There was slow drainage to the tub drain in the basement bathroom. It is likely that this is the result of blockage, which can be corrected using a plumber's snake. It is possible that more extensive repairs will be needed. You should consult with a plumbing contractor regarding this.

n. As routine annual maintenance, exterior hose spigots should be winterized to help prevent freezing and bursting. The corresponding inside valve should be turned off for the winter and the outside spigot opened in order to drain any water collected in the line.

o. The water dispenser next to the kitchen sink did not appear to function. The fixture also appeared to be corroded. It is recommended that this be repaired if you plan to keep and use the fixture.

It is recommended to consult with a plumber regarding the above mentioned items.

**OTHER ITEMS:**

***The following items, in the opinion of the inspector, are cost effective to increase the overall factor of safety or life cycle of a system/component, are key items to remember, or need to be further evaluated to determine if they are a problem:***

## GROUNDS / GRADING

**The following information is regarding the grounds, grading and foundation moisture:**

15. Although the grounds are not part of the home, there are areas that can affect how well different systems in the home perform. This can range from the grade of the soil around the home to the vegetation around the exterior. The following comments are primarily focused on the grounds, grading, vegetation, and foundation moisture:

a. There are large trees on the property. Unhealthy and overhanging limbs can accelerate deterioration of siding/roofing materials, and may attract pests. Regular trimming maintenance is recommended in order to remove any overhanging or unhealthy limbs. You should consult with a Certified Arborist regarding this.

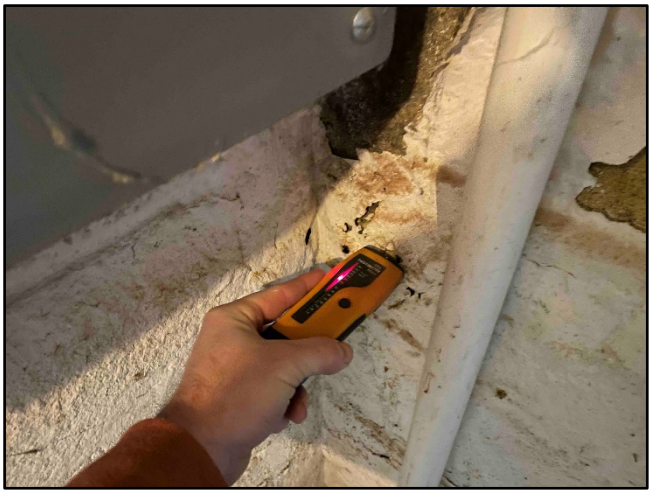
Vines and vegetation were encroaching the sides of the house. This can trap excess moisture against the siding as well as present a conducive atmosphere for carpenter ants or termites. It is recommended that all vines are removed and vegetation cleared away approximately 6” from any exterior wall.

b. There is a flat grade / slight negative grade towards the back and sides of the house. This can allow runoff to collect at and subsequently seep into the foundation area. If ponding water or runoff from the grade becomes problematic, a curtain drain, or surface cut-off trench, could be installed to help collect and direct runoff away from the house. You should consult with a landscaping contractor regarding this.

c. There were a few hairline cracks to the concrete driveway at the front of the house. This condition is not uncommon. It is recommended that any cracks or openings be patched and sealed.

d. There was some cracking and deterioration to the concrete sidewalk by the front porch staircase. It is recommended that this be repaired.

e. Staining, efflorescence and signs of past water penetration were observed on the foundation walls at various areas of the basement. When checked with an electronic moisture meter, some of these areas were wet or damp at the time of the inspection. Moisture meter readings were between 35% - 45%. This condition is illustrated in the accompanying photo. Some of this moisture appeared to be related to the leakage from the gutter by the front porch (as seen near the electric panel in the garage. Most other damp areas appeared to be related to ground moisture penetrating through the walls.



In general, the house pre-dates the era of modern water-proofing and damp-proofing coatings. A dehumidifier should be operated to help control moisture and humidity at the basement.

The most effective way to prevent basement water penetration is to control storm water run-off outside at its source, by keeping roof drainage systems open and free-flowing, grading patios, sidewalks and soil to slope away from the house, etc.

