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INSPECTOR:
Charles Buell

ASHI Member #246514

WA State Licensed Home Inspector #220
WA State Licensed Structural Pest Inspector, #67488

Emergency Shut-off Locations:

<table>
<thead>
<tr>
<th></th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Disconnect:</td>
<td>Electrical panel at NE corner of furnace room</td>
</tr>
<tr>
<td>Water shut-Off:</td>
<td>At water meter</td>
</tr>
<tr>
<td>Gas Shut-off:</td>
<td>At gas meter</td>
</tr>
<tr>
<td>Drain clean-out:</td>
<td>Laundry area</td>
</tr>
</tbody>
</table>

Total Pages 126

Inspection Report #: 10317CB 2017
For the purpose of this report the front entry of the building is assumed to be on the:

- **X** East side of the building

**Weather at time of inspection:**
- Temperature, Degrees F: **45**
- Start Time: **9am**
- Finish Time: **1:15pm**

**Soil Conditions:**
- **X** Cloudy Skies
- **X** Wet Soils

**Home Occupancy Status:**
- **X** Vacant, How long: **Not known**

**Present at Inspection:**
- **X** Buyer Present
- **X** Buyer's Agent Present
- **X** Others Present
- **_** Sewer scoper

**SCOPE AND LIMITATIONS OF THE INSPECTION:**

The inspection and report are intended to provide the client with information regarding the condition of the systems and components of the property as observed at the time of the inspection. The inspector examines the readily accessible systems and components using normal operating controls. The inspection is not technically exhaustive, and will not identify concealed conditions or latent defects. Any comments offered by the INSPECTOR that could be construed as over or beyond the standards of practice or the language of this contract, are offered as a professional courtesy. Refer to the Washington State, Standards of Practice and/or Pre-Inspection Agreement for additional information regarding the scope and limitations of the inspection. The Standards of Practice are linked below and describe the "minimum" standards a Licensed Washington State Home Inspector must adhere to:


All homes are likely to have some faults which may range from cosmetic defects to major safety hazards. Not all defects will be found. While some minor deficiencies may be mentioned, the emphasis of this report is to inform the buyer of the property condition by detecting deficiencies or circumstances that may affect the structural integrity of the building and its components and its safe use as a residence.

You are encouraged to obtain competitive estimates for major repair needs. Safety and health issues should be addressed promptly. It is recommended that all corrective work, other than routine maintenance activities, be performed by qualified licensed contractors.

If you were not present during the inspection, you are urged to contact the inspector for a verbal consultation. If you choose not to consult with the inspector, the inspection company cannot be responsible for misinterpretation of the report.

**EXPLANATION OF TERMS USED IN REPORT:**

- **X** N/A (Not Applicable): The component was not present, was not within the scope of the inspection, or was not inspected for other reason(s) as noted.
- **X** Satisfactory: The component was inspected and appeared to be “functional” at the time of the inspection. Although some evidence of wear and tear may exist relative to age and use, no evidence of a "substantial" defect was observed.
- **X** Upgrade: A missing component, which, when added, would improve the overall quality of the home environment.
- **X** Monitor: The component is in marginal condition and/or nearing the end of its service life. Recommend monitoring to determine if or when corrective action is needed. Repair or replacement at this time is considered optional.
- **X** Evaluate: The condition of the component could either not be determined, or evaluation was beyond the scope of the inspection. Recommend further evaluation by a specialist or appropriate licensed tradesperson.
- **X** Repair / Replace: The component was either not functioning or was exhibiting a major defect at the time of the inspection. Recommend repair or replacement by a licensed contractor or appropriate tradesperson.
- **X** Safety: The condition of the component, or the lack of the component altogether, represents a possible safety hazard to pets, children, and adults. **Corrective action is recommended/required.**
- **X** Wood Destroying Organism (WDO): This indicates evidence of wood destroying organism activity, or conditions that can cause it. Recommend appropriate action to eliminate potential pest damage (See section 1200).
Maintenance: The component showed impaired function at the time of the inspection. Recommend maintenance or minor repair, as appropriate. This work might typically be done by a knowledgeable homeowner or handyman.

Energy Conservation & IAQ: The addition of, or defects in, this condition and/or component is related to the home's energy efficiency or indoor air quality. While the inspector does not test or determine the quality of indoor air quality there are some things related to indoor air quality that will be noted.

Occasional typographical errors will occur. I apologize in advance for these typos and spell-check errors. If any of these typos make the report unclear or confusing please contact me immediately for clarification/correction.

The contents of this report are for the sole use of the client named above and no other person or party may rely on this report for any reason or purpose whatsoever without the prior written consent of the inspector who authored the report. Any person or party who chooses to rely on this report for any reason or purpose whatsoever without the express written consent of the inspector does so at their own risk and by doing so without the prior written consent of the inspector waives any claim of error or deficiency in this report.

Photographs: Digital photographs, thermographs and illustrations may be included in this report. If included, their purpose is to better illustrate an observation or recommendation. No degree of importance should be inferred by the presence or absence of photos and illustrations. Some pictures will undergo lightening, darkening, cropping and have call-outs and other "overlays" present, but the image itself will not be altered unless specifically noted on the picture. The use of infrared thermography (IR) must not be construed to mean that a full thermal survey of the structure was done. The use of IR is primarily for recording thermal differences to show the function or lack of function of heating and cooling of HVAC equipment; and, anomalies associated with temperature differences sometimes produced by water leaks, air infiltration etc. IR during a home inspection is mainly a qualitative evaluation and in most cases "thermal tuning" will not have been performed and therefore temperatures present on any thermal images in the report should not be seen as an absolute temperature but only "relative temperature."

It is recommended that you obtain as much history as is available concerning this property. This historical information may include copies of any seller's disclosures, previous inspection or engineering reports, reports performed for or by relocation companies, municipal inspection departments, lenders, insurers and appraisers. You should attempt to determine whether repairs, renovation, remodeling, additions or other such activities have taken place at this property, and this report will attempt to identify such items when possible.

Throughout the report, reference may be made to moisture conditions and percentages of moisture content. These moisture readings are obtained by the use of a Protimeter, Surveymaster Moisture Meter.

Ranges, Dish Washers, and Refrigerators are typically tested for basic function (Do they turn on). No assertions are made as to how well they function. Microwave ovens, clothes washers/dryers are not operated.

It is beyond the scope of the Standard Home Inspection to identify components within the home that may have been part of a "manufacturer's recall". Mention of specific recalls within this report must not be construed to mean that all such items have been identified, or that such identification is part of a Standard Home Inspection. When possible, appliance Model Numbers and Serial Numbers are included in the report and can be used to check for recall related issues. If you have any question about specific appliances, information can often times be found at the CPSC (Consumer Products Safety Commission) website: http://www.cpsc.gov, or http://search.cpsc.gov/query.html or contact the manufacturer directly.

This report may suggest improvements and upgrades. While building codes are constantly changing, home owners are NOT generally required to make these changes to an existing structure.

ENVIRONMENTAL/MOLD ISSUES (AND EXCLUSIONS) – The reported actual or potential health effects of many potentially harmful, toxic or environmentally hazardous elements that may be found in building materials or in the air, soil, water in and/or around any house are varied, and, in some cases controversial. A home inspection does not include the detection, identification or analysis of any such elements or related concerns such as, but not limited to, mold, allergens, legal/illegal drugs and other biological contaminants, radon, bed bugs, cockroaches, fleas, lice, formaldehyde, asbestos, lead, electromagnetic fields, carbon monoxide, insecticides, Chinese drywall, refrigerants and fuel oils. Furthermore, no evaluations are performed to determine the effectiveness or appropriateness of any method or system (e.g., water filter, radon mitigation, etc.), designed to prevent or remove any hazardous or unwanted materials or elements. An environmental health specialist should be contacted for evaluation of any potential health or environmental concerns. The noting of the presence of materials commonly considered to contain asbestos, formaldehyde, lead, mold etc. in the inspection report, should not be construed to mean the inspector is inspecting for these things but instead should be seen as a "heads-up" regarding these materials and further evaluation by qualified professional may be warranted.

For the latest information regarding Chinese Drywall please visit the following link at CPSC/HUD:


Throughout this report, comments will be made as to the presence or absence of components or parts of components. This must not be construed to mean that these components or parts of components exist (or don't exist) in concealed areas or behind finished surfaces. For example: if foundation bolting was seen in one area, it does not mean that the bolting exists (or doesn't exist) in areas that are concealed. Also if an item was noted as "not being visible," that should not be construed to mean that none of whatever was "not visible" does not exist on the premises---it just means none was noted at the time of inspection and should be seen as a "heads-up" that the concern or condition might be present but hidden, or that the conditions that would allow its presence to be known was not replicated at the time of inspection.
The main body of the report consists of the Summary, the Information/Maintenance Section, and the Narrative Section. The summary section is copied from the Narrative Section. The Information/Maintenance section is general information about the house, some of which is expanded upon in the Narrative Section. All sections are needed to gain the most complete picture of the condition of the home at the time of inspection and careful reading of all sections is recommended.

Many of the observations detailed in the Information/Maintenance section of the report that are related to more "cosmetic" issues should not be construed as "all inclusive" but should instead be seen in as "suggestive" or as a "guideline" of conditions that may exist elsewhere in the home. It is not the focus of the report to comment extensively on cosmetic issues but I do on occasion make note of them to help complete the "snap-shot" of the home at the time of inspection. For example, "nail-pops" seen in one room are likely to be seen (and should be anticipated) in other rooms even though I may not have noted them in the report.

Throughout the report I may make recommendations as to possible repairs. These recommendations are not intended to be substitutes or construed to be more appropriate than the recommendations of the professionals actually making the repairs. Conflicts in recommendations should be resolved prior to repairs being made.

Workman qualifications: In the text of the report, in some instances, I recommend that work be done by a "qualified" person or "qualified" parties. I consider qualified parties, in licensed trades, to be those individuals who hold the necessary licenses to legally work in their profession -- licensed electricians, licensed pest control applicators, licensed plumbers, licensed HVAC professionals, licensed engineers, licensed general contractors, etc. In instances where a task may not, typically, need to be done by a person with a license, my recommendation is to hire an individual to do the work who is, based on past training, experience or expertise, qualified to further evaluate the condition or problem listed in the report and to then make appropriate repairs.

For additional fees, this inspector can perform invasive inspection of concealed areas if desired. Please contact the inspector for more information regarding this service.

<table>
<thead>
<tr>
<th>PAYMENT RECORD:</th>
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<tbody>
<tr>
<td>Total Inspection Fee: $720.00</td>
</tr>
<tr>
<td>Fee Paid By:</td>
</tr>
</tbody>
</table>
**SUMMARY OF SIGNIFICANT FINDINGS:**

Potentially significant findings are summarized below. A "Significant Finding" is defined as a substantial safety hazard; or, a deficiency requiring a major short term expense to correct. This summary is not a complete listing of the findings in the report, and reflects the opinion of the inspector. It should be considered highly likely there will be other issues you would like in the summary, and you should add these as desired. Please review all of the report pages. All repairs must be done by the applicable qualified, licensed & bonded trade or profession. I recommend obtaining receipts and warranties for the work done (including copies of any necessary permits).

Many of these Narrative comments in the Summary have pictures and web links that better clarify the issues. Please refer to their place in the report body for additional clarification/information. Lack of information under any given component only means that, in my opinion, there was nothing in the body of the report that warranted posting it to the Summary. There will certainly be valuable information under each applicable component in the body of the report.

---

**ooo Grounds:**

1. Improving grading around the home to improve clearances to finish siding as well as to eliminate areas that increase likelihood that water will impact wood structures is recommended. This is mostly a concern at basement windows around the home where there are not adequate window wells to protect wood trim from decay/rot. Grade should slope away from the home for at least 10 feet or have proper drainage to accommodate surface water that can impact the home and there should be 6 inches of clearance between finish grade and untreated wood structures. I recommend that a qualified party evaluate and make repairs as deemed necessary. Work along the south side will likely require removal of concrete surfaces.
   
   This will be further discussed in the Exteriors section of the report below.
   
   - Evaluate
   - Repair/Replace/Install
   - WDO (Wood Destroying Organisms & conducive conditions) Hidden damage should be anticipated
   - Maintain

2. The Storage structure and garage structure at the West yard were not inspected or only casually inspected and no determination made as to the condition or long term usability of the structures. Electrical related to the garage structure is included in the electrical section of the report.
   
   - Evaluate
   - Repair/Replace/Install
   - Safety

3. The Perimeter/Footing Drains of homes of this age are often not functional and have been abandoned. Standing water was noted in the drain at the chimney. The result is that roof water can flood next to the foundation and can have a negative impact on the foundation of the home. Cleaning of these older drains is usually not possible and installation of new footing drains can be very costly (however the best long term solution). I recommend installation of new tight-line drains for the roof water drains that are not connected to adequate drains be installed by a qualified drainage contractor to lessen the impact of roof water on the foundation and interior spaces.
At the time of inspection there was evidence (past/ongoing interior flooding as indicated by water under the floor covering in the south basement room) that the footing/perimeter drainage system was not functioning properly (or are not present). I recommend a full evaluation of this water issue by a qualified drainage contractor to both determine the source of this water intrusion and to make repairs as deemed necessary. Proper evaluation may require removal of finish materials at the interior. Digging around the exterior of the home and installation of proper footing and downspout drains is strongly encouraged as a best practice solution.

- Evaluate
- Repair/Replace/Install
- Safety
- WDO (Wood Destroying Organisms & conducive conditions) Hidden damage should be anticipated
- Maintain

4

The city walkway is in very poor condition with some trip hazards at one location. I recommend factoring replacement of this area of the sidewalk by a qualified sidewalk replacement contractor. The city has very specific guidelines as to replacement of these surfaces.

- Evaluate
- Repair/Replace/Install
- Safety
- Maintain

100 Exterior:

5

Some failure/deterioration of the brick mortar joints was noted around the home. Most of this failure is concentrated on the south side. Only other minor areas of deterioration was noted around the other sides of the home. It appears that previous repairs did not involve grinding out the mortar joints to sufficient depth to allow for adequate fill of the joints. I recommend evaluation/repairs as deemed necessary by a qualified brick mason that specializes in these types of repairs. All of the house should be evaluated and repaired as deemed necessary---including the entire chimney structure.

In the crawl space there is evidence of water intrusion that may be related to the open cracks at the brick siding at the SE corner.

- Evaluate
- Repair/Replace/Install
- Safety
- WDO (Wood Destroying Organisms & conducive conditions)
- Maintain

6

Some of the trim is in need of proper painting. All trim components should be carefully evaluated as to the need for repairs and repaired as necessary. Some decay/rot was noted at the NW Basement window where the trim is too close to the ground. All horizontal trim components should be caulked/flashed properly---especially over the top and along the bottom of the windows. Proper caulking of siding and trim details should be fully evaluated and caulked/sealed/flashed as deemed necessary.

Some of the exterior trim of the home has very recently been repainted. Repainting prior to sale oftentimes conceals conditions that would otherwise be evident. I recommend monitoring over the next few months for staining/bleed-through conditions that would be indicative of previous or current leaks/water damage. Painting can conceal repairs, rot, stains etc.

As previously discussed the south basement window has trim installed behind the concrete and installation of a window well is recommended. Sooner than latter this trim will decay. This should also be considered a possible source of water intrusion in the adjacent basement area.

- Evaluate
- Repair/Replace/Install
- WDO (Wood Destroying Organisms & conducive conditions) Hidden damage should be anticipated
- Maintain
All around the edge of the roof where the fascia board does not adequately meet the roof sheathing there is a wide gap that can allow vermin entry to the attic/roof structure. Some areas have already had screening installed. I recommend all of the house perimeter be evaluated by a qualified party and repaired as deemed necessary.

Decks should be secured to the building by means of a ledger that is lag screwed or bolted into the wall, including anchoring for resistance to lateral loads. Flashing should be installed at the wall connection to prevent moisture entry behind the ledger. Joists should be secured at the ends utilizing joist hangers. The ledger should not be attached over the top of siding materials of any type, including this wood horizontal lap type siding.

It was not possible to evaluate how the ledger was attached to the home but it does appear that bricks were removed to allow for installation of the ledger to the structure behind the bricks. How the bricks were re-supported or how these deck structures were flashed could not be determined. Less than professional beam support installation at the west end of the deck warrant a full evaluation of the deck by a qualified deck installation contractor. Any possible issue with the removed brick should be evaluated by the brick mason in conjunction with previously discussed evaluation of all of the brick work on the home.

I recommend a grippable hand rail installed on the west deck stairs. I recommend installation by qualified railing installation company or other qualified repair person. The front entryway stoop could benefit from a proper guard to prevent falls from the service and a proper handrail to assist in safe use of the stairs. I recommend evaluation/repairs and/or replacement as deemed necessary by a qualified party.

Foundations that have very little of the foundation exposed above finish grade and are concealed by finished surfaces on the interior are impossible to fully assess. Assessment relies on evidence of how foundation issues affect finish materials: indications of flooding/leaking, elements out-of-plumb/out-of-level, high humidity, etc. Careful monitoring of finished spaces in basements is warranted.

Any building with below grade space is susceptible to seepage or water related issues. In this region, seasonally, there will be more runoff/ground water than at other times of the year. This report is confined to the conditions observed at the time of the inspection. I do not guaranty that a basement has always been dry in the past or provide assurances that it will remain dry in the future. Without long-term study and complete access to a substructure area during a variety of circumstances, including heavy rain and melting snow, it is impossible to predict the future. As previously discussed there is evidence of water intrusion into the South room and this was apparently disclosed by the sellers. This conditions should be further evaluated and repaired as previously discussed.

Throughout the crawl space there is wood and other debris/storage items lying about. This material is considered food and habitat for wood destroying organisms and other vermin. I recommend that all of this materials be removed in the context of overall repairs to the crawl space.
Throughout the crawl space there is wood/cardboard form material still in place from original construction, as well as some debris/storage present. These materials are considered food and habitat for wood destroying organisms. I recommend that all of this material be removed in the context of overall repairs to the crawl space.

Repair/Replace/Install
Safety
WDO (Wood Destroying Organisms & conducive conditions)
Maintain

There is evidence of moisture ant activity in the crawl space in the area of the SE corner of the living room. The cause of the moisture intrusion into this area may be related to cracks in the brick or possibly due to other causes and may be seasonal. I recommend cleaning up all of this frass (evidence) and if further evidence is noted, then more invasive investigation/repairs will be necessary.

Monitor
Evaluate
Repair/Replace/Install
WDO (Wood Destroying Organisms & conducive conditions) Hidden damage should be anticipated

There is an exception to these recommendations that allows for much less ventilation if there is a proper Plastic Ground Cover on the floor of the crawl space. Moisture conditions within the crawl space are consistent with adequate ventilation and no changes are recommended at this time. I suspect this space used to communicate with the basement space which would have minimized the need for ventilation of the space. I recommend that proper venting be installed by a qualified party.

Evaluate
Repair/Replace/Install
WDO (Wood Destroying Organisms & conducive conditions)
Maintain
Energy Conservation & IAQ

300 Roof & Attic:

At 18 years old, the roof surface is approaching the end of its useful life. I recommend replacement of the roof by a qualified roofing contractor within the next five years and the roof will need vigilant inspection and maintenance in the meantime. I recommend obtaining estimates as to costs of replacement and any associated repairs that might be necessary in conjunction with the replacement. There is some granular loss, some beginning tabs not sealed down, minor mechanical damage, etc.

Monitor
Evaluate
WDO (Wood Destroying Organisms & conducive conditions)
Maintain

The roof surface above the West entryway/deck is too flat for the type of shingles installed and hidden damage is possible unless specific types of underlayment were used. I saw no evidence of ice and water shield type products being installed as underlayment. I recommend evaluation/repairs and/or replacement as deemed necessary by a qualified roofing contractor.

Monitor
Evaluate
Repair/Replace/Install
WDO (Wood Destroying Organisms & conducive conditions) Hidden damage should be anticipated

Some of the gutters need cleaning. I recommend professional cleaning of the gutters and downspouts and verification of proper function.

Repair/Replace/Install
WDO (Wood Destroying Organisms & conducive conditions)
Maintain
There is no hat and spark arrester on the fireplace flue. I recommend that a qualified masonry contractor install a proper hat and spark arrester. This keeps moisture and vermin from entering the chimney and large sparks from leaving the chimney.

- Upgrade
- Repair/Replace/Install
- Safety
- WDO (Wood Destroying Organisms & conducive conditions)
- Maintain

As previously discussed the mortar joints in the chimney are deteriorating and should be properly pointed by a qualified masonry contractor. One of the chimney shoulders is in very poor condition as well. I recommend at the time of repairs that the whole chimney be evaluated/repaired as necessary by the masonry contractor.

- Evaluate
- Repair/Replace/Install
- Safety
- Maintain

**400 Electrical:**

The service entrance wires cross the house on the north side too close to the egress window of the North Bedroom. These wires are not allowed to be within 3 feet of the sides of below the window. These wires will likely be re-routed in the context of the electrical service upgrade but is an additional reason the system should be upgraded. Consult with licensed electrical contractor as to best options.

- Repair/Replace/Install
- Safety

The service entrance wires and meter appear to be for a previous 60amp service with upgrades to the interior panel. Wire sizing from the weather-head to the meter appears to be in very poor condition and undersized for the rating of the service panel. I recommend upgrading of the electrical service to the home by a licensed electrical contractor.

- Upgrade
- Evaluate
- Repair/Replace/Install
- Safety

The service panel has been upgraded without benefit of upgrading the rest of the service from the panel through the meter base and up to the Service Weather-head (point of connection to the Utility Company wires).

The meter seal is not in place on the meter. This is sometimes an indication of work being done without permits or that permits were never received a final inspection. The power company can be contacted about getting this seal placed regardless. The size of the service panel in relation to the entrance wires and the meter base is consistent with work being done less than professionally. I recommend obtaining assurances that any necessary electrical permits have been satisfied. Thorough inspection by a licensed electrical contractor is advised given numerous other concerns that will be discussed later in this section.
Thorough inspection by a licensed electrical contractor is advised given numerous other concerns that will be discussed later in this section.

- Evaluate
- Repair/Replace/Install
- Safety
- Maintain
The older style split bus type panel may no longer be adequate for the needs of the home as upgrading of wiring throughout the home occurs. Split buss type panels do not have one main shut-off but rely on several breakers at the top of the panel being shut off to turn all power in the house off. As the house wiring is upgraded, additional circuits will be required and I do not recommend adding additional circuits to this panel (or adding additional wiring to the existing circuits). I recommend that a licensed electrical contractor install a new panel to provide more adequate space for additional circuits. Adding a sub-panel to this panel is also a possibility---but that would not eliminate the inconvenience of not having a single main shut-off.

**Split Bus Electrical Panels**

The one Murray/Siemens breaker labeled "dryer" does not fit properly in this panel. This needs repairs prior to use of the dryer as loose connections can cause arcing and failure of the connections and fire. I recommend evaluation/repairs and/or replacement as deemed necessary by a licensed electrical contractor.

**One**
- **Safety**
- **Repair/Replace/Install**
- **Evaluate**

One of the basic requirements of all remote distribution panels (sub-panels) is that the grounds and neutrals be isolated from each other. When the panel is in a detached building on the same property the panel is required to have its own ground rods from the panel but also interconnected to the grounding electrodes for the Service Panel. This panel has been less than professionally wired and proper corrections should be made by a licensed electrical contractor in the near future. This is a shock hazard. The wire size run to the building is likely undersized and there is no fourth conductor. If electricity is desired to this detached structure a new wire will need to be pulled to the panel and grounds and neutrals properly isolated.

**One**
- **Safety**
- **Repair/Replace/Install**
- **Evaluate**

Bonding of the gas piping was not observed at the time of inspection. I recommend verification by electrical contractor that gas piping as been properly bonded. This can be done when the electrician is at the home for other reasons.

**This** is particularly important when the gas piping includes CSST type pipe (flexible stainless steel with black or yellow coating).

**One**
- **Safety**
- **Repair/Replace/Install**
- **Evaluate**
- **Upgrade**

Grounding of the metal water pipe from the street was not found and no means of system grounding was found at all. I recommend evaluation/repairs/installation by a licensed electrical contractor prior to occupancy. System grounding provides a path to ground for lightning surges and static electricity that would otherwise build up on the electrical system. Surge suppressors may not function properly without it.

**One**
- **Safety**
- **Repair/Replace/Install**
- **Evaluate**

Proper bonding of all low voltage systems (phone, cable, satellite dish) should be verified by the licensed electrical contractor in the context of other electrical repairs done at the home.

**One**
- **Safety**
- **Repair/Replace/Install**
- **Evaluate**

Circuits that have been compromised by the addition of post installation wiring are particularly vulnerable to arcing conditions because connections are frequently not professionally done. I consider it a good idea (until the wiring can be replaced) to add some level of protection to these older circuits by adding AFCI breakers to the circuits. All work on these older circuits must be performed by a licensed electrical contractor. Replacement of all of this older wiring is recommended in the context of overall remodeling of the home.
Upgrading all of the knob & tube wiring is recommended for improved electrical safety and some insurance requirements require replacement. Some companies will insure homes with knob & tube wiring while others will not—check with your homeowner insurance carrier.

28 There are a couple of junction boxes throughout the home that are missing cover plates or with knock-outs not covered. Cover plates should be installed by the electrician in the context of other electrical repairs at the home. Noted locations:
SE Knee wall attic
Basement next to refrigerator
Others should be anticipated and covered were found missing.
There is also some wiring subject to mechanical damage. Two locations in the kitchen and locations in the basement where wiring is run on the surface and not in conduit should be evaluated and repaired as deemed necessary by the licensed electrical contractor.

29 Wiring has been improperly run out from behind the light fixture in the upper 1/2 Bath to provide power to the receptacle (or visa versa). I recommend evaluation/repairs and/or replacement as deemed necessary by a licensed electrical contractor.

30 The microwave range hood has been tapped into the receptacle next to the range and therefore is not on its own circuit. I recommend evaluation/repairs and/or replacement as deemed necessary by a licensed electrical contractor.

31 The can lights in the attic space are not rated for contact with insulation/combustibles. I recommend that proper insulation baffles be installed around all non-insulation contact rated light fixtures by qualified insulation contractor or other qualified repair person. As an upgrade I recommend replacement of the light fixtures so that they can be covered with insulation for improved energy efficiency. This greatly reduces both heating and cooling costs. Each one of these cans acts like a little chimney and much heat can be lost from the living space.

As a safety and energy upgrade, I recommend factoring replacement of fixtures that are not rated for insulation contact with fixtures that are both rated to be buried in insulation as well as being air tight. Each one of these cans acts like a little chimney and much heat can be lost from the living space.

32 The exposed bulb in the porcelain bulb holder in the NW corner of the East Upper room is subject to mechanical damage as well as being a fire hazard. I recommend upgrading this fixture with type approved for closet installation, by a licensed electrical contractor.
It is quite common (and true of this home) to find ungrounded three-prong receptacles in older homes, where the receptacle have been "upgraded" to the newer three prong type without ever upgrading the ground wire. These receptacles should: (1) be returned to "two-prong" type receptacles; (2) have GFCI receptacles installed; or, (3) be rewired to include a ground wire; all by a licensed electrical contractor. Depending on the capabilities of the electrical panel for these circuits, it may be possible to change the circuit breakers to dual function AFCI/GFCI type breakers and then any 3-prong receptacles on those circuits could be labeled "ungrounded" as required. Discuss this option with the licensed electrical contractor as there are many variables to this solution.

If the neutral and ground are connected anywhere else in the building (other than at the Service panel), all grounded metal becomes part of the neutral conductor, constantly energized and creating various voltage potentials on electronic equipment.

It is important for home owners to become aware that the replacement of ANY receptacle in the home now require that they be replaced with Tamper Resistant type receptacles where required by current regulations as well as that they be provided with AFCI protection where AFCI protection is currently required.

At the time of remodeling, GFCI protection of some of the kitchen receptacles was required. I recommend that for safety, that all locations currently required to be GFCI protected be upgraded by a licensed electrical contractor. If practical, and/or possible, it is considered best practice for the breakers for these circuits to be changed to Dual Function (AFCI/GFCI) Combination type breakers. Current requirements call for all receptacles within a 6 foot arc of the kitchen sink (including under the sink), the refrigerator if it is within 6’ of the sink, and outlets like the dishwasher be GFCI protected. For safety, these locations should be given GFCI protection as a safety upgrade. Keep in mind that any changes related to these recommendations will require that the receptacles be tamper resistant and AFCI protected.

There is currently no GFCI protection at the east outside receptacle on the house and the south receptacle at the exterior of the detached garage/building (defective). I recommend that for safety the receptacles be changed by a licensed electrical contractor to GFCI type receptacles.

The outside receptacles at some locations do not have a proper weather tight "in-use" type cover as currently required. As a safety upgrade I recommend that the covers be replaced by the licensed electrical contractor in the context of other electrical repairs at the home.

There is currently no GFCI protection at the bathroom receptacle in the upper bathroom. I recommend that for safety the receptacles be changed by a licensed electrical contractor to GFCI type receptacles.

No smoke alarms were found in some of the bedrooms. I recommend installation of smoke alarms by homeowner/handyperson prior to occupancy.
No CO detectors were noted anywhere in the home as currently required with the sale of a home. I recommend installation or verification of installation at all required locations. Currently they are required to be located at each floor level and in the proximity of bedrooms.

Combination type alarms can be problematic even while meeting "legal requirements" for installation. Carbon Monoxide detectors in conjunction with Ionization type smoke detectors is problematic due to the poor ion technology (see links under smoke alarms previous to this section). The devices also can have different life spans. For best protection, combination type alarms should not be used. The International Association of Fire Fighters (IAFF) specifically recommends against installing combination alarms. Combination type alarms are required to be UL-217 and UL-2034, listed.

Furnaces this age should be serviced annually. I recommend servicing of this furnace prior to the next heating season. Servicing should include cleaning of the interior of the furnace compartment, inspecting the furnace venting system, and evaluation for carbon monoxide, in conjunction with all other normal servicing aspects performed by the qualified heating contractor. Conditions not noted at the time of inspection should be anticipated, especially with older units.

The condensate visible at the vent connectors and in the heating unit compartment is indicative of issues with the combustion and venting of the furnace---including inadequate combustion/dilution air. I recommend further evaluation/correction by licensed heating contractor in conjunction with overall servicing of the unit.

There is some evidence of duct work with what is considered to be asbestos paper/insulation. Asbestos materials were commonly used in homes of this age. Asbestos has been shown to present a health hazard if it becomes friable, or airborne in small particles. It is usually recommended that this tape/insulation be left undisturbed and remediation be taken only when necessary by a licensed asbestos removal contractor or by the homeowner themselves with the necessary permitting in place. For further information contact the EPA and Puget Sound Clean Air Commission links listed below:

EPA Asbestos Information, http://www.epa.gov/asbestos/

The furnace filters are extremely dirty to the point of affecting function and efficiency of the furnace. Restriction of air through the heat exchanger can damage the heat exchanger. I recommend cleaning/replacement by homeowner/handyperson.
At the time the home was remodeled (unless prior to 1991), some method of whole house ventilation would have been required. Lack of installation may be an oversight or be an indication of work being done without permits. I recommend further evaluation as desired. Sometimes these are incorporated on timers installed on bathroom or laundry room exhaust fans. It is possible I missed the timer location or it was hidden. I recommend asking seller if they are aware of any such installation.

**60o Plumbing:**

When there is a sprinkler system installed, a back flow valve is required to be installed on the system at the meter. No back flow valve was seen. It was extremely unusual that only one sprinkler head was noted. The valve is typically located in a compartment within 4' of the water meter compartment. This condition can result in what is called a “cross connection” and simply put can result in the siphoning of water from the pipes in the irrigation system back into the city water supply in the event of negative pressure (cleaning or use of fire hydrants). These systems should also have anti-siphon devices installed on them. I recommend further evaluation/repair of the entire sprinkler system by a licensed plumber.

**44** No water shut-off was found within the home. This is not uncommon. Water to the home can always be shut off at the street/meter. As an upgrade, I recommend having a licensed plumber install a shut-off inside the home for convenience unless it is determined that there is already one somewhere. I recommend asking seller if they know of an inside shut-off.

**45** Much of the supply plumbing in the home is the older style galvanized pipe. This pipe is at the end of its expected life and typical corrosion at joints is evident throughout. Functional flow throughout the home will worsen over time. I recommend factoring replacement of this supply piping in the near future by a licensed plumber. It is critical that when this piping is replaced that proper grounding of the Electrical system be maintained/re-connected. If the line is replaced with plastic pipe additional means of grounding may be required. Verify that the plumber is replacing this pipe in conjunction with a licensed electrical contractor to maintain/install proper grounding of the electrical system.

Certainly in the context of any remodeling that makes this piping accessible it should be upgraded at that time. At the time of inspection there was evidence of "poor" functional flow at the hot water lines to fixtures. This is typical of old galvanized pipes but may also be related to the water filter at the water heater. I recommend evaluation/repairs and/or replacement as deemed necessary by a licensed plumber or other qualified party.

At the time of inspection there was evidence of "reduced" functional flow with multiple fixtures running.

Functional flow at individual fixture locations will not be further discussed at individual fixture locations. However there is some possibility that cleaning fixture valves, screens and interior components could improve flow---at least temporarily.
46 Piercing valves are connections to the supply piping that are frequently used to achieve water supply to the Refrigerator or hot water taps. They are prone to leaking/failure. As an upgrade I recommend installation of a proper "T" with shut-off by a licensed plumber.

- Upgrade
- Monitor
- Safety
- WDO (Wood Destroying Organisms & conducive conditions)
- Maintain

47 Much of the drainage plumbing in the home is the older style galvanized pipe. This pipe is at the end of its expected life and typical corrosion at joints and pipes is evident throughout. Attempts at cleaning these drains usually accelerates their demise, especially with the use of corrosive types of drain cleaning products. Corrosive types of drain cleaning products should never be used in metal drain lines. There are some Bio-Enzymatic types of cleaners that can be quite effective.

   Certainly in the context of any remodeling that makes this piping accessible it should be upgraded at that time.

- Upgrade
- Monitor
- Evaluate
- Repair/Replace/Install
- Safety
- WDO (Wood Destroying Organisms & conducive conditions)
- Maintain

48 There is at least one lead type toilet elbow present in the home. These should be considered well past their expected life. There may or may not be one for the Upper Hallway Bathroom as some remodeling of that area has occurred. The one for the Main Floor Bathroom shows signs of failure consistent with age of the pipe. I recommend immediate replacement of this elbow and further evaluation as to the condition of the upstairs bathroom if it is present. I recommend replacement by a licensed plumber. Openings is plumbing drains can allow sewer gases back into the home.

- Upgrade
- Evaluate
- Repair/Replace/Install
- Safety

49 There is currently no "proper" seismic strapping on the water heater as is required. I recommend that seismic strapping be installed per manufacturer's instructions by homeowner/handyperson. These strapping kits are readily available at Lowes/Home Depot type home maintenance stores. Strapping is required to be at both the top and bottom of the tank in the top and bottom third of the tank.

   There is currently no cold water shut-off to the water heater as required. I recommend a proper water shut-off be installed by a licensed plumber or other qualified party.

- Repair/Replace/Install
- Safety

700 Doors & Windows:

50 The basement exterior door is in need of repairs/weather-stripping and/or replacement. Replacement of the door can improve overall energy efficiency of the home as well as improve security of the home. Until this door can be replaced by a qualified door installation company, I recommend that it be maintained well painted and sealed to protect the home from damage from the elements.

   Many of the exterior doors could benefit from upgrading for energy efficiency and safety. They have cosmetic as well as defects related to age and use. Replacement of the doors can improve overall energy efficiency of the home as well as improve security of the home. Until these doors can be replaced by a qualified door installation company, I recommend that they be maintained well painted and sealed to protect the home from damage from the elements.
The locking mechanisms for the west deck door do not operate properly and there is damaged weather-stripping that should be replaced. I recommend evaluation/repairs and/or replacement as deemed necessary by a qualified door installation contractor or other qualified party.

The lower hinge pin on the front entryway door is not properly placed which can cause damage to the hinge. I recommend evaluation/repairs and/or replacement as deemed necessary by a qualified party.

The Most of the windows in the home are older style (original) single pane wood windows. There are cracks and poor/missing glazing and some are painted shut or otherwise not functional. I recommend factoring replacement of all of the windows in the home by a qualified window installation company. All of these windows should be properly maintained until they can be replaced. Window replacement should include evaluation/repair/replacement of trim/sills and related components as well. Most of the windows that should open, appear to be pocket type windows. In other words they slide into the adjacent walls. Function should be verified especially in rooms where egress is necessary/required. I recommend evaluation/repairs and/or replacement as deemed necessary by a qualified party.

Listing information for homes often call rooms bedrooms according to appraiser records and various other determinations. In this report, while I may refer to rooms as bedrooms, technically rooms that do not have a means of heat, egress, or sufficient height do not meet current requirements to be considered "habitable." As such the none of the basement rooms meet these criteria for height and egress if desired to be bedrooms.

The upper East Room window has broken plastic components. I recommend replacement of the sash as desired. I recommend evaluation/repairs and/or replacement as deemed necessary by a qualified party.

The West door of the main floor SE Bedroom binds on the jamb. I recommend proper adjustments by a qualified party to allow for proper operation of the door. Sticking doors can prevent rapid egress through the door when necessary.

The west closet door of the Upper North Bedroom and the low wall storage doors of the East Upper Room bind on the floor making operation difficult. I recommend evaluation/repairs and/or replacement as deemed necessary by a qualified party.

**800 Interiors & Structure:**

The upper east room does not have a source of heat as would be required to be considered "habitable space." I recommend that a source of heat be provided by a qualified party and that clarification be made as to the room's status as a bedroom.

It is very common for stairs to the basement and attic levels in homes of this age to not meet current standards. Improper side barriers, handrails, tread spacings, head room etc. Changes to these stairs for safety may be warranted but often times adjustments are difficult and/or expensive.
It is very common for stairs to the basement to be of lower quality than stairs in finished areas of the home. Improper side barriers, handrails, tread spacings, head room etc. Changes to these stairs for safety may be warranted but often times adjustments are difficult and/or expensive.

The barrier railings at the basement stairs do not meet current spacing requirements (less than 4”) and upgrading for safety is recommended. Openings in guards larger than 4” represent a safety hazard for small children. Consult with railing installation contractor as to options.

- Evaluate
- Repair/Replace/Install
- Safety

55

Improving of the hand railings of both sets of stairs by a qualified stair railing installation company, so that the ends return to the wall, is recommend for improved safe use of the stairs. Handrail ends should be either returned to the post, returned to the wall, or should terminate at newel posts or safety terminals. Ends that are not properly terminated can snag belongings and lead to injuries of persons using the railings.

- Upgrade
- Repair/Replace/Install
- Safety

56

The damper was open at the time of inspection and the handle fell out of place during testing. This causes heat to be continually exhausted up the chimney. Keeping the damper closed when the fireplace is not in use is recommended to prevent heat loss. Having a glass enclosure professionally installed over the fireplace opening is recommended to improve efficiency. I recommend evaluation/repairs and/or replacement as deemed necessary by a qualified party.

- Evaluate
- Repair/Replace/Install
- Safety
- Maintain
- Energy Conservation & IAQ

900 Bathroom(s):

57

The pop-up stopper is missing/not functional at both of the bathroom sinks. The faucet on the Upper Bathroom sink is broken on the cold side. I recommend repairs by homeowner/handyperson. These pop-up stoppers are readily available at Lowes/Home Depot.

There is also staining below the sink in the upper bathroom that should be monitored. It likely will leak again. I recommend evaluation/repairs and/or replacement as deemed necessary by a licensed plumber or other qualified party.

- Repair/Replace/Install
- Maintain

58

The lid on the toilet tank of the Main Floor Bathroom is broken. Replacement may require replacement of the toilet. I recommend evaluation/repairs and/or replacement as deemed necessary by a licensed plumber or other qualified party.

- Evaluate
- Repair/Replace/Install
- Safety

1000 Kitchen:

59

The Kitchen cabinets are older style painted wood cabinets and are consistent with age and type of construction. Doors and drawers that do not operate properly are common with these older cabinets. Non adjustable shelves and drawers without runners are typical. The fronts of drawers are often poorly attached to the drawer boxes and evidence of past repairs is common.

There is some minor delamination and mechanical damage of the laminate countertops. Upgrade as desired.
The shrink-wrap finish cabinets are prone to damage from heated surfaces such as ranges. While primarily a cosmetic issue, replacement of the doors with more durable types of materials is recommended. Consult with qualified cabinet installation contractor as to options. Delamination was noted at many locations with some mechanical damage to surfaces as well. Replacement is likely the best solution. Some damage noted at cabinets next to range.

The left rear burner was not functional at the time of inspection. I recommend evaluation/repairs and/or replacement as deemed necessary by a qualified party.

The hood to the range does not vent to the exterior. These hoods collect grease and can be a fire hazard if not maintained properly. I recommend that a proper hood, vented to the exterior, be installed by qualified ventilation company. Kitchen exhaust fans can help control the overall moisture levels in the home.

The dryer exhaust cap at the west side of the home is painted shut. I recommend evaluation/repairs and/or replacement as deemed necessary by a qualified party to allow for proper venting of the appliance. The dryer should not be used until repairs are made to the circuit breaker that protects the dryer circuit.

Remember: this Summary is not a complete listing of the findings in the report, and reflects the opinion of the inspector. It should be considered highly likely there will be other issues you would like in the summary, and you should add these as desired. Please review all of the report pages.
HOME OVERVIEW:
In the course of the inspection I am looking for obvious, and not so obvious, clues as to problems with components or systems. At times a repair can be as expensive as replacement and sometimes additional problems or damage are found when work begins. In fact, a defect in one system or component can cause a related problem at another location that was not apparent at the time of the inspection. It is recommended that prior to closing the client have in hand -- at a minimum -- estimates from specialists for service/repairs or replacement/upgrades of any components or systems that may be potentially costly, dangerous or complex to fix or replace. If repairs are completed prior to closing, the client minimizes the chances of any unexpected surprises after closing.

While on-site, all professional repair people should be asked to further evaluate the condition of the system, structural components or device that he or she is working on. Often one problem will lead to another related issue which can require further repairs or replacement. If remodeling is done, where walls and ceilings are opened, wallpaper removed, homeowners may find some concealed issues that will also have to be addressed during the remodel. Because the home inspector is a generalist, this policy further protects the client.

Determining the location of property boundary lines is beyond the scope of a Standard Home Inspection and can typically only be determined by a licensed surveyor.

There was some staging and belongings throughout the home that made observation of covered surfaces difficult. The chances that hidden defects will be found when the home is emptied is always a possibility. For a more complete opinion of the overall condition of the home I recommend further evaluation of the home when the house is vacated.

There is a some deferred maintenance and cosmetic defects in the home----both inside and out. No attempt is made to identify all of these issues but will be mentioned in relation to more serious concerns throughout the report.

Asbestos products were commonly used in homes until around 1986 (give or take a few years) and their presence should be assumed in homes prior to that time period. Common building materials that sometimes contain asbestos are "popcorn" textured ceilings, acoustic tiles, linoleum or vinyl (which might have another surface them), siding, vermiculite insulation, heat duct insulation/tape, and heating pipe insulation. Asbestos products are not usually considered to be a problem as long as they are in sound condition and not friable. However, if remodeling is done, a strict safety protocol must be adhered to.

Lead products were commonly used in homes prior to 1978 (give or take a couple of years) and their presence should be assumed in homes prior to that time period. Common building materials that sometimes contain lead are paints, ceramic glazes (including old enamel tubs & sinks) and copper pipe solder. It should be noted that lead in copper pipe solder was not banned until 1985) Lead-based paints are not usually considered to be a problem as long as they are in sound condition and not friable. However, if remodeling is done there are strict safety protocols that must be followed. A home Inspection is NOT an environmental survey; therefore, a qualified specialist or environmental testing firm should be hired by the client if he or she wishes to have further evaluation/testing for any hazardous substances such as asbestos, lead-based paint, etc.

When repairs are made on the home, I recommend that I be called back to verify that corrections have been satisfactorily made. There is typically an additional fee of $150.00 (unless an otherwise agreed upon amount) for this service to cover inspection/travel time and report writing time.

There are many things that can be done to improve safety and living conditions within any home. While many of these issues come to light in the course of the Standard Home Inspection there are likely to be other things that can be done to improve the home. Additional information can be found at:

Center for Healthy Living, http://www.centerforhealthyhousing.org/
EXPLANATION OF TERMS USED IN REPORT:

- **N/A (Not Applicable):** The component was not present, was not within the scope of the inspection, or was not inspected for other reason(s) as noted.
- **Satisfactory:** The component was inspected and appeared to be “functional” at the time of the inspection. Although some evidence of wear and tear may exist relative to age and use, no evidence of a “substantial” defect was observed.
- **Upgrade:** A missing component, which, when added, would improve the overall quality of the home environment.
- **Monitor:** The component is in marginal condition and/or nearing the end of its service life. I recommend monitoring to determine if or when corrective action is needed. Repair or replacement at this time is considered optional.
- **Evaluate:** The condition of the component could either not be determined, or evaluation was beyond the scope of the inspection. I recommend further evaluation by a specialist or appropriate licensed tradesperson.
- **Repair / Replace:** The component was either not functioning or was exhibiting a major defect at the time of the inspection. I recommend repair or replacement by a licensed contractor or appropriate tradesperson.
- **Safety:** The condition of the component, or the lack of the component altogether, represents a possible safety hazard to pets, children, and adults. **Corrective action is recommended/required.**
- **Wood Destroying Organism (WDO):** This indicates evidence of wood destroying organism activity, or conditions that can cause it. I recommend appropriate action to eliminate potential pest damage (See section 1200).
- **Maintenance:** The component showed impaired function at the time of the inspection. I recommend maintenance or minor repair, as appropriate. This work might typically be done by a knowledgeable homeowner or handyperson.
- **Energy Conservation & IAQ:** The addition of, or defects in, this condition and/or component is related to the home’s energy efficiency or indoor air quality. While the inspector does not test or determine the quality of indoor air quality there are some things related to indoor air quality that will be noted.

YOU ARE ENCOURAGED TO READ THE FOLLOWING REPORT IN ITS ENTIREITY.

**REMEDIAL WORK** – For any element or condition requiring attention, quotes should be obtained prior to closing from qualified specialists or contractors to determine actual repair/replacement costs. Any cost estimates provided, whether oral or written, represent only an approximation of possible costs. Also, any cost estimates do not reflect all possible remedial needs or costs for the property; latent concerns or consequential damage may exist. If the need for remedial work develops or is uncovered after the inspection, contact Charles Buell Inspections, Inc. to arrange an inspection to assess conditions prior to performing any repairs.

**IF THERE ARE ITEMS WITHIN THIS REPORT THAT REQUIRE RE-INSPECTION, YOU ARE ENCOURAGED TO HAVE THIS INSPECTOR COMMUNICATE DIRECTLY WITH THOSE HIRED TO MAKE THE CORRECTIONS TO ENSURE THAT REPAIRS ARE PROPERLY MADE.**
Washington State, Home Inspector Standards of Practice related to the Site:
The inspection of the site includes the building perimeter, land grade, and water drainage directly adjacent to the foundation; trees and vegetation that adversely affect the structure; walks, grade steps, driveways, patios, and retaining walls contiguous with the structure.

(1) The inspector will:
Describe the material used for driveways, walkways, patios and other flatwork around the home.
Inspect for serviceability of the driveways, steps, walkways, patios, flatwork and retaining walls contiguous with the structure.
Inspect for proper grading and drainage slope.
Inspect vegetation in close proximity to the home.
Describe any deficiencies of these systems or components.

(2) The inspector is not required to:
Inspect fences, privacy walls or retaining walls that are not contiguous with the structure.
Report the condition of soil, trees, shrubs or vegetation unless they adversely affect the structure.
Evaluate hydrological or geological conditions.
Determine the adequacy of bulkheads, seawalls, breakwalls, and docks.

Topography (grading & site conditions):
GEOLOGICAL FACTORS – This report does not include evaluation of any soils or geological conditions/concerns. Construction on certain soils, particularly expansive clays, fill soils, hillside and waterfront areas, necessitate special design consideration. Evaluation of these factors, or the need for them, is beyond the scope of this inspection. Pertinent information should be obtained from local officials and/or a qualified specialists, particularly if any concerns are detected or if home is in a detrimental soils area.

To maintain proper drainage away from the structure, soil adjacent to the foundation should slope at least 1 inch per foot for five feet away from the building. Paved areas should slope at least 1/4 inch per foot. Control of surface drainage is critical to keeping basements and crawl spaces dry. A clearance of 6 inches should be maintained from the soil to the bottom of wood siding or trim on the building, unless the material is pressure treated wood or other material approved for ground contact.