If you are seeking a water proofing guarantee, you will need to consult with a water proofing contractor. Please note that it is not in the scope of this inspection to determine or predict the amount or frequency of past or future water penetration into a basement. Evaluation of water penetration into a basement is based solely on existing conditions, appearance of masonry, etc. In the Pittsburgh area, most basements will have occasional water penetration and this, depending on the situation, may or may not present a serious problem.

f. At the perimeter of the basement, there is an interior water-proofing system or French drain system installed. This type of system will tend to prevent *liquid* water accumulation in the basement. You should retain a copy of the installer's literature regarding any warranties, paperwork or maintenance associated with the system. This type of system controls water once it enters the foundation and does not prevent storm runoff at its source.

The sump pump was activated by flushing the sump pit with a bucket of water. The pump appeared to be functioning properly.

g. There were wood tie retaining walls along the driveway. This type of wood tie will tend to rot internally before it rots externally. The wall was "sounded" (tapped lightly) with a hammer at several areas along its length to observe for hollow sounds indicative of rotting. A few of the ties sounded hollow, however most of the ties sounded reasonably solid. The wall was leaning slightly towards the driveway

near the staircase. In general the walls were in reasonable condition. The wood tie wall should be monitored for signs of future movement or deterioration.

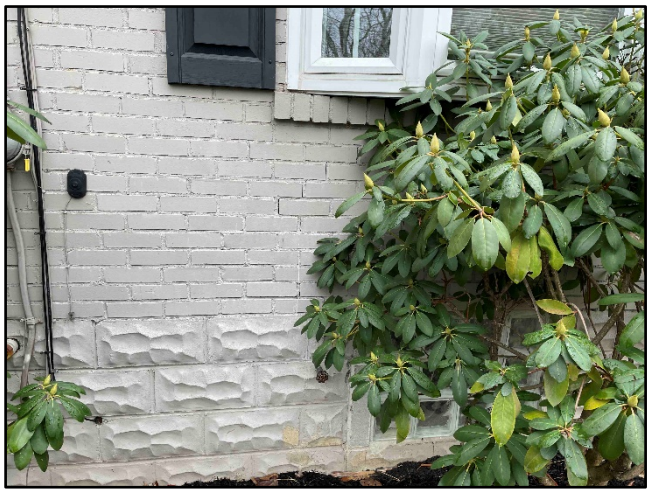
## MASONRY

**The following information is regarding the masonry:**

16. Most homes in this area have some amount of masonry for foundation walls, exterior walls, chimneys and other areas of the home. This can include brick, concrete block, sandstone, brick, terra cotta block, engineered stone, etc. Most masonry problems are not uncommon for homes in this area and can usually be corrected by a mason or contractor. Weather can accelerate deterioration, so it is important to periodically monitor the masonry for signs of defects. The following are concerns with the masonry:

a. Slight cracking and deterioration was observed at the cement crown at the top of the masonry chimney when viewed from the sides. Maintaining the integrity of the cement crown is important to prevent water entry at the top of the chimney. Repair/replacement of the crown is recommended. You should consult with a mason or handyman regarding this.

b. There were step cracks above and below the bay windows at the right side exterior. This was most prominent to the front bay window. It is recommended that these cracks be pointed and repaired. Similar step cracks were observed around several of the other windows to the house. This condition is illustrated in the accompanying photo.



c. There were areas of loose and missing mortar to the brick pillars at the left and right side of the enclosed front porch. This condition is illustrated in the accompanying photo. There were also a few hairline step cracks along the brick railing. It is recommended that these areas be pointed and repaired.

d. There were step cracks at the back right corner of the house extending from the window up to the roofline. It is recommended that these cracks be pointed and repaired. A similar condition was observed along the back left window that extended up towards the roof line. This condition is illustrated in the accompanying photos above.

e. Step cracks with slight sheared offsets were observed above the front left side window. It is recommended that these cracks be evaluated and repaired.

f. There were a few step cracks to the foundation walls seen in the basement and the garage. This condition is not uncommon. The walls were checked with a level around the perimeter. Most areas were found to be plumb, aside from the back wall as mentioned below. Any cracks should be pointed and repaired.

g. There was a noticeable bulge on the foundation wall at the back right side of the basement. This condition is illustrated in the accompanying photo. When checked with a 4' level, the foundation wall was found to be bulged inward approximately ¾" - 1" in the height of the wall. In general, this amount of movement is not considered to be significant, however it is approaching the threshold. Typically, wherever inward movement over 1" away from plumb is observed, reinforcement of the wall should be considered. It is recommended that the wall be measured and monitored for additional signs of movement.