Location:
Site Slope:
House on Flat Site, portions of property sloped:
Grading around home:
Some areas of poor grading noted, some wood structures too close to the ground
Seasonal ponding possible in some areas of yard depending on inherent ability of the soil to drain

Underground pipe drainage systems:
Footing drains:
Footing drain point of termination not determined
Location or appropriateness of footing drain pipe termination not determined
Presence of footing drain pipes not determined

Downspout/underground pipe terminations:
Located at several points around the foundation-----individual locations identified only in relation to specific problems
Some downspouts are NOT connected to underground drains
Abandoned/unused pipes evident
Caps missing at one location
NW corner of home under deck
Missing and/or damaged caps can allow debris into the drains as well as create a pathway for vermin----these open pipes should be properly capped and damaged caps should be replaced.

Pipes full of water
Pipe at the NE corner of the home--others should be anticipated

Tight-line drains:

Tight-line drains are for the collection of roof water independent of footing drains.

Driveway:
NA----public alley

Street Sidewalk
Concrete:
Cracking evident
Surface Settlement/Upheaval Evident
Surface Displacement Evident
Trip Hazards present

### Walkways:

**Concrete:**
- Cracking evident

**Brick/Pavers:**

#### Walkway Stairs:

- **Stairs:**
  - Concrete

- **Handrail:**
  - A proper hand rail has a "grippable" rail 1-1/4" - 2-5/8" wide, spaced at least 1-1/2" away from the wall, and the ends return to wall/post (or designed so as to not "catch" clothing, belongings, or persons). The rail should be 34" - 38" above the stair nosing.

  - No Hand Rail----required when 4 or more risers

### Exterior Stairs to Basement:

**Retaining wall structures:**

- **Poured Concrete Retaining Wall:**
  - Wall taller than 30"

- **Barrier around retaining walls is present**

**Railings (top cap):**

- Present where required
- ≥ 36" height
  - Not measured and should be verified it is at least 36" high

- **Painted Wood
  - Guard (barrier):**
  - Painted Wood
  - <4" baluster spacings

**Stairs:**

- **Concrete
  - Handrail:**
  - A proper hand rail has a "grippable" rail 1-1/4" - 2-5/8" wide, spaced at least 1-1/2" away from the wall, and the ends return to wall/post (or designed so as to not "catch" clothing, belongings, or persons). The rail should be 34" - 38" above the stair nosing.

  - No Hand Rail----required when 4 or more risers

### Retaining Walls:

- Retaining walls are subject to movement if water pressure builds up behind a wall that has not been provided with proper drainage and weep holes.

  - Walls should be vertical or lean slightly to the high side of the slope. If the wall is cracked or tilted forward, it is likely to be failing and should be further evaluated by a structural engineer.

**Brick:**

- **Along Street**
- **At Patio**
  - Loose capping blocks noted

### Vegetation:

- Satisfactorily maintained away from the house/building

### Fences:

- Fences around the property are generally excluded from the Standard Home Inspection. However, some information is provided as a courtesy and points of connection to the home itself are inspected. Fences can represent safety issues when they become damaged, derelict or otherwise compromised. Wood decay/rot is common. It also typically cannot be determined who actually owns the fence and communication with neighbors is often necessary to accomplish repairs and/or replacement. Specific evaluation of the fences on the property may be warranted.

### Patio:

- **Concrete:**

- **Drainage:**
  - Ability of patio to drain away water not determined----I recommend verifying
**Detached Garage**

Not inspected—casually inspected (except for electrical components), converted to some sort of “living space.” Further evaluation of this building is recommended depending on what it is to be used for.

**Storage Shed (s)**

Not inspected—casually inspected

Doors noted as being in poor condition

**Wood Destroying Organisms around the property (not necessarily related to home):**

<table>
<thead>
<tr>
<th>Rot:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rot/decay in stumps</td>
</tr>
<tr>
<td>Rot/decay in “excluded” structures</td>
</tr>
</tbody>
</table>

**Conducive Conditions:**

Tree stumps around property

Some soils not adequately retained to prevent contact with wood trim

Finish grade too high around home in some areas

**Mold or Mold-like/fungal growth present:**

Localized

On storage shed doors

**Evidence of Oil Heating System:**

No Evidence Seen

- Fill pipe
  - West side of home

- Vent Pipe
  - West side of home

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**GROUNDS**

**001 Grading & Site Conditions:**

- Repairs/improvements recommended and/or necessary

A reverse grade, or grade that is very flat, around the home will carry water toward the foundation instead of away from it. This water can impact the foundation and find its way into the basement and crawl space contributing to the overall moisture burden of the home. This will be further discussed in the exteriors section of the report.

Maintaining proper grading around the home is recommended.

- Monitor
- Evaluate
- Repair/Replace/Install
- WDO (Wood Destroying Organisms & conducive conditions)
- Maintain

Improving grading around the home to improve clearances to finish siding as well as to eliminate areas that increase likelihood that water will impact wood structures is recommended. This is mostly a concern at basement windows around the home where there are not adequate window wells to protect wood trim from decay/rot. Grade should slope away from the home for at least 10 feet or have proper drainage to accommodate surface water that can impact the home and there should be 6 inches of clearance between finish grade and untreated wood structures. I recommend that a qualified party evaluate and make repairs as deemed necessary. Work along the south side will likely require removal of concrete surfaces. This will be further discussed in the Exteriors section of the report below.

- Evaluate
- Repair/Replace/Install
- WDO (Wood Destroying Organisms & conducive conditions)
- Maintain
The storage structure and garage structure at the West yard were not inspected or only casually inspected and no determination made as to the condition or long term usability of the structures. Electrical related to the garage structure is included in the electrical section of the report.

- Evaluate
- Repair/Replace/Install
- Safety

### 002 Roof-Water (tight-line) & Foundation/Footing/Surface drainage:

- Repairs/improvements recommended and/or necessary

Typically the foundation drainage systems of homes are not visible for inspection. Problems with these drainage systems can be evidenced by a wide variety of water related issues. Foundations can have footing drains and "tight-line" drains that function as separate systems or in some jurisdictions they are all tied together. Evaluation of the type of system installed on a home typically cannot be determined in the course of the Standard Home Inspection.

Proper function of perimeter drains and/or stairwell drains is beyond the scope of this inspection. I recommend that proper function be both determined and maintained. If drains are present and accessible, one method to verify function is to run a hose into them for a prolonged time and see whether water backs up out of the drain. While some can be inspected by remote camera, most sewer scoping companies do not scope these drains.

- Monitor
- Evaluate
- Repair/Replace/Install
- WDO (Wood Destroying Organisms & conducive conditions)
- Maintain

The Perimeter/Footing Drains of homes of this age are often not functional and have been abandoned. Standing water was noted in the drain at the chimney. The result is that roof water can flood next to the foundation and can have a negative impact on the foundation of the home. Cleaning of these older drains is usually not possible and installation of new footing drains can be very costly (however the best long term solution). I recommend installation of new tight-line drains for the roof water drains that are not connected to adequate drains be installed by a qualified drainage contractor to lessen the impact of roof water on the foundation and interior spaces.

At the time of inspection there was evidence (past/ongoing interior flooding as indicated by water under the floor covering in the south basement room) that the footing/perimeter drainage system was not functioning properly (or are not present). I recommend a full evaluation of this water issue by a qualified drainage contractor to both determine the source of this water intrusion and to make repairs as deemed necessary. Proper evaluation may require removal of finish materials at the interior. Digging around the exterior of the home and installation of proper footing and downspout drains is strongly encouraged as a best practice solution.

- Evaluate
- Repair/Replace/Install
- Safety
- WDO (Wood Destroying Organisms & conducive conditions) Hidden damage should be anticipated
- Maintain

### 003 Driveway / Walkways:

- Repairs/improvements recommended and/or necessary

Maintenance and liability associated with the public sidewalks around homes is often the responsibility of the homeowner. Maintaining the sidewalks free of ice and other hazardous conditions is often the responsibility of the homeowner. I recommend finding out what is expected in you jurisdiction.

The city walkway is in very poor condition with some trip hazards at one location. I recommend factoring replacement of this area of the sidewalk by a qualified sidewalk replacement contractor. The city has very specific guidelines as to replacement of these surfaces.
004. Exterior Steps & Railings (Not related to Decks/Porches):

- Repairs/improvements recommended and/or necessary

It is common for landscaping stairs and walkways to not meet the same standards as those attached to the home or decks. Handrails and protective side barriers are recommended for safety and consideration should be given to improving/maintaining these stairs and walkways for safety.

The steps from the street sidewalk could benefit from installation of a proper handrail for improved safety. I recommend railing be installed by qualified railing installation company.

For improved safety I recommend installation of a proper handrail on the stairs on the exterior stairs to the basement for improved safe use of the stairs.

Since this structure is a source of moisture into the basement you might at some point want to build some sort of roof and enclosure.
005 Retaining Walls (walls higher than 30") & Fences:
- No defects noted at the time of inspection

006 Vegetation:
- No defects noted at the time of inspection

Vegetation:
Trees and shrubs add beauty to a home, but can cause damage to exterior components. Vegetation in contact with the house provides an access path for wood destroying insects, promotes moisture against the walls, and may cause physical (mechanical) damage. All vegetation should be cut back away from the home a minimum of 6”. Leaves falling from overhanging tree branches can clog gutters, while the roots of larger trees can damage drain pipes and crack foundations.

007 Fences, Gates & Trellises:
- No defects noted at the time of inspection

Fences, Gates & Trellises:
Inspection of fences is generally limited to conditions which may adversely affect the adjacent structure(s). Evaluation of these elements is not within the scope of a standard home inspection. Wood components are prone to decay and insect damage. I advise checking these components for assurance of personal acceptability.

- Maintain

While only casually inspected, the brick fence at the patio was noted as having loose capping blocks. I recommend evaluation/repairs by a qualified brick mason---perhaps in conjunction with repairs to the brickwork on the house to be discussed later in this report.
Patio: No defects noted, visual limitations apply

Patio is subject to the same type of cracking and settlement as driveways and walkways. If settlement creates a trip-hazard or creates negative drainage toward the foundation and resultant moisture intrusion into the basement or crawl space, repair/replacement of the patio should be undertaken. Patios should be constructed to drain surface water away from the house.

Grounds Inspection Limitations / Exclusions:
Fences that surround the property are typically not inspected---except as an additional service.
Soil and slope stability and hydrological conditions are not within the scope of this inspection.
The functionality of underground drainage components cannot be determined during a typical inspection.
In the absence of rain, consideration must be given to the possibility that drainage function cannot be adequately assessed; and, indications of past conditions or damage from moisture may not be evident.
A Standard Home Inspection does not include evaluation of elements such as site lighting, irrigation systems, barbecues, sheds, outbuildings, fencing, planters, landscaping retaining structures, and/or recreational elements on the site. Evaluation of these elements, if present, may be warranted, any comments made or made as a courtesy, whether done verbally or included in the written report.

Non-Wood Destroying Organisms (Household Pests):
While this inspector may comment on evidence of Rodent and other vermin activity around the home, it is beyond the scope of this inspection to determine the "current" presence or absence of Rodents/Vermin.
An inspection of the exterior includes the visible wall coverings, trim, protective coatings and sealants, windows and doors, attached porches, decks, steps, balconies, handrails, guardrails, carports, eaves, soffits, fascias and visible exterior portions of chimneys.

(1) The inspector will:
- **Describe** the exterior components visible from ground level.
- **Inspect** visible wall coverings, trim, protective coatings and sealants, windows and doors, attached porches, decks, steps, balconies, handrails, guardrails, carports, eaves, soffits, fascias and visible exterior portions of chimneys.
- **Probe** exterior components where deterioration is suspected or where clear indications of possible deterioration exist. Probing is not required when probing will damage any finished surface or where no deterioration is suspected.
- **Describe** any deficiencies of these systems or components.

(2) The inspector is not required to:
- **Inspect** Buildings, decks, patios, fences, retaining walls, and other structures detached from the dwelling.
- **Inspect** Safety type glass or the integrity of thermal window seals.
- **Inspect** Flues or verify the presence of flue liners beyond what can be safely and readily seen from the roof or the firebox of a stove or fireplace.

**Exterior Wall Structure:**

**Wall Structure:**
- **Wood Frame**

2X4 wood wall construction
Make-up of most wall structures could not be determined due to finishes

**House Numbers:**

Numbers present on **house**
In an emergency it is important for authorities and service personnel to readily locate the home. I recommend that homeowner make sure that house numbers are visible from street (both night and day) and maintained. Modern requirements call for numbers/letters to be a minimum of 4" high and placed on a contrasting surface and lighted.

- [X] **Maintain**

**Exterior Wall Covering(s):**

Homes constructed prior to 1978 most likely contain paints with some lead---both interior and exterior. These paints are not considered a problem as long as the paint does not become “flakable” or air-borne. Keeping walls and woodwork well painted can minimize exposure to the lead paints. It is recommended that old painted wood be removed and properly disposed of as opposed to sanding and striping of the woodwork. Removal of lead paint should only be done by qualified lead materials removal companies. For additional information contact the EPA and CPSC at:

- [EPA](http://www.epa.gov/lead/)
- [CPSC](http://www.cpsc.gov/CPSCPUB/PUBS/5055.html)

This inspector can have the home tested for lead based paints for an additional fee.

As of April 22, 2010, new Lead Safety protocols became effective, and any work done on homes built prior to 1978 are required to have paint tested for the presence of lead whenever remodeling or painting that would result in the paint becoming airborne. Testing and removal of lead based paint must meet strict abatement protocols and work must be performed by qualified persons with Lead Abatement certification and training. There are procedures to allow for homeowners to perform this work themselves but they too must follow the safety guidelines. For additional information see the link to the EPA's website:

- [LEAD Safety Protocols](http://www.epa.gov/lead/pubs/renovaterightbrochure.pdf)

- [Safety](http://www.epa.gov/lead/pubs/renovaterightbrochure.pdf)
- [Maintain](http://www.epa.gov/lead/pubs/renovaterightbrochure.pdf)

**Building Sheathing:**

- It is not always possible to identify the type of structural sheathing present on the home. There are methods of home construction where the sheathing is sometimes eliminated or where what is noted in one area is not indicative that it is present elsewhere.
- [X] **Maintain**

- **OSB sheathing suspected (typical of time of construction)**
  - West dormer only

- **Solid Wood T&G Boards**
  - Typical of time frame of construction
  - Visible at gable ends of attic
### Types of Cladding:

- **Fiber-Cement (i.e. Hardiplank) Cladding:**
  - "Shake" style—west dormer only
  - Painted
    - None to minimal paint failure

- **Brick Cladding:**
  - Some beginning deterioration of surface of mortar joints in some areas
  - Evidence of tuck-pointing
  - Window ledges loose/damaged
  - South window of SW Bedroom
  - Cracks:
    - "Steped" cracks
    - Open cracks—repairs necessary
    - On wall surface
    - Under window corners
    - Above window corners
  - Shrinkage/settlement cracks present

#### Bottom flashing:
- Bottom flashing not visible

#### Weep holes:
- Weep holes not visible/presence not determined
  - Weep holes allow the balancing of atmospheric pressures within the wall and allow a way for accumulated moisture to escape.

**Associated interior defects:**
- Water damage, moisture ants, wood decay rot noted in crawl space at the SE corner.

### Wood Destroying Organisms & Conducive Conditions in Siding/Wall Coverings:

- **Conducive Conditions:**
  - Some cracking of brick mortar joints

### Trim, Eaves, Soffits, Fascia:

- **No overhangs present**

#### Wood:
- Trim behind/in-contact-with concrete structures
- Some trim in contact with ground
- Gaps not caulked
  - Gaps at Wood Trim / Brick connections
- Painted
  - Moderate to extensive paint failure
  - Localized
  - Some Weathering-Deterioration present
- Rot/Decay present
  - Basement windows at north side of home

- **Gaps that could allow vermin entry**
  - Gap above fascia along the gutters

- **Stains** on soffit and fascia
  - Stains on soffit and fascia tested "negative" for moisture by moisture meter at time of inspection

### Wood Destroying Organisms & Conducive Conditions in Trim/Soffits:

#### Rot:
- Rot/Decay in Trim
  - Basement windows at north side of home

- **Conducive Conditions:**
  - Some trim in contact with ground
  - Some trim too close to concrete structures
  - Some trim behind concrete structures
  - Considerable failing of painted surfaces

### Front Entryway/Stoop:

- **Surface/stairs:**
  - Concrete
    - Patching evident
    - Minor settlement evident
Concrete covers untreated wood structures (rim joist)

**Railings (top cap):**
- None Present/but is recommended/necessary
- >30" from finish grade, within 36" of drop-off

**Guard (barrier):**
- None Present/but is recommended/necessary

**Stair Structure:**
- Concrete/Masonry
- Handrail:
  - A proper hand rail has a "grippable" rail 1-1/4"-2-5/8" wide, spaced at least 1-1/2" away from the wall, and the ends return to wall/post (or designed so as to not "catch" clothing, belongings, or persons). The rail should be 34"-38" above the stair nosing.
  - No Hand Rail----required when 4 or more risers

**Entryway Roof Structure:**
- Included in Roof Section (part of House roof)

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### Wood Destroying Organisms & Conducive Conditions related to Stoop:

**Front Entryway/Stoop:**
- **Conducive Conditions:**
  - Stoop covers untreated wood floor structures
  - Typical of time of construction
  - Evaluation of hidden structures not possible due to interior finish coverings

### West Deck:

**Deck/Floor Structure:**
- Mostly NOT Visible

**Support Structures:**

**Footings/Foundation:**
- Post & Pier, and supported on house/building:
  - **Ledgers:**
    - While this report will identify the means of attachment, or lack thereof, of the deck/porch to the home, it must be stressed that a purely visual examination cannot typically determine the adequacy of any such connections and/or supports.
    - The above informational caution will not be repeated for other decks/porches reported on in this report.
  - Treated wood
  - Ledger bolting:
    - Ledger not visible
  - Lateral Bracing Anchors:
    - Not determined
  - Ledger flashing:
    - Not determined
  - Joist Hangers:
    - Not determined
  - Joists:
    - Wood Joists: 2x10, 16"oc
    - Treated wood

**Surface:**
- Synthetic Wood/Plastic

**Railings (top cap):**
- Present where required
- ≥ 36" height
- Plastic

**Guard (barrier):**
- Synthetic Wood/Plastic
- <4" baluster spacings

**Stair Structure:**
- Not Visible
  - (partially visible by remote camera)

**Surface treated wood (non-ground-contact type)**

**Treads:**
- Synthetic Wood/Plastic

**Risers:**
- Closed risers
  - Synthetic Wood/Plastic
  - Mechanical damage
Top Cap of Stair Barrier Railing:
Plastic
Handrail:
A proper hand rail has a “grippable” rail 1-1/4"-2-5/8" wide, spaced at least 1-1/2" away from the wall, and the ends return to wall/post (or designed so as to not “catch” clothing, belongings, or persons). The rail should be 34"-38" above the stair nosing.
No Hand Rail—required when 4 or more risers
Stair side-barrier (s):  
Same as rest of deck
Space under deck:  
Open/not fully enclosure  
Vermin access possible  
Evidence of previous entryway structures noted
Deck Roof Structure:  
Flat
Roof Support structures:  
Corbel support structures  
Roof is too flat for the type of shingle roof covering

Wood Destroying Organisms & Conducive Conditions related to Deck:
West Deck:  
Conducive Conditions:  
Poor access for full evaluation

EXTERIOR

101 Exterior Walls:  
X Repairs/improvements recommended and/or necessary

Exterior wall coverings protect the wall structure and living space from water, wind, and sun damage. If not installed and maintained properly, exterior siding can be vulnerable to moisture entry, causing siding failure and/or structural damage. Routine maintenance of exterior walls should include: sealing gaps, openings, and joints at door and window frames with appropriate caulk and/or weather stripping; cleaning and repainting or re-staining wall surfaces as necessary; and keeping vegetation cut back at least 6 inches away from wall surfaces.

All pipe & wire penetrations, cracks in the siding, and connections at windows/siding should be properly caulked by homeowner/handyperson to prevent moisture and vermin entry to the home. All of the siding should be evaluated and all cracks and openings properly sealed/caulked as necessary. Only minor gaps in need of caulking were noted at the time of inspection.
X Evaluate  
X WDO (Wood Destroying Organisms & conducive conditions)  
X Maintain

Some failure/deterioration of the brick mortar joints was noted around the home. Most of this failure is concentrated on the south side. Only other minor areas of deterioration was noted around the other sides of the home. It appears that previous repairs did not involve grinding out the mortar joints to sufficient depth to allow for adequate fill of the joints. I recommend evaluation/repairs as deemed necessary by a qualified brick mason that specializes in these types of repairs. All of the house should be evaluated and repaired as deemed necessary---including the entire chimney structure.
In the crawl space there is evidence of water intrusion that may be related to the open cracks at the brick siding at the SE corner.
area of wood decay/rot

mortar joints in poor condition

bricks and mortar joints in poor condition

Upgrade
Evaluate
Repair/Replace/Install
Safety
WDO (Wood Destroying Organisms & conducive conditions)
Maintain
Under the west deck there is some sort of key pad possibly for a hidden key. Discuss with the seller to your satisfaction.

102 Trim, Eaves, Soffits, Fascia:

- Repairs/improvements recommended and/or necessary

Trim components include eaves, soffits, fascia, and moldings at door and window frames. Regular maintenance of trim and trim connections should be practiced in concert with siding maintenance to prevent moisture damage.

Some of the trim is in need of proper painting. All trim components should be carefully evaluated as to the need for repairs and repaired as necessary. Some decay/rot was noted at the NW Basement window where the trim is too close to the ground. All horizontal trim components should be caulked/flashed properly---especially over the top and along the bottom of the windows. Proper caulking of siding and trim details should be fully evaluated and caulked/sealed/flashed as deemed necessary.

Some of the exterior trim of the home has very recently been repainted. Repainting prior to sale oftentimes conceals conditions that would otherwise be evident. I recommend monitoring over the next few months for staining/bleed-through conditions that would be indicative of previous or current leaks/water damage. Painting can conceal repairs, rot, stains etc.
As previously discussed the south basement window has trim installed behind the concrete and installation of a window well is recommended. Sooner than latter this trim will decay. This should also be considered a possible source of water intrusion in the adjacent basement area.

- Evaluate
- Repair/Replace/Install
- WDO (Wood Destroying Organisms & conducive conditions) Hidden damage should be anticipated
- Maintain

All around the edge of the roof where the fascia board does not adequately meet the roof sheathing there is a wide gap that can allow vermin entry to the attic/roof structure. Some areas have already had screening installed. I recommend all of the house perimeter be evaluated by a qualified party and repaired as deemed necessary.
103 Decks / Stoops:

- Repairs/improvements recommended and/or necessary

Decks should be secured to the building by means of a ledger that is lag screwed or bolted into the wall, including anchoring for resistance to lateral loads. Flashing should be installed at the wall connection to prevent moisture entry behind the ledger. Joists should be secured at the ends utilizing joist hangers. The ledger should not be attached over the top of siding materials of any type, including this wood horizontal lap type siding.

It was not possible to evaluate how the ledger was attached to the home but it does appear that bricks were removed to allow for installation of the ledger to the structure behind the bricks. How the bricks were re-supported or how these deck structures were flashed could not be determined. Less than professional beam support installation at the west end of the deck warrant a full evaluation of the deck by a qualified deck installation contractor. Any possible issue with the removed brick should be evaluated by the brick mason in conjunction with previously discussed evaluation of all of the brick work on the home.

For information about proper deck construction, that meets current requirements, see the following link (please note that if this deck is in Seismic zones D0, D1, D2 & D3 there are other requirements for construction in many jurisdictions that are better covered in the second link below):
Decks in seismic zone Do, D1 & D2 (all of Puget Sound region) require solid blocking at intermediate supports of decks (over the top of beams). Solid blocking is missing above the beams on this deck. I recommend installation by a qualified party.

**PROPER DECK CONSTRUCTION** [http://www.awc.org/Publications/DCA/DCA6/DCA6-09.pdf]

For information about proper deck construction, that meets current requirements, and more specific to the Puget Sound region see the following link:


**Stoops/decks** that are higher than 30 inches above the ground (within 36 inches of the stoop) should have a railing that is at least 36 inches in height, and baluster spaces should be no greater than 4 inches in width.

- Evaluate
- Repair/Replace/Install
- Safety

I recommend a grippable hand rail installed on the west deck stairs. I recommend installation by qualified railing installation company or other qualified repair person. The front entryway stoop could benefit from a proper guard to prevent falls from the service and a proper handrail to assist in safe use of the stairs. I recommend evaluation/repairs and/or replacement as deemed necessary by a qualified party.

- Evaluate
- Repair/Replace/Install
- Safety

There are literally hundreds of manufacturers of composite type decking materials and it is typically not possible to determine the manufacturer of these materials in the context of a home inspection. Some manufacturer's materials have undergone 3rd party testing and have appropriate certifications while others have no certification or do not have current certifications. Again this is also not possible to determine the context of a home inspection. Every manufacturer will have different installation requirements for their materials. As an example, many of these materials are not approved for use on stairs or require special engineering for use on stairs. Many of these materials have also suffered premature failure with resultant recalls in some cases. Obvious visual defects will be reported but it is recommended that it be verified by a qualified party that these materials are properly installed per manufacturer's recommendations.

- Monitor
- Evaluate
- Repair/Replace/Install
- Safety
- Maintain

Most concrete stoop and deck surfaces in the NW can become very slippery if they are not maintained. This represents a hazard to persons using the entryways. Keeping these surfaces free of moss/algae and other slippery substances is recommended.
Inspection Limitations / Exclusions:
Unless otherwise noted, inspection of the exterior of the home is limited to a visual inspection from the ground.
- Some components not included in this inspection
- Limited access below Decks
- Storage/furniture on Decks
- Storage under Porches
Out-Buildings/Structures are not included in this inspection except for electrical components (or only casually inspected).

Non-Wood Destroying Organisms (Household Pests):
While this inspector may comment on evidence of Rodent and other vermin activity within the Wall Structures and around the exterior of the home/building, it is beyond the scope of this inspection to determine the "current" presence or absence of Rodents/Vermin.
- None indicated--visual limitations apply

100G GARAGE STRUCTURE:
INFO & MAINTENANCE
Not inspected or casually inspected---not included in the written report except for electrical issues
Washington State, Home Inspector Standards of Practice related to the Building Structure:

An inspection of the structure will include the visible foundation; floor framing; roof framing and decking; other support and substructure/superstructure components; stairs; ventilation (when applicable); and exposed concrete slabs in garages and habitable areas.

1. The inspector will:
   - Describe the type of building materials comprising the major structural components.
   - Enter and traverse attics and subfloor crawlspaces.
   - Inspect the condition and serviceability of visible, exposed foundations and grade slabs, walls, posts, piers, beams, joists, trusses, subfloors, chimney foundations, stairs and the visible roof structure and attic components where readily and safely accessible.
   - Inspect the Subfloor crawlspaces and basements for indications of flooding and moisture penetration.
   - Probe a representative number of structural components where deterioration is suspected or where clear indications of possible deterioration exist. Probing is not required to:
   - Report all wood rot and pest-condusive conditions discovered.
   - Refer all issues that are suspected to be insect related to a licensed structural pest inspector (SPI) or pest control operator (PCO) for follow up.

2. The inspector is not required to:
   - Enter Subfloor crawlspaces that require excavation or have an access opening less than eighteen inches by twenty-four inches or headroom less than eighteen inches beneath floor joists and twelve inches beneath girders (beams).
   - Enter any areas that are not readily accessible due to obstructions, inadequate clearances or have conditions which, in the inspector's opinion, are hazardous to the health and safety of the inspector or will cause damage to components of the home.
   - Move stored items or debris or perform excavation to gain access.

HOUSE FOUNDATION:

Basement Area:

Foundation Footings:
   - Not visible

Foundation:
   - Cracks present:
     - Cracking typical of age and type of construction
     - Too much of basement is finished to determine how much cracking there is

Foundation Sill Plate:
   - Foundation sill plate NOT visible
   - Anchoring of foundation:
     - Foundation sill plate bolting not visible/not determined due to finish surfaces

Foundation Pony Walls:
   - Framing:
     - Not visible due to finish surfaces

Window Wells:
   - Present at one location
   - Window wells missing
   - South basement windows and the West window on the north side
   - Egress window wells present
   - None present

Seismic Restraint:
   - NO evidence of seismic retrofit
   - In many cases older homes can benefit from seismic upgrades.
     - Seismic upgrade may be suggested, but is not a mandatory requirement. (With the exception of seismic strapping of newer water heaters, there is no state law requiring a seller to bring an older home into compliance with current earthquake resistance requirements). However, seismic improvements are prudent, and if done properly, can significantly limit structural damage in the event of a severe earthquake. Effective seismic upgrading consists of:
       1. Installing additional anchor bolts to adequately attach wood sills to the concrete foundation. This is only necessary when the existing bolts do not meet current building standards.
       2. Adding plywood sheets known as shear panels, nailed to the “cripple walls” to prevent collapse of those walls when lateral seismic forces are exerted against the building. Cripple walls are the short framed walls that extend from the top of the foundation to the base of the floor structure.
       3. Installing hold-down brackets to secure “cripple walls” to the anchor bolts. This ensures that the wall studs will not separate from the wood sills during a quake.
Reinforcing post and beam connections with plywood gussets or T-straps to ensure against separation or displacement.

In many homes, the floor joists are installed directly on the sill plates, rather than on "cripple walls." In such cases, the second and third recommendations above do not apply. Instead, add tie-down brackets to ensure secure attachment of the floor structure to the wood sills.

Floor Framing (primary floor system) (basement ceiling joists):
Floor system partially visible due to finishes

Wood Joists: 2x10, 16"oc
Based on very small unfinished areas

Sub-floor:
3/4" Solid Board Sub-Floor

Fire-Blocking/Draft-Stopping
Finish surfaces and/or insulation can conceal missing fire-blocking. When the basement space is fully finished off and/or insulated, evaluation of fire-blocking deficiencies is not usually possible.
Requirements for fire-blocking and draft-stopping in homes has changed over the years and varied from jurisdiction to jurisdiction. In general more modern requirements call for "blocking" the spread of fire from lower level spaces to upper level spaces. Some structures also have requirements for installation of protection against the flow of fire horizontally. To achieve this there are specific requirements as to sealing/blocking of spaces around pipes, ducts, chimneys, wiring, framing, laundry chutes, chases etc.

It is beyond the scope of this inspection to determine if all fire-blocking and/or draft-stopping is in place, but where it is "obviously" missing I attempt to identify the condition/location and recommend appropriate repairs for improved fire safety.

Major omissions of fire-stopping will be more thoroughly reported on in the Narrative section of the report, otherwise repairs to missing fire-stopping should be done by the appropriate trade or other qualified repair person.

Safety
Where Missing:
Wiring holes from lower spaces to upper spaces (through sill plates etc) not caulked/sealed
Typical of age and type of construction
Plumbing Pipes from lower spaces to upper spaces (through sill plates etc) not caulked/sealed
Typical of age and type of construction
Ductwork from lower spaces to upper spaces (through sill plates etc) not caulked/sealed
Typical of age and type of construction

Insulation in Basement:
Ceiling Above Basement:
Not visible/Not determined
Rim joists only:
Not visible/Not determined
None
Wall Cavity:
Not determined in some areas due to finish surfaces

Basement Floor, Wall, Ceiling finishes:
In addition to the obvious fact that finished surfaces may restrict structural evaluations, it should be noted that no evaluations are made regarding local permits or approvals for such work or use. Compliance regarding egress, plumbing, heating or electric requirements should be determined by contacting local building officials.

Finished (these percentages are approximate and should only be considered a VERY rough guideline)

Floors:
- Fully finished except for small area at furnace/water heater/laundry
- Foam interlocking panels may not be considered “finish floor” materials

Walls:
- Fully finished except for small area at furnace/water heater/laundry

Ceilings:
- Fully finished except for small area at furnace/water heater/laundry

Basement Floor:
Concrete
Some cracking occurs in all concrete slabs due to shrinkage during the curing process. Floor coverings generally prevent detection of cracks or settlement in concrete slabs, unless the condition is severe. Floor coverings are not removed during the inspection.

Efflorescence Present
Amount of efflorescence present could not be determine due to finish surfaces

Cracks present:
Any possible cracking was not visible due to finish surfaces
Evidence of Present water/moisture in Basement Space:
None Seen

Evidence of Present water/moisture at Basement Floor Level:
Water present:
  Indications of moisture:
  Water under foam interlocking panels at the West end of the South room and evidence that it may be under other areas as well
How moisture is getting into Basement:
  Not determined----further evaluation/monitoring is recommended

Fungus, Wood Destroying Organisms & Conducive Conditions in Basement Space:

Conducive Conditions:
  Water infiltration from exterior
  Standing water
  Under floor covering in the South basement room
  Finish wall surfaces covering foundation

Crawl Space:
Crawl spaces are particularly prone to wood deterioration or damage. Proper ventilation and moisture barriers should be maintained. Check periodically for potential concerns.
While the inspector takes care to protect the home from debris that might be inevitably carried out of the crawl space, some amount of impact should always be anticipated, as crawl spaces are often very dusty, dirty, muddy, rodent infested, and cob web filled spaces. Most of these materials are easily vacuumed up and typically the inspector is at the property to inspect the crawl space and the inspector should not be expected to have the equipment necessary to clean these materials up satisfactorily.
Minor debris impact present

Access:
  Basement at:
    East side of basement
      Access Door Insulation & Weather-stripping:
        Insulation/Weather-Stripping missing / but recommended

  Inspection Method and Access Limitations:
    Traversed to all corners

  Limitations:
    Storage
    Debris
    Ductwork
    Slope of ground

Foundation Footings:
  Not visible

Foundation:
Poured Concrete
  Minor vertical cracks in foundation walls are common, and generally indicate typical foundation settlement. Cracks in excess of 1/4 inch, or signs of active foundation movement should be further evaluated by a structural engineer.
  It is usually not possible to determine whether masonry foundations, chimneys or other concrete elements have been properly reinforced.

  Generally speaking concrete components built prior to the 1950's have very little structural reinforcement.

Efflorescence Present
  Water that moves through masonry in a liquid state can result in the formation of efflorescence, which can disfigure the face of masonry/concrete structures. Migrating water dissolves salts from inside the concrete/brick and then deposits them on the surface as the water evaporates. Usually it is not destructive, only disfiguring. Sealing the surface of a wall in this situation can lead to spalling (exfoliation) of the surface and is therefore not recommended.
  None to Minimal
    Typical of age/type of construction

Cracks present:
  Cracking typical of age and type of construction

Foundation Sill Plate:
  Most of foundation sill plate NOT visible
  NON-treated foundation sill plate
  Foundation sill plate NOT bolted
Lack of attachment to the foundation is typical of age and type of construction.

Foundation sill plate set into foundation
Typical of time of construction
Can lead to decay of sill plate if adequately clearances to finish grade are not maintained
Hidden decay is VERY common with sill plates installed in this manner and can usually only be determined through invasive investigation

Floor System Framing
Floor system partially visible due to insulation
Wood Joists: 2x10, 16"oc
Dirt Floor

Evidence of Present water/moisture in Crawl Space:
None Seen

Indications of PAST moisture in crawl space:
Water Stains and decay rot at the SE corner of the crawl space

How moisture was getting into crawl space:
Past evidence of water running into crawl space under sill plate noted
Rot/decay present ---- repairs necessary
Past moisture ant evidence noted
The brick veneer above and adjacent to this area has large cracks that may be causing this water damage

Crawl Space Ventilation:
None Found
Improvements to ventilation necessary

Crawl Space Insulation:
Ceiling Cavity:
Rockwool
Minor displacement of insulation noted

Rockwool

Unless the deficiencies in the installation of the insulation are significant further discussion in the report is unwarranted. I recommend that homeowner/handyperson correct deficiencies such as minor displacement, minor loss of coverage etc.

Maintain

Vapor Barrier/Ground Cover:
Present
Clear Plastic

Gravity Drains:
None seen

Gravity drains are installed through the foundation at the low point of the crawl space to drain water out of the crawl space during construction and will drain water from the crawl space after construction if they remain connected to the drain system. These drains are also known to admit water to the crawl space when drainage systems back up and to also be a point of entry for vermin. No determination can be made at the time of inspection as to the effectiveness or function of any such gravity drains. At the time of inspection no gravity drains were seen.

Fungus, Wood Destroying Organisms & Conducive Conditions in Crawl Space:

Crawl Space:
Rot:
Rot in Floor/Joists
SE corner
Past/present wood destroying insects
Moisture Ants
Galleries
Carton structures present
Past/Ongoing activity noted
Floor system
SE corner

Conducive Conditions:
Form materials left in place
Wood form boards
Storage items
No ventilation

Noxious or Other Odors Noted (as related to Foundation structures):
Odors associated with moisture conditions under the floor covering in the south basement room
Most houses have the potential for surface or subsurface water penetration. Regardless of any specific report comments, it would be prudent in all cases to discuss local conditions and concerns with the present owner and local authorities. Any comments made in this report are based on evidence/indications present at the time of the inspection only. It is not possible to accurately determine the extent of past conditions or to predict future concerns. If there are indications of prior remedial work intended to reduce water penetration concerns, documentation should be obtained from the owner and/or installer.

Experience indicates that the majority of water penetration concerns are due to a combination of factors commonly related to inadequate foundation grading and drainage provisions. In many situations, relatively straightforward measures may have a direct effect on the condition; in other cases, the remedy may be more complex or impossible to achieve. Any specific recommendations in the report should be considered; however, be aware that they do not necessarily represent a complete or permanent solution to the condition.

### 201 Foundation Wall /Basement Floor:

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<tr>
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<th>Mostly Covered/Not Visible to Inspect</th>
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Storage and finished wall surfaces in basements can often limit assessment of the extent of efflorescence in basements.

Foundations that have very little of the foundation exposed above finish grade and are concealed by finished surfaces on the interior are impossible to fully assess. Assessment relies on evidence of how foundation issues affect finish materials: indications of flooding/leaking, elements out-of-plumb/out-of-level, high humidity, etc. Careful monitoring of finished spaces in basements is warranted.

Any building with below grade space is susceptible to seepage or water related issues. In this region, seasonally, there will be more runoff/ground water than at other times of the year. This report is confined to the conditions observed at the time of the inspection. I do not guaranty that a basement has always been dry in the past or provide assurances that it will remain dry in the future. Without long-term study and complete access to a substructure area during a variety of circumstances, including heavy rain and melting snow, it is impossible to predict the future. As previously discussed there is evidence of water intrusion into the South room and this was apparently disclosed by the sellers. This conditions should be further evaluated and repaired as previously discussed.

![Image of wet areas under panels](image)

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<th>Evaluate</th>
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<td>Repair/Replace/Install</td>
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<td>Safety</td>
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<td>WDO (Wood Destroying Organisms &amp; conducive conditions)</td>
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Cracks in the foundations of homes this age are very common. I recommend that any cracks discovered by homeowner/handyperson be patched with expansive concrete. This will help keep out moisture and small insects and make monitoring for further movement easier. Significant cracking after repairs are made would indicate the need for further evaluation by a licensed structural engineer.
I noted only minor cracks at the time of inspection but that should not be construed to mean there are no larger cracks present hidden by finish materials and/or storage.

- Evaluate
- Repair/Replace/Install
- Safety
- WDO (Wood Destroying Organisms & conducive conditions)

### 202 Building Framing:

- Covered/Not Visible to Inspect

It is outside the scope of a Standard Home Inspection to determine the load capabilities of floor systems. When heavy objects are to be located within the home (like pianos, waterbeds, etc) care must be taken, and determinations made as to the load capabilities of the floors where heavy objects are to be located.

Homes of this age were often constructed without many of the metal fasteners/hangers that would be typical of modern construction. For example openings in floor systems for chimneys and stairwells could often benefit from installation of metal hangers. I recommend evaluation/installation of hangers where deemed necessary by a qualified general contractor---perhaps in the context of other repairs done to the home.

Throughout the building there are floors that squeak. I recommend further evaluation/repairs by a qualified party as desired.

- Upgrade
- Evaluate
- Safety
- Maintain

When the entire home is finished off, there is often no way to directly assess methods and types of framing systems. Being a visual inspection, I can only look for the results of hidden conditions related to the structural framing components. Severe movement of finish surfaces should be invasively evaluated by appropriate licensed professionals.

- Monitor
- Evaluate
- Maintain

### 203 Insulation:

- Covered/Not Visible to Inspect

When the entire home is finished off, there is often no way to directly assess methods and types of insulation in the home. Being a visual inspection, I can only look for the results of hidden conditions related to missing insulation.

Evaluation of how well the home is insulated can be done by thermal imaging devices.

Upgrading insulation wherever practical in older homes is usually considered advantageous and cost effective adding to both comfort and energy savings.

- Upgrade
- Evaluate
- Maintain
- Energy Conservation & IAQ

### 204 Crawl Space Foundation Wall:

- Repairs/improvements recommended and/or necessary

Throughout the crawl space there is wood and other debris/storage items lying about. This material is considered food and habitat for wood destroying organisms and other vermin. I recommend that all of this materials be removed in the context of overall repairs to the crawl space.

Throughout the crawl space there is wood/cardboard form material still in place from original construction, as well as some debris/storage present. These materials are considered food and habitat for wood destroying organisms. I recommend that all of this materials be removed in the context of overall repairs to the crawl space.
There is evidence of moisture ant activity in the crawl space in the area of the SE corner of the living room. The cause of the moisture intrusion into this area may be related to cracks in the brick or possibly due to other causes and may be seasonal. I recommend cleaning up all of this frass (evidence) and if further evidence is noted, then more invasive investigation/repairs will be necessary.

A proper crawl space access opening should be no less than 18 inches high and 24 inches wide. The opening should be fitted with a cover that can be easily removed without the use of special tools, and should be sized properly to prevent the entry of mice or other vermin.

There is no weather-stripping on the crawl space access door. This opening is often under negative pressure, especially in two story homes, and crawl space air can be drawn into the home if the weather-stripping is not in place. I recommend evaluation/repairs by a qualified party.

When the access is from heated spaces the access door should be insulated and weather-stripped for improved energy efficiency.
206 Crawl Space Insulation:

- **Reps/improvements recommended and/or necessary**
  
  Modern insulation requirements call for floor insulation to be installed in permanent contact with the sub-floor decking. The current installation is installed such that the insulation is entirely flush with the bottom of the floor joists leaving a uniform gap above the insulation of approximately 2 inches—not in contact with the sub-floor in all areas checked. This installation can result in reduced energy efficiency as well as making floors feel colder at this space fills with cold air. I recommend proper repairs by a qualified insulation contractor or other qualified party.

- Evaluate
- Repair/Replace/Install
- Maintain
- Energy Conservation & IAQ

207 Crawl Space Ventilation, Crawl Space Plastic Ground Cover:

- **Reps/improvements recommended and/or necessary**
  
  If the floor of a crawl space or basement is soil and/or gravel, it should be covered with a vapor retarding barrier of 6 mil black polyethylene sheeting. Adjoining sections of the barrier material should overlap at least 6 inches, and pier blocks should not be covered.

- Evaluate
- Repair/Replace/Install
- WDO (Wood Destroying Organisms & conducive conditions)
- Maintain
- Energy Conservation & IAQ

There is an exception to these recommendations that allows for much less ventilation if there is a proper Plastic Ground Cover on the floor of the crawl space. Moisture conditions within the crawl space are consistent with adequate ventilation and no changes are recommended at this time. I suspect this space used to communicate with the basement space which would have minimized the need for ventilation of the space. I recommend that proper venting be installed by a qualified party.

Inspection Limitations / Exclusions:

- Basement:
  - Built-in wood structures
  - Heating equipment
  - Ductwork
  - Water heater
  - Appliances
  - Furnishings
  - Storage in basement space limited inspection
  - Poor/Difficult access to some areas
  - Basement Ceilings Finished/Covered / Not visible
  - Basement Floors Finished/covered not visible
  - Some of Basement Floors Finished/covered not visible
  - Basement Walls Finished/covered not visible
  - Very little of Foundation Walls visible at exterior

- Crawl Space:
  - Floors above crawl space Insulated / Not Visible
  - Ductwork
  - Very little of Foundation Walls visible at exterior

Non-Wood Destroying Organisms (Household Pests):

While this inspector may comment on evidence of Rodent an other vermin activity within the home, it is beyond the scope of this inspection to determine the "current" presence or absence of Rodents/Vermin.
Washington State, Home Inspector Standards of Practice related to the Roof:
An inspection of the roof includes the roof covering materials; gutters and downspout systems; visible flashings; roof vents; skylights, and any other roof penetrations; and the portions of the chimneys and flues visible from the exterior.

(1) The inspector will:
- Traverse the roof to inspect it.
- Inspect the gutters and downspout systems, visible flashings, soffits and fascias, skylights, and other roof penetrations.
- Report the manner in which the roof is ventilated.
- Describe the type and general condition of roof coverings.
- Report multiple layers of roofing when visible or readily apparent.
- Describe any deficiencies of these systems or components.

(2) The inspector is not required to:
- Traverse a roof where, in the opinion of the inspector, doing so can damage roofing materials or be unsafe. If the roof is not traversed, the method used to inspect the roof must be reported.
- Remove snow, ice, debris or other material that obscures the roof surface or prevents access to the roof.
- Inspect gutter and downspout systems concealed within the structure; related underground drainage piping; and/or antennas, lightning arresters, or similar attachments.
- Operate powered roof ventilators.
- Predict remaining life expectancy of roof coverings.

HOUSE ROOF:

Roof Configuration:
- Gable
- Pitch(s) approximately: Pitch not determined but very steep in most areas

Roof Covering Material:
The evaluation of a roof is primarily a visual assessment based on general roofing appearances. The verification of actual roofing materials, installation methods, or roof age is generally not possible. Conditions such as hail damage or the lack of underlayment may not be easily detected and may result in future concerns.

Composition Shingle (non-dimensional, 3 tab traditional):
- 15-20 year life span

18 Years: “Guestimate” of age of roof

Method of shingle attachment:
- 3/8” head nails present----means of shingle attachment

Tabs sealed down (random sampling):
  When shingles tabs are very well sealed down it is typically not possible to tell either methods of nailing or adequacy of nailing.
  Some beginning failure of seal-down adhesive strips (tabs lift up----vulnerable to wind damage)

Some damaged ridge cap
Some mechanical damage
Very steep roofs often suffer minor mechanical damage

Minor cracked shingles

Some widening of cut-outs between tabs

Minor granular loss
  Throughout roof surface

Very minor moss growth noted
  Enough to limit inspection of surface in some areas

Some black streaking noted (Lichen growth)

Shingles installed on pitch below 4/12
  Flat roof above West deck/entryway

Past Leaking evident:
  At pipe penetrations
  At chimney penetrations
  At roof transitions
  Visible in attic

Roof Inspection Method:
- Walked on
- Traversed the ridge
  Some areas not walked on
    Too Steep
    Slippery
Layers of Roofing:

A determination should be made at the time of re-roofing as to whether or not ripping off of the existing layers and/or roof decking work will be necessary. Roof loading, local requirements or the need to provide a firm base for the new roofing are some of the factors to consider.

1 layer

Roof Flashings:

Lapped Style Valleys (one plane runs under the adjoining plane which overlaps and is cut parallel to the valley...at the valley)

Eave flashings:

- Eave flashings NOT present/roofing materials overhanging gutters
- Consistent with age of roof

Rake flashings:

- Flashings present

Roof to wall flashings:

- Metal Flashings present

Step flashings:

- Step Flashings present

Main Attic:

Washington State, Home Inspector Standards of Practice related to the Insulation & Ventilation:

The inspection of the insulation and ventilation includes the type and condition of the insulation and ventilation in viewable unfinished attics and subgrade areas as well as the installed mechanical ventilation systems.

1. The inspector will:
- Inspect the insulation, ventilation and installed mechanical systems in viewable and accessible attics and unfinished subfloor areas.
- Describe the type of insulation in viewable and accessible unconditioned spaces.
- Report missing or inadequate vapor barriers in subfloor crawlspaces with earth floors.
- Report the absence of insulation at the interface between conditioned and unconditioned spaces where visible.
- Report the absence of insulation on heating system ductwork and supply plumbing in unconditioned spaces.
- Describe any deficiencies of these systems or components.

2. The inspector is not required to:
- Determine the presence, extent, and type of insulation and vapor barriers concealed in the exterior walls.
- Determine the thickness or R-value of insulation above the ceiling, in the walls or below the floors.

An attic access opening should be provided to all attics of combustible roof construction. The opening should be not less than 22 inches x 30 inches, should be located in a readily accessible location, and should have at least 30 inches of headroom above the access opening.

Access hatches to insulated attic areas should also be insulated, and the access opening should be fitted with weather-stripping to insure a tight fitting seal.