In many cases, foundation wall movement or bulging is the result of excess saturated soil pressure on the wall, which is often the result of poor drainage at the

exterior. It is important that gutters, downspouts, and underground rain conductor pipes function and drain properly, and that the property be graded to direct surface runoff water away from the house.

It is recommended that you consult with a mason regarding the exact scope of appropriate repairs to the above-mentioned items.

## EXTERIOR

**The following information is regarding miscellaneous exterior items:**

17. Dried and cracked caulking was observed around some of the doors and windows along the exterior. Periodic resealing of the caulk joints is recommended to prevent possible water penetration.

18. Tree and leaf debris was seen in the window wells at the exterior. These areas should be cleaned of debris. You may consider installing plastic covers to provide protection from debris or excess water.

19. The soffit had pulled loose along the left side of the front porch. This could allow birds or rodents to enter into the framing. It is recommended at the soffit be reinstalled. This condition is illustrated in the accompanying photo above left.

Some of the soffit was also pulling loose along the back upper roof. It is recommended that the soffit be reattached. This condition is illustrated in the accompanying photo above right.

20. Chipped and peeling paint as well as some early deterioration was observed to the bottom of the support posts to the back porch roof. It is recommended that the post to be scraped and repainted to help preserve longevity.

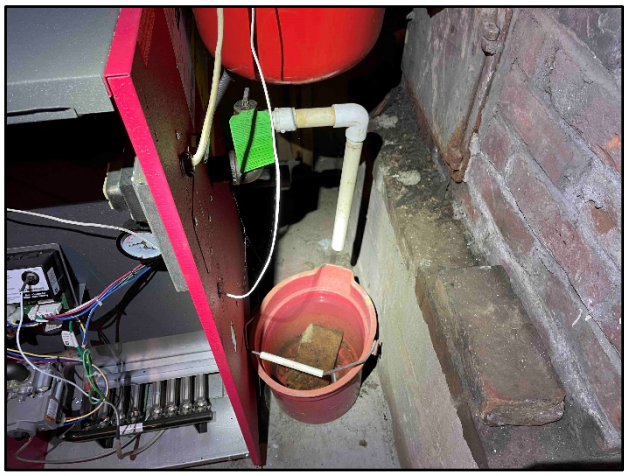
It is not possible to determine if the support posts were resting upon a footer. Typically, support posts would be installed on a footer to provide adequate support. This area should be monitored for any signs of settlement.

## HVAC SYSTEM / WATER HEATER

**The following information is regarding the HVAC system and hot water heater:**

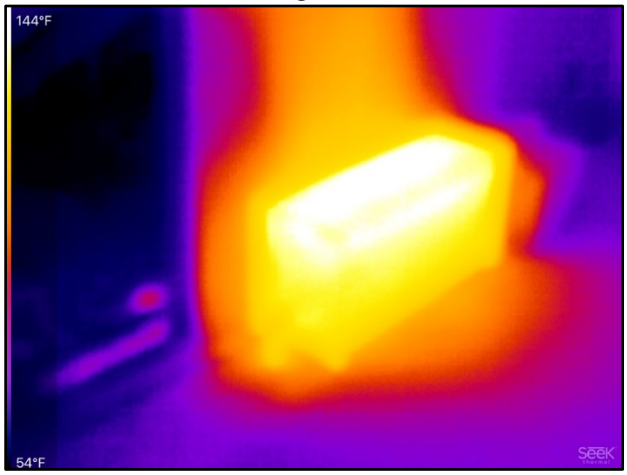
21. The HVAC systems includes furnaces, boilers, air conditioners, and any other supplemental heating or cooling systems. The inspection of the HVAC system is visual, therefore no parts are removed (other than cover panels) when evaluating the systems. It is recommended that all HVAC equipment be serviced and evaluated by an HVAC contractor as some defects are not possible to observe in this type of inspection. During the inspection the following observations were made:

a. The boiler was operated during the inspection. The boiler responded to normal controls and appeared to be functional. The boiler distribution pump operated, and appeared functional. A carbon monoxide test was performed in the vicinity of the boiler cabinet using a Testo 317-3 CO detector, and no excess levels were observed. Professional annual maintenance is recommended for the HVAC equipment.



A bucket had been placed below the temperature pressure relief valve discharge pipe. This condition is illustrated in the accompanying photo. This was filled with water. During the inspection, the valve continuously discharged water. It also appeared that the boiler's pressure raised to approximately 35psi. This is not recommended. This should be evaluated by an HVAC contractor.