While the inspector takes care to protect the home from debris that might be inevitably carried out of the attic space, some amount of impact should always be anticipated, as attic spaces are often very dusty, dirty, rodent infested, insulation filled and cob web filled spaces. Most of these materials are easily vacuumed up and typically the inspector is at the property to inspect the attic space and the inspector should not be expected to have the equipment necessary to clean these materials up satisfactorily.

Minor debris impact present

Maintain

Above all of upper living space north room and south room

Inspection method:
- Not traversed due to insulation and low clearances
- Viewed from Opening

Access Door/Cover:

Access Door/Cover #1:
- North Upper Room
- Opening smaller than 22" x 30" --- consistent with time of construction
- Access Door/cover Insulation & Weather-stripping:
  - Insulation missing / but recommended

Inspection of Attic limited by:
- Dormer
- Insulation in Joist/Rafter Space

Roof Framing:
- Conventional, "stick-built"
- Rafters:
  - Wood Rafters: 2x4, 24°oc
**Insulation:**

- **Roof**: Some blocking/draft sheathing.

**Ventilation:**

- **Rockwool**: Indicative of the house originally having wood shingle/shake roof.

**Roof Sheathing:**

- **OSB**: Damage or deterioration is typically due to excessive moisture from inadequate ventilation, leakage or manufacturing defects. Such damage, if widespread, can be structurally significant and adversely affect the roof integrity.


**Insulation:**

- **The small amounts** of installed insulation and condition of insulation limit effectiveness
- **Missing in some areas:**
  
  All other things being equal, approximately half of the heat loss from a home is through the ceiling. It is typically easier and more effective to insulate the flat ceiling above living space rather than between the roof rafters. Adding insulation above the ceilings in poorly insulated older homes is generally a wise investment.

  An energy assessment or audit is outside the scope of the standard home inspection. Any comments on amounts and/or materials are for general informational purposes only and were not verified. Pre-1970s homes are more likely to have been constructed with insulation levels significantly below present day standards.

- **Estimates of depth of insulation is not meant to imply that the attic is sufficiently insulated or that the estimated depth is consistent throughout the attic. Use these depth "guesstimates" as a guide in determining the necessity for upgrading/adding additional insulation or in determining if the amount is "close" to recommended current standards. Adequacy of insulation can best be determined by a professional Energy Audit.**

**Rockwool Battls**

- **Quantities not determined**

**Ventilation:**

- **Ventilation of the home is examined by looking for eave, soffit, gable, roof and ridge vents. Even when present, these vents can be compromised by blockage or inadequate clearances not visible to the inspector.**

  **Ventilation of attics and roof cavities is essential to allow heat to escape in the summer and moisture to escape in the winter. A properly ventilated attic/roof cavity keeps the house more comfortable in the summer, and prevents condensation that can damage roofing components. Newer homes that are well insulated should have no less than one square foot of free vent area for each 150 square feet of ventilated area. The amount can be reduced to one square foot for each 300 square feet if the ventilation is equally divided between the lower and upper portions of the area being vented, or if a vapor barrier is installed on the warm side of the insulation.**

  Determination of how or if vaulted ceilings are vented can be beyond the scope of the Standard Home Inspection. Determination of venting can be indicated by the presence of roof, ridge and soffit vents, but no determination can be made as to the effectiveness of such systems. Hidden damage in vaulted ceilings due to leaks and condensation from poor venting that regular monitoring of spaces below these roof systems is warranted. All signs of staining should be checked for active moisture by moisture meter.

  **Improvements to roof/attic ventilation is recommended when roof is replaced**

- **Soffit vents:**
  
  - Non vented soffits

- **Ridge vents**
  
  - Ridge vents are present

**Evidence of Present moisture in Attic Space:**

- **None Seen**

**Past and/or ongoing Water Conditions:**

- **Past leaking at pipe penetrations**
- **Past leaking around chimney penetrations**

**Fire-Blocking/Draft-Stopping**

- Insulation can conceal missing fire-blocking and it also can act as effective fire-blocking in some cases. When the attic space is fully insulated evaluation of fire-blocking deficiencies is not usually possible.
Requirements for fire-blocking and draft-stopping in homes has changed over the years and varied from jurisdiction to jurisdiction. In general more modern requirements call for "blocking" the spread of fire from lower level spaces to upper level spaces. Some structures also have requirements for installation of protection against the flow of fire horizontally. To achieve this there are specific requirements as to sealing/blocking of spaces around pipes, ducts, chimneys, wiring, framing, laundry chutes, chases etc.

It is beyond the scope of this inspection to determine if all fire-blocking/draft stopping is in place, but where it is "obviously" missing I attempt to identify the condition/location and recommend appropriate repairs for improved fire safety.

Major omissions of fire-stopping will be more thoroughly reported on in the Narrative section of the report, otherwise repairs to missing fire-stopping should be done by the appropriate trade or other qualified repair person.

**Safety**

Where Missing:
- Fire-blocking around Chimneys **NOT** in place
- Opening in Attic Space around Chimney

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### Fungus & Wood Destroying Organisms & Conducive Conditions in Roof Structures, Attic:

#### Main Attic:

- **Conducive Conditions:**
  - Clogged gutters
  - Inadequate attic ventilation
  - Can lights not adequately sealed

#### Knee-wall Attics:

An attic access opening should be provided to all attics of combustible roof construction. The opening should be not less than 22 inches x 30 inches, should be located in a readily accessible location, and should have at least 30 inches of headroom above the access opening.

Access hatches to insulated attic areas should also be insulated, and the access opening should be fitted with weather-stripping to insure a tight fitting seal.

While the inspector takes care to protect the home from debris that might be inevitably carried out of the attic space, some amount of impact should always be anticipated, as attic spaces are often very dusty, dirty, rodent infested, insulation filled and cob web filled spaces. Most of these materials are easily vacuumed up and typically the inspector is at the property to inspect the attic space and the inspector should not be expected to have the equipment necessary to clean these materials up satisfactorily.

- Considerable debris impact present
- Some debris impact present
- Some debris impact present from other parties
- Minor debris impact present
- No debris impact present

#### SE corner of Upper south room

- **Inspection method:** Traversed to all ends
- **Access Door/Cover:**
  - Access Door/cover Insulation & Weather-stripping: Insulation/Weather-Stripping missing / but recommended
  - Inspection of Attic limited by: Walkway/Flooring Materials

### Roof Framing:
- Conventional, "stick-built"

### Roof Sheathing:
- OSB
- 3/4" Spaced Boards, "skip-sheathing"

### Insulation:
- Present in some walls between the attic and the living space but there does not appear to be any in the floor area.
  - Determination of insulation is limited to those areas visible during the inspection. The insulation in exterior walls, cathedral ceilings, and inaccessible portions of attics can not be readily assessed. In addition, vapor barriers in finished areas are beyond the scope of a home inspection.

Due to overall **poor condition** of insulation no attempt is made to indicate overall "R-Value" of the insulation

### Ventilation:
- Ventilation of the home is examined by looking for eave, soffit, gable, roof and ridge vents. Even when present, these vents can be compromised by blockage or inadequate clearances not visible to the inspector.
Ventilation of attics and roof cavities is essential to allow heat to escape in the summer and moisture to escape in the winter. A properly ventilated attic/roof cavity keeps the house more comfortable in the summer, and prevents condensation that can damage roofing components. Newer homes that are well insulated should have no less than one square foot of free vent area for each 150 square feet of ventilated area. The amount can be reduced to one square foot for each 300 square feet if the ventilation is equally divided between the lower and upper portions of the area being vented, or if a vapor barrier is installed on the warm side of the insulation.

**Improvements to roof/attic ventilation is recommended when roof is replaced**

**Soffit vents:**

Non vented soffits

How or whether this space communicates with the upper attic space could not be fully determined---but is likely

### Roof Structures With No Access:

It is very common to have areas of roof attached to homes that have no access to possible spaces within them. Usually no access is required to these spaces unless they are of sufficient size. I make to determination as to whether these spaces need access, or require access and observations and recommendations are based on observable exterior conditions at the time of inspection.

Conditions with the roof surface, flashing details and structure are discussed elsewhere in this report.

**Roof Structures With No Access:**

- NW and SW Knee wall Attic spaces
- All roof structures related to the Upper East Room
- All vaulted ceiling areas

### Chimney(s):

See Furnace and Gas Appliance Venting

The chimney footing/foundation is usually not readily visible; however, footing or foundation inadequacies are factors to consider if there is any evidence of chimney movement. Conditions should be assessed by a qualified specialist to determine any remedial needs.

### NE Fireplace Chimney:

**Masonry:**

- Chimney not adequately inspected due to lack of access--further evaluation recommended
- It is recommended that this chimney not be used for wood burning until repairs are made
- Chimney tie-back:
  - Tie back not present--but is recommended on chimneys this tall
- Chimney Clean-Out:
  - None seen
  - Not inspected
  - While Clean-Outs are not inspected, routine cleaning/inspection in conjunction with regular chimney maintenance is recommended.

**Mortar joints:**

- Considerable deterioration noted
- At top of chimney
- Whole chimney

**Chimney Roof Flashings:**

- Flashings present
- Observed with binoculars
  - Counter flashing may or may not be adequate
- Cricket:
  - Present

**Masonry Cap (Crown):**

- Present
- Masonry Cap not properly sealed against moisture penetration

**Chimney "Shoulders/Ledges":**

- Loose Bricks
- Deteriorating mortar caps

**Flue:**

- Condition not determined
- Chimney too tall to determine if flue is lined
- Clay liner visible at top of chimney

**Hat:**

- Hat Missing
- Spark arrester / vermin screen missing
- Capped/Abandoned
- Not in use

### Abandoned Chimney:

**Masonry:**

- Central chimney that shows in the basement but was removed to below the roof line in the upper attic.
House Gutters/Downspouts:

Even if/Unless it was raining at the time of inspection, it is not always possible to determine if gutters leak/overflow. Monitoring the gutters for leaks when it is raining is recommended. Leaking/overflowing gutters should be repaired to prevent damage to roof/fascia structures.

- Monitor
- Evaluate
- Maintain

Gutters need to be cleaned

Properly functioning gutters, downspouts, and splash blocks or drain piping are critical to protect the foundation from moisture intrusion. Gutters should be cleaned as needed and leaky joints sealed.

- Maintain

Aluminum Gutters:

Downspouts:

- Aluminum Downspouts

Downspout Termination:

Underground pipes

Underground pipes--no determination as to whether these are pipes or just sections of pipe that the downspouts terminate at.

It was common practice in older homes to install short sections of pipe next to the foundation as a place to terminate the downspouts at. These pipes were not actually connected to underground pipes and drainage was provided by the installation of gravel at the end of the pipe or sometimes just relied on the natural ability of the ground to absorb the water. These types of drains are rarely “functional” and overflowing of this short section of pipe is common.

At Ground

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ROOF & ATTIC

I recommend that all changes/corrections to the Roof be performed by a qualified roofing contractor. Nothing said about the roof in this report should be construed to be any kind of warranty of the roof. Roof warranties can only be obtained by qualified roofing contractors.

301 Roof Coverings:

- Repairs/improvements recommended and/or necessary
- Roofs should be kept clean of moss and other vegetative debris. I recommend that qualified party maintain the roof free of debris. This will help prevent clogging of the gutters as well.
- WDO (Wood Destroying Organisms & conducive conditions)
- Maintain

- Portions of this roof are very steep and maintenance should be performed by qualified roof maintenance professionals taking proper safety precautions.
- Safety

- At 18 years old, the roof surface is approaching the end of its useful life. I recommend replacement of the roof by a qualified roofing contractor within the next five years and the roof will need vigilant inspection and maintenance in the meantime. I recommend obtaining estimates as to costs of replacement and any associated repairs that might be necessary in conjunction with the replacement. There is some granular loss, some beginning tabs not sealed down, minor mechanical damage, etc.
- Monitor
- Evaluate
- WDO (Wood Destroying Organisms & conducive conditions)
- Maintain

- The roof surface above the West entryway/deck is too flat for the type of shingles installed and hidden damage is possible unless specific types of underlayment were used. I saw no evidence of ice and water shield type products being installed as underlayment. I recommend evaluation/repairs and/or replacement as deemed necessary by a qualified roofing contractor.
### 302 Flashings
- **Check Mark**: Repairs/improvements/upgrades recommended and/or necessary

All pipe flashings will need to be replaced when the roof is replaced—they should not be re-used if a second layer is installed. This type of flashing has a life expectancy consistent with this type of roofing. As an upgrade, I recommend use of lead type flashings for greater durability—especially if a longer life type of roof covering is installed.

### 303 Gutters & Downspouts
- **Check Mark**: Repairs/improvements recommended and/or necessary

Downspouts that terminate at the ground next to the foundation are especially troublesome because water can immediately negatively impact the foundation system. I recommend that either extensions be added to the downspouts to carry the water at least 5 feet away from the home, that tight-line drains be installed to collect all of the downspout water and carry it away from the home, or that it be verified that current underground pipes are fully functional.

Some of the gutters need cleaning. I recommend professional cleaning of the gutters and downspouts and verification of proper function.
When purchasing a home it is a good idea to have the chimney cleaned to establish a cleaning history—unless satisfactory documentation can be obtained from the seller. The chimney flue is in need of cleaning. I recommend that the chimney flue be cleaned and inspected by a CSIA-Certified, qualified chimney sweep prior to use and that any repairs found to be necessary be performed by a qualified masonry contractor that specializes in brick fireplace repair/construction.

A home inspector provides a basic visual examination of a chimney and any associated component such as a fireplace. The National Fire Protection Association has stated that a Level 2 chimney inspection should be part of every sale or transfer of property. A Level 2 inspection is an in-depth inspection by a specially trained and qualified chimney professional. The flue and all associated components are carefully analyzed for safety and performance. For additional information, and to evaluate if you wish to have such an inspection, please visit:

[http://www.csia.org/homeowners/inspections-three-levels.htm](http://www.csia.org/homeowners/inspections-three-levels.htm)

Maintaining these chimneys suitable for use as wood burning fireplaces can be difficult and may not be cost effective or energy efficient. As a safety and energy efficiency upgrade I recommend conversion of the fireplace to a gas type fireplace by a qualified gas fireplace installation company.

Proper roof step flashing and chimney counter-flashing is necessary to keep water out of the roof structures around the chimney. Flashings appeared adequate at time of inspection.
As previously discussed the mortar joints in the chimney are deteriorating and should be properly pointed by a qualified masonry contractor. One of the chimney shoulders is in very poor condition as well. I recommend at the time of repairs that the whole chimney be evaluated/repaired as necessary by the masonry contractor.

305 Skylights:
- N/A

306 Roof Structure, Attic, and Access to Attic:
- Repairs/improvements recommended and/or necessary

    Roofs that have very little of their structures exposed due to finish surfaces on the interior are impossible to fully assess. Assessment relies on evidence of how roof issues affect finish materials: leaking, staining, etc. Careful monitoring of finished spaces adjacent to these hidden structures is warranted.

    - Monitor
    - Evaluate
    - WDO (Wood Destroying Organisms & conducive conditions)
    - WDO (Wood Destroying Organisms & conducive conditions) Hidden damage should be anticipated
    - Maintain

    The attic access door to the SE Knee-wall Attic is not weather-stripped or insulated and allows for heat loss/moisture from the living space. I recommend for energy conservation that proper insulation and weather-stripping be installed by qualified repair person. The upper attic access, while weather-stripped, is not insulated. Proper insulation should be installed by a qualified party. That said, without significant overall improvements to the house insulation and air sealing, these improvements will have minimal impact on energy efficiency of the home.

    - Upgrade
    - Evaluate
    - Repair/Replace/Install
    - WDO (Wood Destroying Organisms & conducive conditions)
    - Maintain
    - Energy Conservation & IAQ

    No access to the two west knee-wall attic spaces was found at the time of inspection. I recommend that proper access be made and that I be called back to make further evaluation as the condition of the attic space. Concerns in attic spaces can relate to wiring, roof ventilation, wiring, vermin, insulation, and leaking among other concerns.
Where the abandoned chimney enters the attic the chimney there are gaps around the chimney that can allow for fire at the lower levels to have immediate access to the roof structure and is required to be properly fire-blocked. Also the large openings allow for cold air in the attic to drop into the chase at the living room level and these walls are uninsulated. This adds to the heating and cooling loads of the home. I recommend evaluation and proper repairs by a qualified contractor. These by-passes must be properly repaired by a qualified party for safety, and energy efficiency.

### 307 Roof Structure Ventilation:

- **X** Vents are Present at some locations

  It is not possible to fully assess the roof ventilation in the context of a Standard Home Inspection. I recommend further evaluation by qualified energy assessment company as desired. This is particularly true of vaulted areas.

  - Evaluate
  - Repair/Replace/Install
  - Maintain
  - Energy Conservation & IAQ

There is by today's standards inadequate ventilation for the attic space. I recommend that when the home is re-roofed that additional roof venting be provided by a qualified roofing contractor. I recommend that continuous type ridge vent be installed. Consult with roofing contractor about this option or I can provide additional information upon request. A full evaluation of the roof venting should be done at the time the roof is replaced and proper vents installed as deemed necessary by the qualified roofing contractor.

In lieu of soffit venting it is sometimes recommended that roof surface type vents be installed.


### 308 Insulation in Attic, Roof & Walls:

- **X** Repairs/improvements recommended and/or necessary

  Assessment of the Insulation of the home is only related to observable, exposed insulation. Analysis of the effectiveness of insulation in concealed spaces is beyond the scope of the standard home inspection. Thermal imaging of the home can be done by energy efficiency specialists to get a better picture of insulation performance.

  - Evaluate
  - Repair/Replace/Install
  - Maintain

  It was not possible for this inspector to determine the presence/amount of insulation in the side walls of the home.

There is currently minimal insulation in the attic space. I recommend that for energy conservation (both heating and cooling) that a qualified insulation contractor upgrade the insulation in the attic to current standards. I also recommend that all changes in the electrical system that involve the attic space be performed prior to upgrading the insulation; and, that all spaces can allow the transfer of heat/moisture from the home and/or wall cavities be properly sealed by a qualified person.

When the home is totally finished off, it is impossible to make any assessment of the types and/or condition of insulation in the home. Thermal imaging can be undertaken to get a better picture of the insulation qualities of the home. This is beyond the scope of the Standard Home Inspection. Certainly upgrading insulation wherever possible is recommended for improved energy efficiency and comfort.

  - Upgrade
  - Evaluate
### Roof/Attic Inspection Limitations / Exclusions:
- Some areas not walked on
- Steepness
- Slippery
- Vegetation/Debris
  - Some debris in gutters
  - Minor debris in valleys
  - Minor debris on roof
- Storage in attic
- Attic partially traversed
- No access to some attic spaces
- Roof structures with no access:
  - Knee-wall Attics:
  - All vaulted ceiling areas
  - All flat roof areas

### This report provides an opinion of the general condition of the roof system based on a visual inspection of representative areas. The inspector does not offer an opinion or warranty as to whether the roof leaks or is subject to future leakage.

Specific notation of leakage or stains does not preclude additional areas of leakage and/or hidden damage. Monitor attic for any changes; ongoing or questionable situations should be assessed and corrected. Leakage can lead to Mold or Mold-like/Fungal Growth.

This inspection does not include evaluation of ancillary components or systems such as lightning protection, antennas, solar panels, site lighting, security systems, patio covers, window awnings or other similar roof or exterior elements.

Due to typical design/accessibility constraints (insulation, storage, etc.), evaluation of attic areas, including structural components, is usually limited. Any specifically noted limitations/obstructions are intended to highlight these limitations beyond the norm. A complete check of the attic should be made when non-permanent limitations are resolved.

It is very common for there to be multiple layers of different kinds of insulation in the attic. It is possible for hidden layers to not be seen at the time of inspection and therefore not be listed as a type of insulation installed in the home.

### Non-Wood Destroying Organisms (Household Pests):
While this inspector may comment on evidence of Rodent and other vermin activity within the roof structures, it is beyond the scope of this inspection to determine the "current" presence or absence of Rodents/Vermin.

- None indicated—visual limitations apply
Washington State, Home Inspector Standards of Practice related to the Electrical:

The inspection of the electrical system includes the service drop through the main panel; subpanels including feeders; branch circuits, connected devices, and lighting fixtures.

(1) The inspector will:
- Describe in the report the type of primary service, whether overhead or underground, voltage, amperage, over-current protection devices (fuses or breakers) and the type of branch wiring used.
- Report the existence of a connected service-grounding conductor and service-grounding electrode when same can be determined.
- Report when no connection to a service grounding electrode can be confirmed.
- 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 subpanel cover(s).
- Report, if present, solid conductor aluminum branch circuits. Include a statement in the report that solid conductor aluminum wiring may be hazardous and a licensed electrician should inspect the system to ensure it's safe.
- Verify the operation of a representative number of accessible switches, receptacles and light fixtures.
- Verify ground fault circuit interrupter (GFCI) protection and arc-fault circuit interrupter (AFCI) protection where required.
- Advise clients that homes without ground fault protection should have GFCI devices installed where recommended by industry standards.
- Report the location of any inoperative or missing GFCI and/or AFCI devices when they are recommended by industry standards.
- Describe any deficiencies of these systems or components.

(2) The inspector is not required to:
- Insert any tool, probe or testing device into the main or subpanels.
- Activate electrical systems or branch circuits that are not energized.
- Operate circuit breakers, service disconnects or remove fuses.
- Inspect ancillary systems, including but not limited to:
- Disassemble any electrical device or control, except for the removal of the deadfront covers from the main service panel and subpanels.
- Move any objects, furniture, or appliances to gain access to any electrical component.
- Test every switch, receptacle, and fixture.
- Remove switch and receptacle cover plates.
- Verify the continuity of connected service ground(s).

Electrical Service to Property:

Service Conductors fed by Utility Company from:
- Overhead
- Attached to Mast:
  - Neutral/ground Restraint Connection:
    - No issues noted
    - Mast penetration has Tar Seal
    - Maintain tar seals
- Drip Loop:
  - Drip loop is present

Utility Company Connections:
- Meter Base:
  - North side of home/building exterior
- Utility Company Meter Seal:
  - Meter seal is not in place

When the meter seal is missing, it is sometimes an indication that alterations to the Electric System have been made. If it has not been re-sealed it may be an indication that the electrical permit was never had a final inspection or that the work was done without an electrical permit. Further investigation may be warranted as to the status of any permits or work performed. I recommend that the power company be called to properly seal the meter (which they will usually do at no charge).

Maintain Service Panel:

Service Disconnect(s):

CHARLES BUELL INSPECTIONS INC, 17123 22nd Ave NE, Shoreline, WA  98155
Location: In this Panel
NE corner of furnace room

Means of service disconnect:
Split (Multiple Breakers)

A split (multiple) Main Disconnect is when multiple breakers need to be tripped off in order to kill all power to the panel. Typically it is required to be done in 6 or less "throws". Sometimes one of these "throws will be the breaker that cut power to several other breakers. See panel diagram for more information regarding shutting down power in this panel.

Service Conductors (wires from Meter to Service Panel):
Copper
Size:
Could not determine size

Working Space at Panel:
Access ok
For proper access to the panel there should be an area 30" wide and 3' deep in front of the panel (clear all the way to the floor. A minimum of 6′-6" of headroom in front of the panel is recommended and the top of the panel should be at least 5-1/2' above the floor.
Poor access----due to appliances----I recommend creating proper access

Dedicated Equipment Space:
The space equal to the width and depth of the equipment and extending from the floor to a height of 1.8 m (6 ft) above the equipment or to the structural ceiling, whichever is lower, shall be dedicated to the electrical installation. No piping, ducts, leak protection apparatus, or other equipment foreign to the electrical installation shall be located in this zone
Water supply plumbing pipes present in space above panel

Panel condition:
Legend/Data Plate:
Present
Panel Cover Screws Missing/wrong type
Bottom left

Panel Bonding:
Bonding not determined

Breakers
Room for expansion / Additional circuits
No Room for expansion / Additional circuits
Minimal Room for expansion / Additional circuits

Service Panel Rating:
200 amps (120/240 volts)

Circuits labeled
No determination was made of individual circuit distribution or accuracy of any circuit labeling. I recommend tracing and labeling, or confirm correct labeling, of all circuits.

Some breakers are not being used (even though in the "on" position)
Some breakers in panel are different brand than the panel

It is not always possible to determine if different brands of breakers are compatible with the type of panel in the Building. When different breakers are noted it is a good idea to have it verified by a licensed electrical contractor that the panel accepts this different type of breaker.

High Voltage Surge Arrestor
NOT Present/Recommended

VOLTAGE SURGES:
Voltage surges can be a costly example of the power interference that occurs in Buildings every day. This momentary rise in voltage can start inside or outside a Building and damage sensitive electronic equipment such as computer, Building entertainment center, treadmills, and all the other -- often expensive -- equipment found in most Buildings today.