Periodic removal of entrained air from the radiator system, or "bleeding", can help to improve the system's ability to heat uniformly. Some of the control valves to the radiators were stiff and difficult to turn. Some of the valves were also inaccessible. It is not uncommon for the valves to get stuck overtime. Any stuck valves should be repaired by an HVAC contractor during annual maintenance. Replacement of aging or stuck valves on individual radiators can help to regulate heat flow to the individual rooms.




Heat was observed at each of the radiators throughout the house. This was confirmed with an infrared camera. This condition is illustrated in the accompanying photo right.

There was minimal heat observed to the basement radiators in the left room. This may suggest

air was trapped in the pipes. It is recommended that this be evaluated.

Some of the covers to the radiators in the finished room in the basement had pulled loose. These were re-attached by the inspector where possible. It is recommended that the covers be reattached.

b. The temperature to the hot water tank was raised and the burner was activated. The hot water tank appeared to function properly at the time of the inspection. The hot water tank was drafting properly and was checked with a Testo 317-3 CO detector and no excess levels of carbon monoxide were observed at this time.

c. The extension pipe from the temperature/pressure relief (TPR) valve of the hot water tank has been reduced to ½" copper pipe. This condition is illustrated in the accompanying photo. A minimum of ¾" pipe is recommended for the entire length of the pipe to accommodate flow in the event of a discharge. This should also discharge approximately 4"-6" off the floor. Installation of a larger pipe is recommended.


## APPLIANCES

**The following information is regarding kitchen / laundry appliances:**

22. Appliances are tested and operated in a normal single mode. If any items are seen in the appliances at the time of the inspection, the appliance is not operated. It is not in the scope of this inspection to determine the cleaning, drying, or heating ability of any appliance. The following observations were made regarding the kitchen / laundry appliances:

a. The dryer vent pipe has been reduced to a 3" pipe where it exits the foundation. This is not a recommended installation. It is recommended that 4" pipe be used for the entire length of the vent to ensure adequate airflow and to help prevent lint accumulation. Additional information regarding proper dryer venting can be found at the Technical Links portion of our website.

The dryer vent was pulling loose from the exterior wall at the back left of the basement. It is recommended this be reattached.

b. It was not possible to activate the microwave as the keypad did not appear to function. This should be evaluated and repaired or replaced.

c. It is suspected that the refrigerator had leaked in the past. There were stains along the floor boards as seen in the basement. There was also a towel laying below the door to the refrigerator. This was dry at the time of the inspection. This should be monitored. You may wish to have the fridge evaluated by an appliance technician.

## WINDOWS / DOORS

**The following information is regarding windows and doors:**

23. There are a wide variety of doors and windows in homes to this area. It is not uncommon for some older homes to still have original single pane glass, while new homes are more energy efficient with double pane safety glass. It is not in the scope of this inspection to determine the age or remaining service life of the windows or doors. This is a visual inspection of the condition and operation. The following items were observed to the doors and windows:

a. The overhead garage door opener continued to exert closing force after meeting reasonable resistance when closing. The safety stop/reverse mechanism on the garage door opener should be adjusted so that the door will stop/reverse when meeting with reasonable resistance when closing.
   The door did reverse when the electric light beam was interrupted.

b. The glass in the rear kitchen door appeared to be regular strength glass. Although common for an older house, it is recommended that the glass be changed to Plexiglas, or tempered glass, as a safety improvement, in order to reduce the possibility of injury from broken glass. Tempered glass is more difficult to break and will improve security as well.

c. There was moisture between the panes of glass to the left window in the back bedroom. This is generally an indication of failure of the seam between the double pane glass and replacement of the insulated glass unit is recommended. You should consult with a window or glass contractor regarding this.

d. Some of the windows around the house were stiff and difficult to open and close. It is recommended that the tracks be cleaned and lubricated. If this does not improve function, you should consult with a window contractor.

## ATTIC

**The following information is regarding the attic space:**

24. Where accessible, attics are crawled or walked to evaluate as much visual area as possible. In many homes, there are areas that are inaccessible due to the minimal clearance from framing, or insulation covers framing which limits safe access. Inspectors are not to disturb insulation. Many older homes will have stains from a previous leak to

an earlier roof covering, while newer homes may not. Many common concerns in our area relate to insulation and ventilation. Air loss into attics can also cause issues with humidity. Sometimes these concerns can be easily corrected while others may not. During the visual inspection of the attic space, the following items were observed:

a. There is concern that there may not be appropriate ventilation for the roof/attic. Proper ventilation helps to remove excess moisture and humidity from the attic cavity by encouraging airflow through the attic. As a general rule, there should be one square foot of free-vent-area for every 150-300 square-feet of attic area. Installation of additional ventilation is recommended. In many cases, this is achieved by adding a ridge vent whenever the roof covering is replaced.