Whole Building surge arrestors should be installed at the Building's electrical service panel by professional, licensed electrical contractors. There are dozens of different makes, models and styles of surge arrestors on the market, which vary greatly in both price and quality. The type and size of the service panel, how full the panel is, as well as the investment in appliances and electronic devices that need to be protected all play a role in determining which surge arrestor should be installed. Your service professional, after inspecting the Building and service panel, will make the recommendation as to the appropriate product to be installed.

"Lock-Out" Devices: (may not have been required at time of construction, but are recommended)
Dishwasher lock-out device:
None Present/Recommended
Microwave lock-out device:
None Present/Recommended

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**Service Rating (size):**

60/100 amps (120/240 volts) (panel upgraded without upgrading meter)

**Electrical System Grounding & Bonding:**

Electrical systems must be grounded at the Main Electrical panel to (1) the main water pipe; (2) ground rods; or (3) Ufer Grounds. Sometimes all three, or just two, or just one means of grounding are employed. In addition to grounding all metallic piping “systems” within the home must be “bonded” to the grounding system. This would include (but is not limited to) gas piping, hot and cold metallic water pipes and metallic heating system pipes.

**Grounding:**
- Utility company transformer ground at pole
- Ground wire is present

**Water Pipe Grounding:**
- None/Not Visible

**Service Ground Rod(s):**
- None/Not Visible

**Bonding:**
- **Water Pipe Bonding:**
  - None/Not Visible
- **Hot-water pipe bonding:**
  - Permanently installed shower control fixtures may constitute bonding of the hot water pipes
- **Cold-water pipe bonding:**
  - Assumed at grounding connection at water pipe if present

**Metal Drain Bonding:**
- None/Not Visible

**Gas Pipe Bonding:**
- None/Not Visible
  - Gas piping of homes this age were typically NOT bonded—upgrading for safety is recommended

**Low voltage system bonding:**
- **Phone system grounding seen at:**
  - Inter-system bonding terminal
    - None present—typical of time of construction
    - Grounding of system not determined—have electrician verify when they are at the home for some other reason
- **Cable system grounding seen at:**
  - Inter-system bonding terminal
    - None present—typical of time of construction
    - Grounding of system not determined—have electrician verify when they are at the home for some other reason
- **Dish Antenna system grounding seen at:**
  - Inter-system bonding terminal
    - None present—typical of time of construction
    - Grounding of system not determined—have electrician verify when they are at the home for some other reason

**Remote Distribution Panel (Sub-Panel) #1:**

**MFG:** Square-D
**Location:** Detached garage building
**Working Space at Panel:**
- Access ok
  - For proper access to the panel there should be an area 30” wide and 3’ deep in front of the panel (clear all the way to the floor. A minimum of 6’-6” of headroom in front of the panel is recommended and the top of the panel should be at least 5-1/2’ above the floor.

**Panel condition:**
- **Legend/Data Plate:**
  - Present

**Panel Bonding/Grounding:**

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Ground bar separate from Neutral bar attached to panel
Neutral wires improperly installed on ground bar
Neutral wire current is not allowed to travel on the metal enclosure as its return path to the transformer---repairs necessary

Ground wire present
Wire is present and ground rods likely buried
Ground rods not verified

Breakers
Room for expansion / Additional circuits

Panel rating:
Remote Distribution Panel Rating:
Could not identify Panel Rating
Size of feeder to remote distribution panel:
3-wire feed
Copper
Size:
#12 awg
Main Disconnect Breaker for the Remote Distribution Panel at Service Panel
30 amp
Circuits NOT labeled / incomplete labeling
No determination was made of individual circuit distribution or accuracy of any circuit labeling. I recommend tracing and labeling, or confirm correct labeling, of all circuits.
Remote Distribution Panel Disconnect
Single Breaker
30 amp
Breaker not permanently attached in panel

Distribution Wiring:
Induced ("Phantom") voltage indicated

When grounded Non-Metallic Sheathed Cable is added into wiring systems that have no ground (or when the ground wire of grounded Non-Metallic Sheathed Cable systems is disconnected), an electromagnetic frequency is set up in the ungrounded ground wire making the ground wire and any metal components the ground wire is connected to appear "hot" by voltage "ticker". This can make conduit, metal boxes, cover plates, cover plate screws, light fixture components, refrigerator cases, etc appear "hot". While not in itself a safety issue it does indicate that any such wiring is not grounded and that in the case of ungrounded circuits it is an indication that these circuits have been added to. It can also be a safety issue if the component actually is "hot" because of other reasons. When Phantom voltage is found corrections of the electrical system are warranted/necessary.

[More Information about Phantom Voltage]
[Another link to more information about Phantom Voltage]

Evaluate
Safety

Wire Temperature rating:
Branch circuit wiring installed in buildings built prior to the mid 1980s is typically rated for a maximum temperature of only 60 degrees Celsius (140 degrees Fahrenheit). This includes non-metallic sheathed (Romex) wiring, and both BX and AC metal-clad flexible wiring. Knob and tube wiring, typically installed in homes built prior to 1950, may be rated for even lower maximum temperatures. Newer electric fixtures including lighting and fans typically require wiring rated for 90 degrees Celsius. Connecting newer fixtures to older, 60-degree-rated wiring is a potential fire hazard. Repairs for such conditions may involve replacing the last few feet of wiring to newer fixtures with new 90-degree-rated wire, and installing a junction box to join the old and new wiring.

It is beyond the scope of this inspection to determine if such incompatible components are installed, or to determine the extent to which they're installed. Based on the age of this building, the client should be aware of this safety hazard, both for existing fixtures and when planning to upgrade with newer fixtures. The use of CFL and LED type light bulbs can greatly reduce any risk associated with the temperature ratings of the wire in the home. Consult with a qualified electrician for repairs as necessary.

Houses with multiple wiring types/systems:

*Estimates* of amounts of various "types/systems" of wiring in the home is for informational purposes only as there is no way to give an accurate accounting of actual amounts installed in the home.

All wiring is required to terminate in appropriate junction boxes with covers, which should be accessible.

Metal cover plates in ungrounded circuits
None seen— but should be anticipated

Houses that have ungrounded wiring systems should not use metal cover plates as there is more risk of the plates becoming energized and creating a shock hazard. Replacement of any metal covers with plastic covers is advised for safety.

Copper:

Wiring in Conduit (Rigid and Flex)

Minimal/Incidental to specific appliances

- Hot water heater
- Furnace
- Microwave

  Mechanical damage present—Requires necessary

10%: Estimated % of home wired in conduit

Grounded Non-Metallic Sheathed Cable (commonly called Romex)

- In attic
- In basement

20%: Estimated % of home with “Grounded” Non-Metallic Sheathed Cable

Knob & Tube and/or ungrounded non-metallic sheathed cable

Older knob-and-tube electrical wiring is often found in homes built prior to 1950. Although not “necessarily” considered unsafe, this wiring has limitations and care must be exercised when working with the wiring components. Some authorities recommend that knob-and-tube wiring not be covered with insulation and current regulations prohibit new installations of knob & tube (extensions to existing systems) from being covered with insulation, as it is more vulnerable to overheating. This inspector stresses that it is the overloading of these older circuits that is the real issue. Some authorities argue that the insulation “protects” these wires from the excessive heat within the attics while others claim it causes overheating of the wires. I recommend that knob-and-tube wiring be replaced in conjunction with remodeling or renovation and prior to adding insulation. Factoring replacement of all knob & tube systems is considered wise.

An important consideration regarding this older style wiring is that the covering often becomes brittle especially at the connection behind light fixtures where installation of over-wattage bulbs and or frequent changing of light fixtures has stressed the wires inside the junction boxes. In older installations there might not even be any junction boxes present. Overheating and arcing conditions are common at these locations and great care should be taken in opening these boxes and changing light fixtures. Obviously work on these older circuits should only be done by qualified persons. I recommend evaluation/repairs by a licensed electrical contractor.

Until homes with knob-and-tube wiring can be upgraded it is recommended that for additional safety the circuits be protected by AFCI breakers. (See AFCI note below)

- Upgrade
- Safety

70%: Estimated % of home with Knob & Tube and/or Un-grounded Non-Metallic Sheathed Cable

Outlet Cover Plates (Switches, Receptacles, Junction Boxes etc.)

Junction boxes with missing covers:

- SE Knee wall attic
  Others should be anticipated and properly covered wherever found missing

Junction boxes with missing knock-outs/wire connectors:

- Next to basement refrigerator
  Others should be anticipated and installed wherever found missing

Wiring not properly supported:

- Crawl space

Receptacle Outlets:

Important information about replacement of Receptacles:

As of July 1st, 2014, any receptacle replaced in a home must be provided with AFCI protection when the receptacle is being replaced in circuits that require AFCI protection (See AFCI section of this report below). This can be accomplished at the receptacle itself, at a point downstream of the receptacle or at the panel where the circuit originates. Whenever possible protecting the entire circuit is considered best practice.

In the context of any electrical panel replacement, the installation of AFCI breakers on all circuits that currently require AFCI protection is considered best practice.

A note about the limitations related to the testing of receptacles:

While I attempt to check readily accessible receptacles in the course of the inspection, it would be rare to check them all in every instance. Also, even receptacles that are tested can still have installation errors not identified in the course of the inspection. Each type of tester (and I utilize several) have limitations as to what they will find, including false positives as well as false negatives. Typically, standard defects related to how receptacles are wired are not costly to correct, and defects discovered after the inspection should be corrected as necessary. Defects found at one location should be anticipated at other locations as well.
Grounded
20% Grounded (estimated % of random sample)

Un-grounded
80% Un-Grounded (estimated % of random sample)

Tamper Resistant Receptacles:
Present at some locations (receptacles upgraded)

Important information about Tamper Resistant Receptacles:
By current regulations in place in Washington State, any receptacle that is replaced in a home is required to be replaced with a Tamper Resistant Type Receptacle. There are a few exceptions detailed in the links below.

For more information on Tamper Resistant Receptacles please visit the following link:
More absolutely shocking news! Washington State Amendments to the National Electric Code regarding Tamper Resistant Receptacles

Un-grounded 3-prong receptacles:
Most three prong receptacles tested as "ungrounded"

Lighting Outlets:

Exterior lights
Lights at exterior doors:
Present at all exterior door locations
All functioned normally at time of inspection by switch

Light fixtures switched from multiple locations are present in the home
Lights that are switched from multiple locations (like 3-way and 4-way switches) can sometimes be wired improperly so that if one of the switches is in the wrong position the lights will not work from the other location. This miswiring of switches is often not found during the course of a Standard Home Inspection due to not testing the circuit with all possible combination of options. When this condition is discovered, repairs are usually quite simple when performed by a licensed electrician.

Can Lights:
Present at many locations
Can lights not rated for insulation contact present in attic

Ceiling fans present:
No determination is possible as to the adequacy of attachment to the ceiling
Locations:
Main floor SE Bedroom
Not tested---verify proper function

Light fixtures improperly installed in wrong location:
Alcove of the Upper East room (NW corner)

Porcelain bulb holders present:
In several basement locations
In closet locations:
Porcelain bulb holders in some closets----should be upgraded to fixtures approved for closets
In many closet locations

Porcelain bulb holders in closet pose a risk of fire from stored items. I recommend replacement of these bulb holders with fixtures approved for closet installation.

Safety
Maintain

GFCI: Locations:

Ground Fault Circuit Interrupters present in Circuits

Lack of installation may indicate work done without permits and may warrant further investigation with permit authorities and seller/owner.

Ground fault circuit interrupters (GFCI) can help prevent electrocution inside and outside the home. GFCIs are an effective means of protecting against electrical shock, however, they must be tested regularly -- UL recommends once a month -- to verify they are working properly.

1 Push the "Reset" button located on the GFCI receptacle, first to assure normal GFCI operation.
2 Plug a nightlight (with an "ON/OFF" switch) or other product (such as a lamp) into the GFCI receptacle and turn the product "ON.
3 Push the "Test" button located on the GFCI receptacle. The nightlight or other product should go "OFF.
4 Push the "Reset" button, again. The light or other product should go "ON" again.
5 Circuit breaker type GFCI devices are checked by pushing the test button on the breaker---these breakers also have "self-testing" capabilities---they still should be tested manually however per manufacture's instructions.

Safety
Maintain

Bathroom GFCI's:
Main floor bathroom
At sink
GFCI protected:
At receptacle

Upper Bathroom
At sink
No GFCI protected receptacle present

Kitchen GFCI’s:
Countertop locations wider than 12” and receptacles noted within 24” of edge of sink and/or walls and receptacles <48” apart:

Counts to be two separate appliance circuits
It cannot always be easily determined if there are two appliance circuits present and the presence of two GFCI devices is not always an indication of two separate circuits.

Countertops and within 6’ of sinks (including under the sink):
Receptacles at countertops are GFCI protected
Current requirements call for the refrigerator to be GFCI protected if the receptacle is located within 6’ of the edge of a sink. I recommend frequent monitoring of these receptacles and installation of both visual and audible alarms to warn you of loss of power to the freezer is recommended.

X Maintain
Receptacles under sink are GFCI protected
Receptacle under sink is the reset location for other countertop receptacles

Dishwasher GFCI
Not GFCI protected, upgrading recommended

Laundry Area GFCI’s:
No GFCI protected receptacles in Laundry area

Exterior GFCI’s:
Some exterior Receptacles tested as GFCI protected

Location of non protected Exterior GFCI’s: (upgrading for improved safety recommended)
East outside receptacle
In-use covers missing in "wet locations"
Not present at several locations---upgrading is recommended
GFCI receptacle at the south side of the detached garage/building was not functional

Unfinished Basement GFCI’s:
No GFCI protected receptacles in Unfinished Basement space

AFCI:

Arc Fault Circuit Interrupters not required at time of construction or remodel/but are recommended

An arc-fault circuit interrupter is a device intended to provide protection from the effects of arc faults by recognizing characteristics unique to arcing and by functioning to de-energize the circuit when an arc fault is detected. They should be tested monthly by the homeowner.

It is important for home owners to become aware that modern standards require the installation of AFCI protection for new wiring installations and even replacement of receptacles wherever AFCI protection is currently required. This means that Installation of AFCI devices will typically be required whenever simply replacing a receptacle is necessary. AFCI protection in now required. Because older wiring systems are more vulnerable to the kinds of fires causes by the various conditions these devices protect against, installation of the devices is a good idea.

Currently all 120-volt, single phase, 15- and 20-ampere branch circuits supplying outlets installed in dwelling unit Kitchens, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, Laundry areas, or similar rooms or areas.

X Upgrade
X Safety

Smoke Alarms:

* Clean regularly. Dust and debris will interfere with normal operation.
* Replace batteries at least once a year—or better yet install 9-volt type batteries.
* Schedule regular maintenance and tests. The Consumer Products Safety Commission recommends checking these alarms every Spring & Fall time change.

Tests should be performed according to manufacturer’s instructions.

It is not usually possible in the context of a home inspection to determine whether smoke alarms are Ionization type or photoelectric type
ELECTRICAL

GENERAL ELECTRICAL SAFETY WARNING: Even if the electricity has been turned off at the main disconnect, sections of the electrical system prior to the main breaker are still charged with electricity and can be lethal if contacted. I recommend that all changes/corrections made to the electrical system be performed by a licensed electrical contractor.

While many of the electrical issues in the home will be addressed in the following section, it should be noted that the electrical issues are numerous and much of it cannot be evaluated due to finish surfaces. Because of the age of the home many different generations of wiring methods are evident. A thorough evaluation of the entire electrical system by a licensed electrical contractor is warranted; and, documenting every defect is beyond the scope of this inspection and it should be assumed that not all issues will be identified below.

401 Electrical Service: 
\[ \checkmark \text{Repairs/improvements recommended and/or necessary} \]

The electrical service is the set of wires that run from the street or power pole to the main breaker panel or fuse box. In this home the service runs overhead. An overhead service will include a service drop from a pole to a weather head, where the service drop connects to the service conductors and enters into the service mast conduit that connects to the electric meter base. At the weather head, the service wires should form a loop, called a drip loop, to prevent water from running into the conduit. Overhead service wires should have proper clearances above ground, walkway, or flat roof surfaces. Tree branches should be kept cut back from overhead service wires.

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The service entrance wires cross the house on the north side too close to the egress window of the North Bedroom. These wires are not allowed to be within 3 feet of the sides of below the window. These wires will likely be re-routed in the context of the electrical service upgrade but is an additional reason the system should be upgraded. Consult with licensed electrical contractor as to best options.

The service entrance wires and meter appear to be for a previous 60amp service with upgrades to the interior panel. Wire sizing from the weather-head to the meter appears to be in very poor condition and undersized for the rating of the service panel. I recommend upgrading of the electrical service to the home by a licensed electrical contractor.
Proper access to the service panel is not possible due to the furnace and ductwork located in front of the panel. Minimum clearances of 30" wide and 36" deep in front of the panel, and from the floor to a height of 6'-6" above the floor is required is required. I recommend that proper clearances be created and maintained. Relocation of the panel to a more accessible area in the context of the service upgrade is recommended. Proper access should be maintained for both servicing and access during an emergency or to reset tripped breakers.

The service panel has been upgraded without benefit of upgrading the rest of the service from the panel through the meter base and up to the Service Weather-head (point of connection to the Utility Company wires).

The meter seal is not in place on the meter. This is sometimes an indication of work being done without permits or that permits were never received a final inspection. The power company can be contacted about getting this seal placed regardless. The size of the service panel in relation to the entrance wires and the meter base is consistent with work being done less than professionally. I recommend obtaining assurances that any necessary electrical permits have been satisfied. Thorough inspection by a licensed electrical contractor is advised given numerous other concerns that will be discussed later in this section.

Thorough inspection by a licensed electrical contractor is advised given numerous other concerns that will be discussed later in this section.

The older style split bus type panel may no longer be adequate for the needs of the home as upgrading of wiring throughout the home occurs. Split buss type panels do not have one main shut-off but rely on several breakers at the top of the panel being shut off to turn all power in the house off. As the house wiring is upgraded, additional circuits will be required and I do not recommend adding additional circuits to this panel (or adding additional wiring to the existing circuits). I recommend that a licensed electrical contractor install a new panel to provide more adequate space for additional circuits. Adding a sub-panel to this panel is also a possibility---but that would not eliminate the inconvenience of not having a single main shut-off.

**Split Bus Electrical Panels**

The one Murray/Siemens breaker labeled "dryer" does not fit properly in this panel. This needs repairs prior to use of the dryer as loose connections can cause arcing and failure of the connections and fire. I recommend evaluation/repairs and/or replacement as deemed necessary by a licensed electrical contractor.
403 Remote Electrical Distribution Panel(s) (Sub-panels):

- Repairs/improvements recommended and/or necessary

Remote Distribution Panels (Sub-panels) are other electrical panels in the home that do not contain the service wiring. Distribution Panels may be found in larger homes for improved accessibility and/or convenience, detached buildings such as garages or used to create room for additional circuits after the Service panel is full.

The panel within the Detached Structure is a remote distribution panel (sub-panel).

One of the basic requirements of all remote distribution panels (sub-panels) is that the grounds and neutrals be isolated from each other. When the panel is in a detached building on the same property the panel is required to have its own ground rods from the panel but also interconnected to the grounding electrodes for the Service Panel. This panel has been less than professionally wired and proper corrections should be made by a licensed electrical contractor in the near future. This is a shock hazard. The wire size run to the building is likely undersized and there is no fourth conductor. If electricity is desired to this detached structure a new wire will need to be pulled to the panel and grounds and neutrals properly isolated.

- Repair/Replace/Install
- Safety

404 Electrical System Grounding & Bonding:

- Repairs/improvements recommended and/or necessary

Grounding requirements for residential electrical systems has undergone numerous changes since the beginning of wiring homes. Whenever possible it is a good idea to upgrade the grounding of older systems for safety. Newest grounding requirements call for ground rods and bonding of metal piping systems (hot and cold water pipes, drains, heating systems and gas pipes, etc). When the licensed electrical contractor is at the home to replace the service, I recommend that proper grounding be evaluated and corrections made as necessary.

Bonding of the gas piping was not observed at the time of inspection. I recommend verification by electrical contractor that gas piping as been properly bonded. This can be done when the electrician is at the home for other reasons.

This is particularly important when the gas piping includes CSST type pipe (flexible stainless steel with black or yellow coating).

- Upgrade
- Evaluate
- Repair/Replace/Install
- Safety

Grounding of the metal water pipe from the street was not found and no means of system grounding was found at all. I recommend evaluation/repairs/installation by a licensed electrical contractor prior to occupancy. System grounding provides a path to ground for lightning surges and static electricity that would otherwise build up on the electrical system. Surge suppressors may not function properly without it.

- Evaluate
- Repair/Replace/Install
- Safety

When metal drains are installed in the home, current standards require that they be properly bonded to the electrical grounding system. I recommend evaluation/repairs by a licensed electrical contractor to insure that all metal piping is properly bonded to the building electrical grounding system when the licensed electrical contractor is at the home for other reasons.

- Upgrade
- Repair/Replace/Install
Proper bonding of all low voltage systems (phone, cable, satellite dish) should be verified by the licensed electrical contractor in the context of other electrical repairs done at the home.

Circuits that have been compromised by the addition of post installation wiring are particularly vulnerable to arcing conditions because connections are frequently not professionally done. I consider it a good idea (until the wiring can be replaced) to add some level of protection to these older circuits by adding AFCI breakers to the circuits. All work on these older circuits must be performed by a licensed electrical contractor. Replacement of all of this older wiring is recommended in the context of overall remodeling of the home.

Upgrading all of the knob & tube wiring is recommended for improved electrical safety and some insurance requirements require replacement. Some companies will insure homes with knob & tube wiring while others will not--check with your homeowner insurance carrier.

There are a couple of junction boxes throughout the home that are missing cover plates or with knock-outs not covered. Cover plates should be installed by the electrician in the context of other electrical repairs at the home. Noted locations:

SE Knee wall attic
Basement next to refrigerator
Others should be anticipated and covered were found missing.

There is also some wiring subject to mechanical damage. Two locations in the kitchen and locations in the basement where wiring is run on the surface and not in conduit should be evaluated and repaired as deemed necessary by the licensed electrical contractor.
The microwave range hood has been tapped into the receptacle next to the range and therefore is not on its own circuit. I recommend evaluation/repairs and/or replacement as deemed necessary by a licensed electrical contractor.

Wiring has been improperly run out from behind the light fixture in the upper 1/2 Bath to provide power to the receptacle (or visa versa). I recommend evaluation/repairs and/or replacement as deemed necessary by a licensed electrical contractor.

406 Lighting:
Including Can Lights
& Paddle Fans:
- Repairs/improvements recommended and/or necessary

Testing of the electrical system within a home includes random testing of receptacles, switches, and lights.

Can Lights often have improper bulbs installed in them. A chart of the proper size & type of bulb allowed in a particular fixture can be found by removing the bulb and looking at the inside of the fixture. I recommend that upon taking possession of the home that all can lights be checked for proper size & type of bulb.
Can lights, whether modern air-tight type cans or older non-insulation contact cans, can be a major contributor to heat loss and air movement into roof structures. This is difficult to determine during the course of a home inspection but if moisture issues are apparent or become apparent in the roof structure, these lights should be considered one possible cause of the issue. Blower door tests can be performed to determine how well sealed can lights are.

The can lights in the attic space are not rated for contact with insulation/combustibles. I recommend that proper insulation baffles be installed around all non-insulation contact rated light fixtures by qualified insulation contractor or other qualified repair person. As an upgrade I recommend replacement of the light fixtures so that they can be covered with insulation for improved energy efficiency. This greatly reduces both heating and cooling costs. Each one of these cans acts like a little chimney and much heat can be lost from the living space.

As a safety and energy upgrade, I recommend factoring replacement of fixtures that are not rated for insulation contact with fixtures that are both rated to be buried in insulation as well as being air tight. Each one of these cans acts like a little chimney and much heat can be lost from the living space.

The exposed bulb in the porcelain bulb holder in the NW corner of the East Upper room is subject to mechanical damage as well as being a fire hazard. I recommend upgrading this fixture with type approved for closet installation, by a licensed electrical contractor.
Testing of the electrical system within a home includes random testing of receptacles, switches, and lights. Receptacles are tested for proper grounding and polarity.