There were a few stained areas on the roof deck, where it was visible from the knee-wall space. These stains are suspected mold growth. It is not in the scope of this inspection to test for evaluate for mold. If you have concerns with this, you should consult with a mold specialist. This condition is illustrated in the accompanying photo.

b. Vermiculite insulation was observed in the attic near the chimney. This condition is illustrated in the accompanying photo. Some varieties of vermiculite insulation are known to be asbestos-containing. Laboratory analysis is needed to positively identify asbestos. Identification- and analysis- of possible asbestos materials is beyond the scope of this inspection. Links to additional information on asbestos is available at the Technical Links page of our website. Additional concerns should be addressed to an Asbestos specialist.

c. Heat loss and air leakage can occur around the knee wall hatches, and it is recommended that an insulated cover or rigid foam insulation be placed over the hatch when not in use to conserve energy.

d. On the underside of the roof deck in the knee wall space, slight staining was observed. The staining suggests condensation occurring occasionally in the attic.

Condensation occurs when warm, humid air from the house enters the attic and contacts the cold surface of the roof deck, condensing to form liquid water. Condensation can be prevented by improving insulation and air sealing to prevent air leakage and heat loss between the house and the attic; and by controlling indoor humidity (installing bathroom vent fans ducted directly to the exterior, operating humidifiers conservatively, etc.). Care should be taken to air-seal any openings or penetrations where conditioned air from the house can escape into the attic (around lights, chases for plumbing and wiring, around the attic access, etc.).

## INTERIOR

**The following information is regarding miscellaneous interior items:**

25. There is an unvented gas log fireplace in the living room. The fireplace was lit and operated for several minutes. Placement of the ceramic logs is critical to proper operation. A carbon monoxide test was performed in the vicinity of the fireplace using a Testo 317-3 CO detector and levels of approximately 10-15 ppm were observed. This may suggest the burner is dirty. This condition is illustrated in the accompanying photo. In addition, the pilot would not light with the ignitor. A separate lighter had to be used to light the fireplace. Consult with a fireplace technician regarding repair to these conditions.

Most manufacturers recommend that a window be opened in the room when the appliance is on, a carbon monoxide detector should be placed in the room and one should never fall asleep in the room with the appliance on. Placement of the ceramic logs is critical to proper operation. It is recommended that you obtain a copy of the manufacturer's literature regarding proper log placement, cleaning and maintenance.

26. There was some minor rust at the bottom of the steel post in the back of the basement. It is recommended that this be scraped and painted.

27. The ceilings and walls to the whole house were scanned with a Seek Thermal infra-red camera. There did not appear to be temperature anomalies that would suggest leakage or lack of insulation at this time. This type of imaging detects temperature differences only, and cannot see through walls. During the course of any remodeling or repairs it is recommended that the attic and wall cavities be further evaluated.

28. There was a hole cut out of the steel I-beam in the center of the garage for the installation of the garage door opener. This condition is illustrated in the accompanying photo. It could not be determined with certainty if this compromises the structural stability of the steel I-beam. It is not considered best practice to notch or cut an I-beam. You should consult with an engineer regarding this. There did not appear to be slope or sag observed at this time. At minimum, it is recommended to monitor this area.

29. Some of the bead board ceiling was pulling loose along the front porch. Is recommended that this be reattached.

30. There were areas of squeaky floors seen around the house. This condition is not uncommon in older homes. This is typically related to the subfloor pulling loose from the joists. In most cases this condition is not considered to be significant. If you have concerns or wish to have this corrected, you should consult with a flooring specialist.

31. There were various hairline cracks to drywall / plaster walls and ceilings throughout the house. This condition is not uncommon in older homes. Some of the cracks were checked with a moisture meter and found to be dry at the time of the inspection. This is likely a result of shrinkage or settlement. It is recommended that any loose or cracked plaster be patched and repaired. You should monitor this condition for any signs of further deterioration.

32. Possible mold substances were observed on several joists and floor boards along the back of the basement above the laundry area as well as below the kitchen. This condition is illustrated in the accompanying photo. Lab sampling or analysis of possible mold substances is beyond the scope of this inspection. If this is a concern, you should consult with a mold expert or an industrial hygienist. In general, mold substances are considered to be a symptom of an underlying moisture problem. Cleaning/removal of the affected materials is recommended.

33. There were hairline cracks and stains indicative of past leakage along the ceiling next to the chimney in the kitchen. This was checked with a moisture meter and found to be dry. This is likely related to the moisture seen in the knee-wall space around the chimney as mentioned above. The ceiling should be repaired.

34. There were stains indicative of leakage below the kitchen as seen at several areas to the floorboards and joists to the back right side of the basement. This may suggest leakage from the refrigerator or below the sink. There were also stains around the drain stack in the back right side of the basement. This condition should be further evaluated.

35. There was a tile shower in the basement bathroom. The tile covered the walls. Due to the finishing, it was not possible to observe if the proper moisture barrier had been applied to the walls prior to the tile installation. The shower was operated for approximately 10-15 minutes with some water directed towards the walls. No evidence of leakage was seen in the rooms below the shower; however, this type of inspection cannot fully evaluate how ongoing use may affect the walls or floor. It is recommended to monitor the area for any signs of leakage.

36. The jetted tub in the basement bathroom was filled, operated and drained and no signs of leakage were observed in the rooms below. The ground fault protection device protecting the tub motor was tested and appeared to be functioning properly. The ground fault protection device is located by the sink.

37. There was deterioration to the paneling alongside the chimney in the second floor. This was checked with the moisture meter and found to be dry at this time. You may find the paneling would benefit from replacement.

38. It is not in the scope of this inspection to inspect carpets. The carpet in the basement was deteriorated and will likely require replacement.

## DESCRIPTION OF COMPONENTS

**STRUCTURAL SYSTEM**

**FOUNDATION** - concrete block and terra cotta block: finish restricted view in many areas of the basement

**FLOOR STRUCTURE** - concrete in the basement; 2"x8" joists with a board sub-floor for the 1st floor; 2nd floor structure could not be observed, finish restricting view

**WALL STRUCTURE** - could not be observed, it is assumed that the interior walls are 2"x4" wood framing and plaster/drywall

**CEILING STRUCTURE** - plaster/drywall, framing not observed finish restricted view

**ROOF STRUCTURE** - 2"x6" rafters and joists, 16" on center with a board roof deck

**ATTIC ACCESS** - knee wall hatch

**METHOD OF ATTIC OBSERVATION** - from the hatch openings

**EXTERIOR**

**WALL COVERINGS** - brick

**ROOFING SYSTEM**

**METHOD OF OBSERVATION** - ladder at the eaves

**TYPE OF ROOF COVERING** - three tab asphalt shingles, approximately 20-24 years old

**PLUMBING SYSTEM**

**WATER SUPPLY PIPING** - service line (as it enters the basement) is ¾" copper; interior piping is ½" & ¾" copper and cpvc as seen in the basement.

**DRAIN, WASTE AND VENT PIPING** - cast iron, galvanized steel, ABS plastic, copper

**HOT WATER TANK** - Reliance, 40 gallon, gas fired, approximately 1 year old

**VENTED** - middle chimney

**MAIN WATER SHUT OFF** - valve adjacent to the meter in the basement

**MAIN FUEL SHUT OFF** - valve at the meter at the front right of the exterior

**ELECTRICAL SYSTEM**

**SERVICE AMPERAGE AND VOLTAGE** - 100-amp, 240-volt

**MAIN PANEL** - located in the right of the garage

**MAIN POWER SHUT OFF** - 100-amp breaker at the top center of the panel

**MAIN PANEL WIRING METHODS** - seventeen 120-volt circuits and zero 240-volt circuits. Wiring where visible was: plastic sheathed copper (Romex), metal sheathed copper, for the 120-volt circuits

**SUBPANELS** - none

**HEATING SYSTEM**

**ENERGY SOURCE** - Natural gas

**SYSTEM TYPE** -Crown; 140,000 BTU; hot water boiler; approximately 7 years old

**VENTED** - middle chimney

**CENTRAL AIR CONDITIONING SYSTEM**

**ENERGY SOURCE** - none

**SYSTEM TYPE** - n/a

**INSULATION AND VENTILATION SYSTEMS**

**ATTIC INSULATION** - 8”-10” of fiberglass, cellulose, Vermiculite
**ATTIC VENTILATION** - two deck mounted vents

**FIREPLACES AND SOLID FUEL BURNING APPLIANCES**

**DESCRIPTION** - ventless gas log fireplace in living room
**SMOKE ALARM** - One in each bedroom, one in the hallway, one in the dining room, one on the second floor, one in the basement stairwell, one in the basement
**CO DETECTOR** – not observed