It is quite common (and true of this home) to find ungrounded three-prong receptacles in older homes, where the receptacle have been "upgraded" to the newer three prong type without ever upgrading the ground wire. These receptacles should: (1) be returned to "two-prong" type receptacles; (2) have GFCI receptacles installed; or, (3) be rewired to include a ground wire; all by a licensed electrical contractor.

Depending on the capabilities of the electrical panel for these circuits, it may be possible to change the circuit breakers to dual function AFCI/GFCI type breakers and then any 3-prong receptacles on those circuits could be labeled "ungrounded" as required. Discuss this option with the licensed electrical contractor as there are many variables to this solution.

If the neutral and ground are connected anywhere else in the building (other than at the Service panel), all grounded metal becomes part of the neutral conductor, constantly energized and creating various voltage potentials on electronic equipment.

It is important for home owners to become aware that the replacement of ANY receptacle in the home now require that they be replaced with Tamper Resistant type receptacles where required by current regulations as well as that they be provided with AFCI protection where AFCI protection is currently required.

A few of the receptacles in the home are Tamper Resistant type receptacles as required. There is a small "learning curve" with how to plug things into these receptacles. Plugging something into these receptacles may seem more difficult than the non-tamper resistant type receptacles that we are all used to.
GFCI outlets (Ground Fault Circuit Interrupt) have evolved over the years both in function and as to where they are required. They are currently required at: receptacles at kitchen countertops, within 6' of all sinks, dishwashers, laundry rooms, bathroom receptacles, exterior receptacles, garage and unfinished basements, crawl spaces, hot tubs, whirlpool baths, swimming pools, water features, sump & ejector pumps and other locations. It is recommended that older style GFCI receptacles and breakers be tested monthly. New breakers and receptacles are “self-testing” and are preferred as they eliminate having to remember to test them or keeping receptacles accessible for testing. Upgrading to self-testing GFCI breakers and receptacles is recommended.

At the time of remodeling, GFCI protection of some of the kitchen receptacles was required. I recommend that for safety, that all locations currently required to be GFCI protected be upgraded by a licensed electrical contractor. If practical, and/or possible, it is considered best practice for the breakers for these circuits to be changed to Dual Function (AFCI/GFCI) Combination type breakers. Current requirements call for all receptacles within a 6 foot arc of the kitchen sink (including under the sink), the refrigerator if it is within 6’ of the sink, and outlets like the dishwasher be GFCI protected. For safety, these locations should be given GFCI protection as a safety upgrade.

Keep in mind that any changes related to these recommendations will require that the receptacles be tamper resistant and AFCI protected.

- Upgrade
- Evaluate
- Repair/Replace/Install
- Safety

There is currently no GFCI protection at the east outside receptacle on the house and the south receptacle at the exterior of the detached garage/building (defective). I recommend that for safety the receptacles be changed by a licensed electrical contractor to GFCI type receptacles. The outside receptacles at some locations do not have a proper weather tight "in-use" type cover as currently required. As a safety upgrade I recommend that the covers be replaced by the licensed electrical contractor in the context of other electrical repairs at the home.

- Upgrade
- Evaluate
- Repair/Replace/Install
- Safety

There is currently no GFCI protection at the bathroom receptacle in the upper bathroom. I recommend that for safety the receptacles be changed by a licensed electrical contractor to GFCI type receptacles.

- Evaluate
- Repair/Replace/Install
- Safety

There is currently no GFCI protection of receptacles in the Laundry as currently required. I recommend that as a safety upgrade the receptacle be changed by a licensed electrical contractor to GFCI type receptacles.

Keep in mind that any changes related to these recommendations will require that the receptacles be tamper resistant and AFCI protected.

- Upgrade
- Repair/Replace/Install
- Safety

There is currently no GFCI protection at the unfinished basement receptacles. I recommend that as a safety upgrade the receptacle be changed by a licensed electrical contractor to GFCI type receptacles.

Keep in mind that any changes related to these recommendations will require that the receptacles be tamper resistant and AFCI protected.

- Upgrade
- Safety
### 409 AFCI Protected Outlets:

- Repairs/improvements recommended and/or necessary

AFCI (Arc Fault Circuit Interrupters) are currently required on all 120volt outlets in the bedrooms of homes. This requirement includes receptacle circuits and lighting circuits. As a safety upgrade I recommend having a licensed electrical contractor install "Combination Type" AFCI breakers on the circuits to these rooms. See the Notes section of this report for additional info and proper testing of the breakers.

Currently all 120-volt, single phase, 15- and 20-ampere branch circuits supplying outlets installed in dwelling unit family rooms, dining rooms, kitchens, laundries, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, or similar rooms or areas are required to be AFCI protected in many jurisdictions. Upgrading to current standards is recommended.

Current standards also require that whenever receptacles are upgraded that they need to be given AFCI protection when they are replaced in any location that currently requires AFCI protection (see list above).

It should be anticipated that the current panel will need to be replaced in order to have enough spaces to install modern AFCI breakers.

According to the NEC (National Electric Code): "Older homes are statistically more vulnerable to electrical fires. Extra protection for older homes is provided by the gradual replacement, over time, of non-AFCI-protected receptacles with new AFCI-protected ones."

Installing these devices on circuits with knob & tube type wiring is also recommended to add a layer of safety to these older circuits until the wiring can be upgraded.

- Upgrade
- Safety
- Maintain

In homes with Knob & Tube, Armored Cable, and Un-Grounded Non-Metallic Sheathed Cable wiring it is considered a good idea (until wiring can be replaced) to give added protection to these older circuits by adding Combination Type AFCI breakers to the circuits. These old systems are prone to the types of arcing conditions that these breakers are designed to detect. Circuits that have been compromised by the addition of post installation wiring are particularly vulnerable to these arcing conditions because connections are frequently not professionally done. I recommend that licensed electrical contractor install Arc Fault Breakers on these circuits.

- Upgrade
- Evaluate
- Repair/Replace/Install
- Safety

### 410 Smoke Alarms:

- Present at some locations

At the time of inspection smoke alarms are not tested. I recommend that prior to move-in, that all smoke alarms be tested according to manufacturer's recommendations and that their batteries be replaced. It is recommended that smoke alarms that are older than 5-7 years should be replaced by a licensed electrical contractor if they are hard-wired; and replaced by the homeowner/handyperson if they are battery operated.

For optimum safety, hard-wired smoke alarms with backup batteries are recommended in each bedroom, and hallways outside of bedrooms. At least one smoke alarm should be installed on each floor of the home. Alarms must be maintained free of dust and debris which can interfere with operation.

Smoke alarm technology is evolving and current wisdom is going in the direction of recommending that only Photoelectric smoke alarms be installed in the home due to the nuisance tripping and other human factors involved with misuse and maintenance associated with Ionization type smoke alarms. It is not possible in the context of the home inspection to determine why types of alarms are installed in the home. You are encouraged to install and maintain any type of alarm in the home and you are encouraged to upgrade alarms to photoelectric type alarms. See the following link for a discussion of Ionization vs. Photoelectric Alarms:
No smoke alarms were found in some of the bedrooms. I recommend installation of smoke alarms by homeowner/handyperson prior to occupancy.

- Evaluate
- Repair/Replace/Install
- Safety
- Maintain

The smoke alarms throughout the home are likely "ionization" type alarms. I recommend upgrading to Photo-electric type alarms or verifying that those currently installed are photo-electric type.

- Upgrade
- Evaluate
- Repair/Replace/Install
- Safety
- Maintain

411 Carbon Monoxide Detectors:
- No defects noted at the time of inspection

At the time of inspection Carbon Monoxide alarm/detectors are not tested. I recommend that prior to move-in, that all Carbon Monoxide alarm/detectors be tested and have their batteries replaced. It is recommended that Carbon Monoxide detectors that are older than 5 years should be replaced by a licensed electrical contractor if they are hard-wired; and replaced by the homeowner/handyperson if they are battery operated. These devices are currently required, according to Washington State Law to be maintained by the tenant/homeowner according to the manufacturer's recommendations/instructions.

For optimum safety, Carbon Monoxide alarm/detectors are required in the immediate vicinity of bedrooms and on each floor level of the home. Alarm/detectors must be maintained free of dust and debris which can interfere with operation.

Please be aware that residential Carbon Monoxide detectors are cumulative and are designed to not sound with low levels of carbon monoxide. Some people are more susceptible than others to low levels of carbon monoxide and I consider it prudent to familiarize yourself with the symptoms/warning signs of Carbon Monoxide. Detectors that meet the UL-2034 requirements for detectors installed in residential construction are not allowed to sound at continuous CO levels up to 30 ppm, 70 ppm for 4 hours, 150 ppm for up to 50 minutes and 400 ppm for up to 15 minutes.

**CARBON MONOXIDE** [http://buellinspections.com/so-you-think-you-know-everything-there-is-to-know-about-co-detectors](http://buellinspections.com/so-you-think-you-know-everything-there-is-to-know-about-co-detectors)

No CO detectors were noted anywhere in the home as currently required with the sale of a home. I recommend installation or verification of installation at all required locations. Currently they are required to be located at each floor level and in the proximity of bedrooms.

Combination type alarms can be problematic even while meeting "legal requirements" for installation. Carbon Monoxide detectors in conjunction with Ionization type smoke detectors is problematic due to the poor ion technology (see links under smoke alarms previous to this section). The devices also can have different life spans. For best protection, combination type alarms should not be used. The International Association of Fire Fighters (IAFF) specifically recommends against installing combination alarms. Combination type alarms are required to be UL-217 and UL-2034 listed.

- Evaluate
- Repair/Replace/Install
- Safety
- Maintain
Limited access to any possible above ceiling spaces
Insulation in Attic
Insulation in Crawl Space
Furnishings / Storage/Staging prevented access to some receptacle outlets
Low voltage wiring systems, including timers and sensors, are not part of this inspection.
Security and alarm systems are not within the scope of this inspection.
Evaluation of auxiliary, low voltage, electric or electronic equipment (e.g., TV, doorbell, computer, cable, lightning protection, surge protection, low voltage lighting, intercoms, site lighting, etc.,) is not performed as part of a standard home inspection.

Unless otherwise noted no determination is made as to whether any electrical component has the proper UL Listing. Permanently installed light fixtures made in other countries sometimes do not have the proper UL Listing indicated on them.
Washington State, Home Inspector Standards of Practice related to the Heating & Cooling:
The inspection of the heating system includes the fuel source; heating equipment; heating distribution; operating controls; flue pipes, chimneys and venting; auxiliary heating units.

1. The inspector will:
   - Describe the type of fuel, heating equipment, and heating distribution systems.
   - Operate the system using normal readily accessible control devices.
   - Open readily accessible access panels or covers provided by the manufacturer or installer, if readily detachable.
   - Inspect the condition of normally operated controls and components of systems.
   - Inspect the condition and operation of furnaces, boilers, heat pumps, electrical central heating units and distribution systems.
   - Inspect visible flue pipes and related components to ensure functional operation and proper clearance from combustibles.
   - Inspect each habitable space in the home to determine whether or not there is a functioning heat source present.
   - Inspect or evaluate any evidence that indicates the possible presence of an underground storage tank.
   - Describe any deficiencies of these systems or components.

2. The inspector is not required to:
   - Ignite pilot lights.
   - Operate heating devices or systems that do not respond to normal controls or have been shut down.
   - Operate any heating system when circumstances are not conducive to safe operation or when doing so will damage the equipment.
   - Inspect or evaluate heat exchangers concealed inside furnaces and boilers.
   - Inspect or evaluate any heating equipment that is not readily accessible.
   - Inspect or evaluate the interior of chimneys and flues.
   - Inspect or evaluate installed heating system accessories, such as humidifiers, air purifiers, motorized dampers, heat reclaimers; solar heating systems; or concealed distribution systems.
   - Remove covers or panels that are not readily accessible or removable.
   - Dismantle any equipment, controls, or gauges except readily identifiable access covers designed to be removed by users.
   - Evaluate whether the type of material used to insulate pipes, ducts, jackets and boilers is a health hazard.
   - Determine the capacity, adequacy, or efficiency of a heating system.
   - Determine adequacy of combustion air.
   - Evaluate thermostats or controls other than to confirm that they actually turn a system on or off.

Buried Storage Tanks:
It is not always possible to determine if an underground oil storage tank (or any other kind of underground storage tank) is present on the site.
If a tank is present and has been abandoned for more than two years, local ordinances often require that the tank be decommissioned or removed. Each jurisdiction has its own rules regarding decommissioning and they should be consulted regarding specific requirements.
Decommissioning of a tank generally means removing any remaining oil product, filling the tank with inert material, and removing exposed pipes. I recommend that when the tank has been decommissioned that the “Certificate of Decommission” be obtained from the seller. There may be some liability exposure related to “decommissioning” of tanks as opposed to tank removal. Typically removal of the tank (and associated soil testing) represents the lowest exposure to future discovery of contaminated soils.

Evidence of previous, existing and/or decommissioned oil tank
- Removed chimney
- In-Ground Tank, evidenced by:
  - Fill pipe
  - Vent Pipe
  - Locator West side of home

GAS HEATING SYSTEM:

High-Efficiency, Category IV (84% and above)
The life expectancy of a gas fired furnace is approximately 15 to 20 years. This figure can vary widely depending on many factors. Newer furnaces (less than 5 years old) should be serviced at no less than two year intervals, while furnaces that are 5 years old or older should be serviced annually.

The “heart” of a furnace is a metal chamber referred to as a heat exchanger. All or most areas of the heat exchanger are not readily accessible or visible to a home inspector. Therefore, assessment of a furnace is limited to external and operational conditions. The older the unit, the greater the probability of failure. A thorough inspection by a qualified HVAC contractor is advised for a full evaluation of heat exchanger conditions, particularly if the unit is beyond 10+ years old or any wear is exhibited.

Location: Basement
Make: Lennox
Unit appeared to operate normally, using thermostat controls
45 degrees F ambient outdoor temperature at time of inspection

**BTU Rating:**

<table>
<thead>
<tr>
<th>Furnace may be undersized for the size of the house---consult with HVAC contractor</th>
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**Up-flow type furnace:**

**Furnace BTU Input:**

- **Maximum:** 66,000
- **Minimum:** 23,000

**Furnace BTU Output:**

- **Maximum:** 64,000
- **Minimum:** 22,000

**Efficiency at Maximum Input/output:**

- **96.97%**

**Efficiency at Minimum Input/output:**

- **95.65%**

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**Est. Age (mfg): 2012**

- **4 Years old**

**Model #: SLPg8UH070XV36B-04**

- **Number hard to read---should be verified**

**Serial #: 591216358**

- **Number hard to read---should be verified**

**Access to heating unit:**

- **Accessible**
- **Required floor/walkway/work space not present.**
- **Minimum 30 x (appliance width) where servicing is required not present**

**Visual Condition & Operation of heating unit:**

- **Last Service Date (according to sticker at furnace):**
  - 3/22/2014

  Furnaces that have not been serviced annually are more vulnerable to hidden concerns and more invasive investigation is warranted

- **Dusty inside of furnace compartment**

- **Some Condensate noted at induced draft fan**

- **Some condensate in furnace compartment---having the furnace serviced is recommended**

- **Minor rusting of interior of compartment noted**

**Drip Legs & Sediment Traps:**

- **Drip Legs:**
  
  - A "drip leg" is located at the lowest point in the gas line system, and there may be more than one "lowest point" in that it is seldom that the gas piping is run horizontally or at a continuous slope, meaning the gas piping is usually run up and around things, then back down and around things, then back up, and each low point would require a drip leg IF the gas was considered to be wet gas. Generally the NW has what is considered to be "dry gas" and a drip leg may or may not be present.
  
  - None noted

- **Sediment Traps:**
  
  - A "sediment" trap is located as close to the appliance as possible and is designed to filter out any small amounts of debris in the pipes that might be in the gas-stream that could clog the valves of the appliance. It is required to be located house side of the gas shut-off for the appliance.
  
  - Present---(Appliance side of shut-off valve)

**Venting:**

- **Plastic vent to exterior, forced draft** (combustion/dilution air taken from space around furnace)
- **Condensate drains by gravity**
- **Condensate pump present**
- **PVC exhaust vent pipes**

- **Plastic vent and combustion air-intake to exterior, forced draft** (combustion/dilution air brought in from exterior of building)
- **Terminates at exterior at:**
  
  - North side of home

  - Vent pipe appears to properly drain toward the furnace

- **Condensate pump present**
  
  - Drains to:
### Laundry sink

**Air Filter**
- **Filter location:** Plenum on the side of the furnace
- **Filter:** very clogged with lint and needs to be replaced

Clean air filters not only improve the living environment, they also help maintain the furnace components by providing proper cooling of the internal parts and reducing dust accumulation in key components. Pleated and electrostatic type filters can provide improved filtration over conventional fiberglass or mesh filters. Electronic air cleaners provide exceptional air filtration.

- **Maintain**

### Electronic Air Cleaner:

- **Space provided for future installation of air cleaner**
- **Today’s weather-tight homes trap airborne particles inside where everyday household contaminants can become increasingly concentrated. The result: indoor air can be up to five times more polluted than the air outdoors. An excellent way to help mitigate these issues is to install an Electronic Air Cleaner.**
  - [http://www.soil.ncsu.edu/assist/homeassist/IndoorAir/](http://www.soil.ncsu.edu/assist/homeassist/IndoorAir/)
- **Upgrade**
- **Maintain**

### Appliance Gas Shut-Off Location:

- **Present:** within 3’ of furnace
- **Flexible Gas connector present**

### Fuel System Shut-Off Location:

#### Gas Meter Location:
- **NE corner of home/building**
  - The gas meter is typically the property of the local utility. All concerns regarding the meter should be directed to the gas utility.
  - **Tracer wire present**
  - Where the gas pipe comes out of the ground to the meter there is often a Yellow (usually) Tracer wire. This wire is not supposed to be connected to anything and is only there to assist anyone trying to locate the underground plastic pipe out to the street.

- **Seismic shut-off NOT present**
- **Meter regulator-vent appears un-obstructed**

### ELECTRICITY:

#### Electric Radiant/Forced Air
- **Wall** (south basement room and Detached building/garage)
  - **Forced air radiant**
    - Forced air electric heaters are prone to collection of dust in their fans and the heater compartment. It is good practice to clean these units annually to maintain the units free of dust which adds to wear and tear on the units. The dust is also combustible and should be eliminated for that reason as well.
    - These heaters can get very hot. Proper clearances to combustibles and items that can be damaged from excessive heat must be maintained at all times: furniture, electrical cords, towels, curtains, clothing etc.

- **Safety**
- **Maintain**

Rise in temperature noted with operation of thermostat

### Distribution:

- **Rooms with no source of heat:**
  - **Upper East Room**

#### Heat Register Covers:
- Dampers are common in the heat registers throughout the home. The Standard Home Inspection will not verify proper function at all locations or even most locations. Function should be verified and registers replaced where damaged. Generally speaking registers should be left open to provide even heating throughout the home.
  - **Present at all visible locations**
  - **Some registers not visible**

**Ductwork:**
**Ductwork Interiors:** It is typically not possible to evaluate the interior of ductwork as to condition or the presence of detrimental materials or other conditions. Hidden conditions can include evidence of rodent and/or other vermin activity, dust/debris, water, vegetation, tobacco smoke etc.

Ductwork with covering/tape considered to contain **asbestos**

Some ductwork concealed / not visible

**Crawl Space Ductwork:**

Ductwork insulation in **crawl spaces**

- No insulation/but recommended in Crawl Space

- **X** Maintain

Duct cleaning:

- Heating ducts can accumulate dust over time. Under most conditions, where filters are properly maintained, cleaning of ductwork is discouraged. Properly cleaning ductwork is more complicated than merely hiring a duct cleaning contractor and having the ducts “cleaned.” Standard cleaning protocols can result in introducing more dirt particles into the indoor environment than would occur had the ducts been left alone. There is significant evidence to support the idea that the dust inside ductwork actually acts as a filter itself to promote clean air in the home. Obviously if the ductwork becomes contaminated with toxic chemicals, or have been flooded etc will need to be cleaned and/or possibly be replaced. Ductwork must be adequately protected from dust during remodeling activities and if this is not done the ductwork will likely require cleaning and/or replacement.

- **X** Maintain

**Whole House Air-Change Fan:**

- **Missing/Not seen**

Remodeled homes, in most jurisdictions, require installation of some means of mechanically changing the air in the home. When these systems are missing consideration should be given to the possibility that compliance with local requirements have not been met and perhaps remodeling was done without applicable permits or that the installation was removed afterwards. Further evaluation is recommended.

**Noxious or Other Odors Noted:**

- Some heaters gave off odors when tested---this is common with wall type heaters that have not been used often----as dust is burned off.

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**HEATING**

*I recommend that all changes/corrections made to the Heating / Cooling / Ventilating Systems be performed by a qualified Heating/Cooling/Ventilation Company.*

**501  Heating Unit(s) & Venting & Combustion:**

- **X** Repairs/improvements recommended and/or necessary

Furnaces this age should be serviced annually. I recommend servicing of this furnace prior to the next heating season. Servicing should include cleaning of the interior of the furnace compartment, inspecting the furnace venting system, and evaluation for carbon monoxide, in conjunction with all other normal servicing aspects performed by the qualified heating contractor. Conditions not noted at the time of inspection should be anticipated, especially with older units.

The condensate visible at the vent connectors and in the heating unit compartment is indicative of issues with the combustion and venting of the furnace----including inadequate combustion/dilution air. I recommend further evaluation/correction by licensed heating contractor in conjunction with overall servicing of the unit.
List of the "minimum" inspection items to be expected of furnace servicing:

1. Inspect heat exchanger.
2. Inspect and operate heating controls, and calibrate thermostat as deemed necessary.
3. Check ignitor & clean pilot orifice, adjust flame.
4. Check and adjust main burners for proper combustion
5. Inspect and operate furnace safety devices.
6. Check draft and vent or motor assembly.
8. Lubricate all motors and shaft bearings.
9. Change and/or clean filters.
10. Clean interiors of all heating equipment interior compartments.
11. Inspect all of the venting system, including sections in attic spaces and above the roof.
12. Check and adjust air-flow, and temperature differential
13. Check unit smoke detector, clean filter--if applicable

15. This list is meant to be "suggestive" of necessary repairs and not a "prescriptive" list of how to do it. Many appliances have other necessary maintenance requirements and protocols. This list also includes items that may not be applicable with this furnace. It is intended to inform all parties as to why professional evaluation/inspection is necessary.

Safety
Maintain
Energy Conservation & IAQ

Do remember to keep belongings/furniture adequately away from the wall heaters. These heaters can get very hot and it is a fire hazard to not maintain proper clearances.

Evaluate
Safety
Maintain

502  Heat Distribution:

- Repairs/improvements recommended and/or necessary

There is some evidence of duct work with what is considered to be asbestos paper/insulation. Asbestos materials were commonly used in homes of this age. Asbestos has been shown to present a health hazard if it becomes friable, or airborne in small particles. It is usually recommended that this tape/insulation be left undisturbed and remediation be taken only when necessary by a licensed asbestos removal contractor or by the homeowner themselves with the necessary permitting in place. For further information contact the EPA and Puget Sound Clean Air Commission links listed below:
As an energy upgrade the ductwork in the crawl space should be properly insulated.

The furnace filters are extremely dirty to the point of affecting function and efficiency of the furnace. Restriction of air through the heat exchanger can damage the heat exchanger. I recommend cleaning/replacement by homeowner/handyperson.

Today’s weather tight homes trap airborne particles inside where everyday household contaminants can become increasingly concentrated. The result: indoor air can be up to five times more polluted than the air outdoors. An excellent way to help mitigate these issues is to have an Electronic Air Cleaner Installed. Contact a licensed heating and ventilation contractor and the link below for more information.
### 504 Air Exchange Unit:

- Repairs/improvements recommended and/or necessary

According to the Heating, Refrigeration and Air Conditioning Institute, your home should have new, fresh air every three hours. In drafty older homes, built before the emphasis on energy conservation, fresh air exchange occurs naturally as stale air seeps out and fresh outside air is drawn in. But in a home that is tightly weatherized, it can take as long as 10 hours to bring in new air.

Whole-house air exchangers for cool climates helps reduce excess moisture problems -- like condensation on windows -- that contribute to Mold/Fungal Growth. It's the same principle as using your bathroom exhaust fan to remove moisture created by running the shower. For more information see the link below.  
[Home Ventilation](http://www.epa.gov/iaq/homes/hip-ventilation.html)

At the time the home was remodeled (unless prior to 1991), some method of whole house ventilation would have been required. Lack of installation may be an oversight or be an indication of work being done without permits. I recommend further evaluation as desired. Sometimes these are incorporated on timers installed on bathroom or laundry room exhaust fans. It is possible I missed the timer location or it was hidden. I recommend asking seller if they are aware of any such installation.