## GENERAL LIMITATIONS AND EXCLUSIONS

**General limitations**

A. The inspector is NOT required to perform actions, or to make determinations, or to make recommendations not specifically stated in this Standard.
B. Inspections performed using this Standard:
1. are not technically exhaustive.
2. are not required to identify and to report:
a. concealed conditions, latent defects, consequential damages, and
b. cosmetic imperfections that do not significantly affect a component’s performance of its intended function.
C. This Standard applies to buildings with four or fewer dwelling units and their attached and detached garages and carports.
D. This Standard shall not limit or prevent the inspector from meeting state statutes which license professional home inspection and home inspectors.
E. Redundancy in the description of the requirements, limitations, and exclusions regarding the scope of the home inspection is provided for emphasis only.

**General exclusions**

A. The inspector is NOT required to determine:
1. the condition of systems and components that are not readily accessible.
2. the remaining life expectancy of systems and components.
3. the strength, adequacy, effectiveness, and efficiency of systems and components.
4. the causes of conditions and deficiencies.
5. methods, materials, and costs of corrections.
6. future conditions including but not limited to failure of systems and components.
7. the suitability of the property for specialized uses.
8. compliance of systems and components with past and present requirements and guidelines (codes, regulations, laws, ordinances, specifications, installation and maintenance instructions, use and care guides, etc.).
9. the market value of the property and its marketability.
10. the advisability of purchasing the property.

11. the presence of plants, animals, and other life forms and substances that may be hazardous or harmful to humans including, but not limited to, wood destroying organisms, molds and mold-like substances.
12. the presence of environmental hazards including, but not limited to, allergens, toxins, carcinogens, electro- magnetic radiation, noise, radioactive substances, and contaminants in building materials, soil, water, and air.
13. the effectiveness of systems installed and methods used to control or remove suspected hazardous plants, animals, and environmental hazards.
14. operating costs of systems and components.
15. acoustical properties of systems and components.
16. soil conditions relating to geotechnical or hydrologic specialties.
17. whether items, materials, conditions and components are subject to recall, controversy, litigation, product liability, and other adverse claims and conditions.

B. The inspector is NOT required to offer:
1. or to perform acts or services contrary to law or to government regulations.
2. or to perform architectural, engineering, contracting, or surveying services or to confirm or to evaluate such services performed by others.
3. or to perform trades or professional services other than home inspection.
4. warranties or guarantees.

C. The inspector is NOT required to operate:
1. systems and components that are shut down or otherwise inoperable.
2. systems and components that do not respond to normal operating controls.
3. shut-off valves and manual stop valves.
4. automatic safety controls.

D. The inspector is NOT required to enter:
1. areas that will, in the professional judgment of the inspector, likely be dangerous to the inspector or to other persons, or to damage the property or its systems and components.
2. under-floor crawlspaces and attics that are not readily accessible.

E. The inspector is NOT required to inspect:
1. underground items including, but not limited to, underground storage tanks and other underground indications of their presence, whether abandoned or active.
2. items that are not installed.
3. installed decorative items.
4. items in areas that are not entered in accordance with 13.2.D.
5. detached structures other than garages and carports.
6. common elements and common areas in multi-unit housing, such as condominium properties and cooperative housing.
7. every occurrence of multiple similar components.
8. outdoor cooking appliances.

F. The inspector is NOT required to:
1. perform procedures or operations that will, in the professional judgment of the inspector, likely be dangerous to the inspector or to other persons, or to damage the

property or its systems or components.
2. describe or report on systems and components that are not included in this Standard and that were not inspected.
3. move personal property, furniture, equipment, plants, soil, snow, ice, and debris.
4. dismantle systems and components, except as explicitly required by this Standard.
5. reset, reprogram, or otherwise adjust devices, systems, and components affected by inspection required by this Standard.
6. ignite or extinguish fires, pilot lights, burners, and other open flames that require manual ignition.
7. probe surfaces that would be damaged or where no deterioration is visible or presumed to exist.