### 505 Air Conditioning:

- N/A

**Heating Inspection Limitations / Exclusions:**

- Furnishings/belongings/curtains/blinds impacting heaters at many locations
- Determination of heating or cooling system adequacy is beyond the scope of this inspection.
- Thermostats are not checked for accuracy or timed functions.
- Determining the presence of asbestos is beyond the scope of the inspection.
Washington State, Home Inspector Standards of Practice related to the Plumbing:
An inspection of the plumbing system includes visible water supply lines; visible waste/soil and vent lines; fixtures and faucets; domestic hot water system and fuel source.

1. The inspector will:
   Describe the visible water supply and distribution piping materials; drain, waste and vent materials; water-heating equipment.
   Report the presence and functionality of sump pumps/waste ejector pumps when visible or confirm the float switch activates the pump when the sump is dry.
   Report the presence and location of a main water shutoff valve and/or fuel shutoff valve(s), or report that they were not found.
   Report the presence of the temperature and pressure relief (TPR) valve and associated piping.
   Report whether or not the water temperature was tested and state that the generally accepted safe water temperature is one hundred twenty degrees Fahrenheit.
   Inspect the condition of accessible and visible water supply pipes, drain/waste plumbing and the domestic hot water system when possible.
   Operate fixtures in order to observe functional flow.
   Check for functional drainage from fixtures.

2. The inspector is not required to:
   Operate any valves, including faucets of freestanding or built-in appliances or fixtures, if the outlet end of the valve or faucet is connected or intended to be connected to an appliance.
   Inspect any system that is shut down or winterized.
   Inspect any plumbing components not readily accessible.
   Inspect floor drains and exterior drain systems, including but not limited to, exterior stairwell drains and driveway drains.
   Inspect fire sprinkler systems.
   Inspect water-conditioning equipment, including softeners and filter systems.
   Inspect private water supply systems.
   Inspect gas supply systems.
   Inspect interior components of exterior pumps or sealed sanitary waste lift systems.
   Inspect ancillary systems or components such as, but not limited to, those related to solar water heating and hot water circulation.
   Test pressure or temperature/pressure relief valve.
   Test shower pans for leaks or use special equipment to test/scan shower or tub surrounds for moisture in surrounding substrate materials.
   Determine the potability of any water supply whether public or private.
   Determine the condition and operation of water wells and related pressure tanks and pumps.
   Determine the quantity of water from on-site water supplies.
   Determine the quality or the condition and operation of on-site sewage disposal systems such as waste ejector pumps, cesspools, septic tanks, drain fields, related underground piping, conduit, cisterns, and related equipment.
   Ignite pilot lights.

Buried Storage Tanks:
It is not always possible to determine if any kind of underground storage tank is present on the site. If a tank is present and has been abandoned, many local ordinances often require that the tank be decommissioned or removed. Each jurisdiction has its own rules regarding decommissioning and they should be consulted regarding specific requirements.

WATER SUPPLY/WASTE DISPOSAL – Neither the source, type nor quality of water supply, nor the method of waste disposal is determined as part of a standard home inspection. Advise obtaining documentation/verification of these systems. If a private water and/or waste system exists, independent evaluation by a specialist is recommended.

Water Source:
Public Utility
   House Water Supply Meter Location:
      At street, NE corner of property
      Meter compartment dirt filled
      [ ] Often times rodent activity will fill the meter compartment with dirt making reading the meter difficult. I recommend homeowner/handyperson keep compartment free of dirt and debris.
      [X] Maintain
   Main Water Shut-Off Location(s):
      At Meter at street: even when there is a shut off located within the home the water to the home can always be shut off at the street.
      No other shut-off found
   Water Pressure:
Please note that the water pressure to the home can vary considerably depending on supply controls of the municipality/utility. If at the time of inspection the water pressure is close to the low end of the scale (40psi) or toward the high end of the scale (70psi), fluctuations above and below these parameters can adversely affect flow and pipe connections. Excessive changes in flow over time should be further evaluated by a qualified plumber.

**43-45** PSI, tested at:
Both outside faucets

**Main Water Line:**
Not visible---type and size of pipe not determined
  **Basement:**
  Location not found

---

**Supply Piping:**
Most of piping not visible
  **Copper:**
  **Galvanized:**
  **PEX (plastic):**
  **CPVC (plastic):**

**Water Filter:**
Water filters are not inspected except as relates to actual leaking and/or electrical bonding/grounding issues
  **Whole house type**
  Location:
  Above the water heater and appears to be only filtering the water that goes to the water heater.
  Water shut-off missing
  Supply side missing
  House side missing
  Filter may account for poor flow of hot water throughout the home

**Outside Faucets:**
Hoses (when removed for testing) are not re-installed after testing if it is after *September 1st*
Outside faucets are typically tested as to basic function (turn off and on) and tested under back pressure with a pressure gauge.

**Frost Free/Anti-Siphon type faucet, Locations:**
Hoses and other restrictive devices should not be left in place during freezing weather as water will not drain from the valve and freezing of the valve can occur.

**West side of home**
Turned on, under back-pressure, without leaking
Valve stem did NOT drain when test gauge removed (indicative of improper slope and/or that the valve is not frost-free type)
  **Anti-siphon device:**
  Integral type present
  **Valve attachment:**
  Screws missing---I recommend proper attachment to avoid damage to pipe/valve during use
  **Valve not protected against freezing**
  Pipe will not drain
  **Frost Cover:**
  It is typically not considered necessary to use "Frost Covers" on frost-free type faucets. Slow leaks inside the cover can over time freeze the valve causing leaking. I recommend removing these covers.

**Non Frost-Free Type faucet, Locations:**
  **East side of home**
  Leaking of valve stem during "back-pressure-test" noted
  Interior shut-off to allow for draining of faucet NOT located
  **Valve not protected against freezing**
  Pipe not drained for the winter season----valve functioned at time of inspection

---

**Waste Destination:**
It is not likely, sufficient water will be used during the course of the inspection that would duplicate actual use of the drainage systems of the home under all scenarios. Plugged drains are quite common in homes and the interior condition of drains can not typically be determined or predicted.

This is especially true of homes built prior to the mid 1960's when plastic piping became more common.
## Public Sewer
- **Location of Main Stack Clean-Out(s):**
  - Laundry room
  - Outside location: None found

## Drain / Waste / Vent Piping (DWV):
- Most of drainage piping not visible
- **Basement floor drains present, location:**
  - Laundry area
    - Trap primer: Not determined---presence of water in trap not determined due to lack of access
    - Under washer dryer---not inspected
      - Verify means of keeping water in trap
  - Function not determined

### Assurances are warranted that floor drains are functional. I do not test them but I do recommend that they be tested for function by homeowner/handy person running a hose in them for a prolonged time or having them professionally scoped by a qualified plumber. The traps in these drains sometimes dry-out allowing sewer gases and vermin into the home. As a part of routine maintenance I recommend making sure drain trap has water in it and is properly covered.

### Galvanized drains:
- Past expected life

### Cast Iron drains:
- Some present---typical of time of construction

### Lead drains:
- Lead Toilet Closet Bend (elbow)
  - Many homes built prior to the early 1960’s have Lead Closet Bends (the elbow that the toilet attaches to). These elbows are prone to corrosion and most (if not all) are at the end of their expected life. I recommend that as the home is remodeled or whenever access to these elbows is to be reduced/eliminated that they be replaced before they are concealed behind finished surfaces.
  - Past/Present Leaking noted (autogenic healing present)
  - Corrosion evident

## Plumbing Venting:
- **Vents extended through roof:**
  - Galvanized vent pipes evident
  - Cast Iron vent pipes evident

### Pipe Flashings:
- No defects noted
- Metal & Rubber/Gasket type flashings.
  - These rubber gasket type pipe flashings are prone to leaking. It is not always possible to tell from a visual inspection if these seals around the pipe are effective. I recommend that if leaking occurs or when the home is re-roofed that these flashings be replaced with lead type flashings that protect the roof and fold inside the pipe at the top.

## Gas Piping:
- **Type(s) of pipe:**
  - Black Steel
  - CSST---Coated Stainless Steel
    - Manufacturer not determined
    - Counterstrike (black coating)
  - CSST type gas piping is required to be installed by qualified contractors approved by the manufacturer. It is not likely that it will be possible to determine whether piping installation at this home meets the requirements of the manufacturer but anything noted as not proper in the report may be an indication of less than professional installation and may warrant further review.

### Proper bonding wire is present:
- Proper electrical bonding not apparent----further evaluation/repairs recommended

## Water Heater Location:
- **Basement**
Under certain conditions, hydrogen gas may be produced in a hot water system that has not been used for two weeks or more. HYDROGEN GAS IS EXPLOSIVE. If the hot water system has not been used for two weeks or more, turn on all hot water faucets and let the water flow from each for several minutes. This will release any accumulated hydrogen gas. As the gas is flammable, do not smoke or use an open flame during this time. It is a good idea to keep this in mind when getting home from vacation/traveling.

Information below is based on the minimum requirements of local plumbing codes (UPC) and may vary somewhat from manufacturer installation instructions. Manufacturer's typically defer some installation requirements to local regulations.

**Manufacturer:**
- **Brand:** Bradford White

**Size (electric):**
- Gallons 50

**Accessibility:**
- Proper access

**Age (mfg):**
- 2 years old
- Model #: M250TXDS-1NCWW
- Serial #: LM35412909

**Electric**
- Conventional domestic water heaters have life expectancies that vary throughout Washington State. In some areas, life estimates are as low as 8 to 12 years. In other areas, life expediencies can be 15 to 25 years.

**Disconnect Location:**
- Electrical disconnect at Service Panel

**TPRV (Temperature Pressure Relief Valve):**
- TPRV located at required location
- Drains to floor

**Hot Water Temperature:**
- 117 degrees F initially tested at:
  - Kitchen sink
- 119 degrees F at end of inspection, tested at:
  - Laundry sink

**Tempering Valve:**
- Tempering Valve NOT Present but recommended.

  If the supply of hot water is inadequate when the water temperature is at 120 degrees F, I recommend considering having a tempering valve installed by a qualified plumber (or having a second or bigger hot water heater installed). This will allow the water heater to be set at much higher temperatures while controlling the temperature of the hot water delivered to the fixtures throughout the home. Contact a qualified plumber for additional information.

  ![Upgrade](false)
  ![Safety](false)
  ![Maintain](true)

**Seismic Strapping:**
- Visual inspection of seismic strapping can only attest to the presence of the strapping and cannot determine the effectiveness of the strapping. Obvious inappropriate attachment will be noted.

  Seismic strapping not properly installed---repairs recommended

  Seismic strapping not Both top and bottom

  Non-approved type of strapping

**Water Supply Connections to Water Heater:**
- Flexible connectors present:
  - Flexible Corrugated stainless steel

**Cold water shut-off:**
- Cold water shut off missing

**Foam Pad (required on concrete floors):**
- Tank sits on foam pad

**Water Temperature Control:**

**General Information regarding Storage Tank Water Heating Systems:**
Having plenty of hot water is not just a convenience, it is considered a necessity in modern homes. However, there are competing concerns related to having plenty of hot water. On the one hand we want to prevent scalding. On the other hand it is a good idea to keep water hot enough to prevent water-borne bacteria from flourishing. It is actually quite complicated to accomplish both goals with storage-tank type water heaters. This is further complicated by Washington State Home Inspector Standards of practice that require us to report when the tested water temperature is above 120 degrees Fahrenheit (including a statement that the generally accepted safe temperature is 120 degrees Fahrenheit). Another complication is that some dishwashers do not have integral water heaters and prefer much hotter water coming to it from the primary water heater.

This information however only address one of the safety concerns--and can actually make the other concern worse. Temperature below 120 degrees Fahrenheit is considered ideal for the growth of harmful bacteria inside the tank--such as Legionella. Keeping the tank temperature between 135 and 140 degrees Fahrenheit can greatly reduce the risk of growing bacteria in the tank but is not a guarantee. For example, Legionella Bacteria can survive extreme hot water and chemical treatment by forming a parasitic relationship with amoebae that are not affected by these treatments. While rare, it is still considered prudent, given the current state of knowledge, to maintain the tank water temperature between 135 and 140 degrees Fahrenheit to at least provide some degree of protection.

Electric water heaters are considered to represent the highest risk, while gas fired water heaters represent the lowest risk. Resolving this difficult issue is perhaps the strongest argument one can make for on-demand type water heaters that do not have this issue as no stored water is present. Homes with copper type pipes are also at lower risk while areas with hard water are considered at greater risk. Non-chlorinated water supply systems are at higher risk (wells).

While “generally-healthy-people” are fairly resistant to infection, some patient populations (organ transplants, diabetes, cancers, kidney disease etc), immunocompromised persons, heavy smokers, heavy drinkers, the elderly and infants can be expected to have higher death rates or incidence of more severe illness if the bacteria is present in sufficient numbers. Some authorities assert that an increase in incidence can be expected with an increased focus on conserving energy (lowering the thermostat on the water heater). The science around all of this is ongoing and new information should be anticipated.

But what about scalding?

Preventing scalding requires a multifaceted approach. #1. We must resort to good sense: • Never leave a child or the infirm alone while drawing water in a bathtub, and check the water temperature before putting your child or the infirm in the tub. • Test the water temperature before bathing or showering. • Turn the cold water on first, then add hot water until the temperature is comfortable. • Teach children to turn the cold water on first, and the hot water off first. #2. Provide a mechanical means (Thermostatic mixing valve) of lowering the temperature to below 120 degrees Fahrenheit at either the points of use or at the water heater itself to protect the whole house. Because these devices can fail, we must always keep #1 in mind.

For additional information on this issue please check out the links below:
- [EPA – Legionella : Drinking Water Fact Sheet](http://EPA/Legionella: Health Advisory)
- [http://OSHA/Domestic Hot Water Systems](http://Wikipedia/Legionella)
- [http://Wikipedia/Legionnaires’ Disease](http://Wikipedia/Legionnaires/Disease)

### Yard Irrigation System:

Less than professionally installed system----repairs necessary prior to use

Yard/Lawn irrigation systems are not included in a Standard Home Inspection. These systems can be inspected at an additional cost, but are otherwise excluded. Typically I do check to make sure back-blow valves are in place and will note implications of observed defects in relation to components that are covered by this inspection. For more information about back-flow valves see:

- [Backflow Valve Information](http://www.irrigationtutorials.com/backflow-preventers.htm)

Presence and/or necessity of Back-Flow valve NOT determined-----I recommend verification

Only one distribution head noted

---

**PLUMBING**

I recommend that all changes/corrections to the Plumbing System be performed by a qualified plumber.

**601 Water Service:**

- Repairs/improvements recommended and/or necessary
When there is a sprinkler system installed, a back flow valve is required to be installed on the system at the meter. No back flow valve was seen. *It was extremely unusual that only one sprinkler head was noted.* The valve is typically located in a compartment within 4’ of the water meter compartment. This condition can result in what is called a “cross connection” and simply put can result in the siphoning of water from the pipes in the irrigation system back into the city water supply in the event of negative pressure (cleaning or use of fire hydrants). These systems should also have anti-siphon devices installed on them. I recommend further evaluation/repair of the entire sprinkler system by a licensed plumber.

No water shut-off was found within the home. This is not uncommon. Water to the home can always be shut off at the street/meter. As an upgrade, I recommend having a licensed plumber install a shut-off inside the home for convenience unless it is determined that there is already one somewhere. I recommend asking seller if they know of an inside shut-off.

### 602 Supply Plumbing:

- Repairs/improvements recommended and/or necessary

| Water temperatures in excess of 120 degrees F should be lowered to avoid scalding burns. |
| A desirable level of static water pressure within a home is 40 to 70 pounds per square inch (psi). |

Much of the supply plumbing in the home is the older style galvanized pipe. This pipe is at the end of its expected life and typical corrosion at joints is evident throughout. Functional flow throughout the home will worsen over time. I recommend factoring replacement of this supply piping in the near future by a licensed plumber. It is critical that when this piping is replaced that proper grounding of the Electrical system be maintained/re-connected. If the line is replaced with plastic pipe additional means of grounding may be required. Verify that the plumber is replacing this pipe in conjunction with a licensed electrical contractor to maintain/install proper grounding of the electrical system.

Certainly in the context of any remodeling that makes this piping accessible it should be upgraded at that time. At the time of inspection there was evidence of “poor” functional flow at the hot water lines to fixtures. This is typical of old galvanized pipes but may also be related to the water filter at the water heater. I recommend evaluation/repairs and/or replacement as deemed necessary by a licensed plumber or other qualified party.

At the time of inspection there was evidence of “reduced” functional flow with multiple fixtures running. Functional flow at individual fixture locations will not be further discussed at individual fixture locations. However there is some possibility that cleaning fixture valves, screens and interior components could improve flow---at least temporarily.
Piercing valves are connections to the supply piping that are frequently used to achieve water supply to the Refrigerator or hot water taps. They are prone to leaking/failure. As an upgrade I recommend installation of a proper "T" with shut-off by a licensed plumber.

**Upgrade**

**Monitor**

**Repair/Replace/Install**

**Safety**

**WDO (Wood Destroying Organisms & conducive conditions)**

**Maintain**

---

**603** Drain, Waste & Vent Plumbing:

**X** Repairs/improvements recommended and/or necessary

Proper function and life expectancy of the main sewer drains is beyond the scope of this inspection. I recommend that if there are concerns about the function of the main sewer drain that it be evaluated by a licensed plumber with a Spectra-Scope. It is not likely in the course of the standard home inspection that large enough quantities of water will be drained to determine the adequacy of the drains. Proper function of house drain to the city sewer is beyond the scope of this inspection. I recommend that proper function be both determined and maintained. The best method to verify function is to have them inspected with a remote camera device.

Proper function of the house drain to the city sewer is beyond the scope of this inspection. I recommend that proper function be both determined and maintained. The best method to verify function is to have them inspected with a remote camera device. I recommend the drains associated with this property be professionally scoped by a qualified drainage scoping company (preferably one not associated with, or part of, a plumbing repair company).

At the time of inspection the interior plumbing drains were scoped by a scoping company. See their report for pipe condition.

**Evaluate**

**X** Repair/Replace/Install

**Safety**

---

Much of the drainage plumbing in the home is the older style galvanized pipe. This pipe is at the end of its expected life and typical corrosion at joints and pipes is evident throughout. Attempts at cleaning these drains usually accelerates their demise, especially with the use of corrosive types of drain cleaning products. Corrosive types of drain cleaning products should never be used in metal drain lines. There are some Bio-Enzymatic types of cleaners that can be quite effective.
Certainly in the context of any remodeling that makes this piping accessible it should be upgraded at that time.

- Upgrade
- Monitor
- Evaluate
- Repair/Replace/Install
- Safety
- WDO (Wood Destroying Organisms & conducive conditions)
- Maintain

At the time of inspection the trap for the floor drain was not evaluated as to whether there was water in it or not (no access). I recommend verification of water in the trap and providing a means of keeping water in the trap is recommended. There are oil-like trap seal products available or mechanical type trap primers can be installed.

- Evaluate
- Repair/Replace/Install
- Safety
- Maintain

There is at least one lead type toilet elbow present in the home. These should be considered well past their expected life. There may or may not be one for the Upper Hallway Bathroom as some remodeling of that area has occurred. The one for the Main Floor Bathroom shows signs of failure consistent with age of the pipe. I recommend immediate replacement of this elbow and further evaluation as to the condition of the upstairs bathroom if it is present. I recommend replacement by a licensed plumber. Openings is plumbing drains can allow sewer gases back into the home.

![lead toilet elbow should be upgraded](image)

- Upgrade
- Evaluate
- Repair/Replace/Install
- Safety

The kitchen sink drain is less than professionally plumbed. I recommend repairs in the context of replacement of the galvanized drainage plumbing at some point. I recommend evaluation/repairs and/or replacement as deemed necessary by a licensed plumber or other qualified party.
Evaluate
Repair/Replace/Install

604 Hose Faucets:
- Repairs/improvements recommended and/or necessary

It is very common for hose faucets to leak around the valve stem and/or anti-siphon device resulting in the wasting of water. Usually this can be corrected by tightening the valve stem nut slightly or by repairs to the anti-siphon device. I recommend further evaluation/repairs by a licensed plumber or other qualified person.

The valve stem at the east side of the home leaks under back pressure. Including new frost-free faucets with integral anti-siphon devices is recommended when the plumbing is upgraded.

Adding anti-siphon devices to the frost free faucets is recommended. These devices are readily available at Lowes/Home Depot and can be installed by homeowner/handyperson. Small amounts of water can remain in the anti-siphon device that can freeze in winter and cause damage to the device. Inside the device, where the water comes out, there is a lever that needs to be moved to drain this small amount of water. This will help protect the device from freeze damage. Upgrading to faucets that have integral anti-siphon devices is recommended to avoid this issue.

The hose faucet at the west side of the home is not properly attached to the house (screws missing) and may not slope enough to sufficiently drain the pipe to make it frost free. I recommend proper attachment by qualified person to prevent damage to the valve/pipe connections and that proper slope be verified. Any necessary repairs should be done by a licensed plumber.

605 Sump(s) & Pump(s):
- N/A

606 Gas Piping:
- No defects noted, visual limitations apply

Steel gas piping is susceptible to rust and corrosion. Pipe should be kept free of rust and when severe rusting is present, replacement may be warranted. The gas piping system is not checked for leaks with gas detecting equipment unless odors of gas are noted. ANY odors of gas should always be investigated further.
**607 Water Heaters:**

*Checklist: Repairs/improvements recommended and/or necessary*

A temperature and pressure relief (TPR) valve is required on all water heaters to discharge any excessive pressure within the tank. A discharge pipe should be attached to the TPR valve and directed to a safe location away from body contact. Newer installations must be directed to the building exterior. Most manufacturers suggest that homeowners test the TPR valve at least once a year by lifting the lever to ensure the valve discharges properly. The picture to the right shows a typical top-of-tank type TPR Valve. They may also be found on the side of the heater on some models. This inspector does not test these valves due to the possibility that they may leak after testing. A leaking or inoperative TPR Valve should be replaced immediately by a licensed plumber.

There is currently no "proper" seismic strapping on the water heater as is required. I recommend that seismic strapping be installed per manufacturer's instructions by homeowner/handyperson. These strapping kits are readily available at Lowes/Home Depot type home maintenance stores. Strapping is required to be at both the top and bottom of the tank in the top and bottom third of the tank.

There is currently no cold water shut-off to the water heater as required. I recommend a proper water shut-off be installed by a licensed plumber or other qualified party.

*Checklist: Repair/Replace/Install, Safety*

**Inspection Limitations / Exclusions:**
- Water meter compartment filled with dirt—inspection limited
- Back-flow valves are not inspected
- Piping insulated—condition and type not visible in some areas
- Main water valve in house not located

Add-on components or systems (electronic air cleaners, humidifiers, water treatment systems, solar water heating systems etc.) are not evaluated unless specifically indicated.

Private water supply systems, waste disposal systems, and fire and lawn sprinkler systems are not inspected unless contracted for an additional fee.

The adequacy of the domestic hot water supply or temperatures was not determined.
The "Security" of any home is never absolute. At the time of inspection I assess the "basic functionality" of door and window locking mechanisms. No assessment of the individual or overall effectiveness of security is implied. Glass, frames, locks and other elements can be prone to "tampering" and are "limiting factors" of locking mechanisms/systems. All security devices and systems must be balanced against the ease of escape in the event of emergency. Concerns about the home's overall security system should be addressed by a licensed home security company.

While determining the presence of "Safety Glazing" in the home is beyond the Standards of Practice, I endeavor to identify safety glazing when possible to improve safety. In this report Safety Glazing is generically used to refer to any of the types of safety glazing including "Laminated Safety Glass", "Tempered Safety Glass" etc. The requirements for safety glazing in homes has changed over the years and varies from jurisdiction to jurisdiction. Questions of the appropriateness or lack of safety glazing in this home should be addressed to the local building department.

**EXTERIOR DOORS:**

**Front Entry Door:**

<table>
<thead>
<tr>
<th>Wood</th>
<th>Side/top weather-stripping:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Weather-Stripping / but recommended</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bottom of door weather-stripping:</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Weather-Stripping / but recommended</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Threshold weather-stripping:</th>
</tr>
</thead>
<tbody>
<tr>
<td>None Present</td>
</tr>
</tbody>
</table>

**Overall condition of door:**

<table>
<thead>
<tr>
<th>Conditions consistent with age</th>
</tr>
</thead>
</table>

**Door structure/Surface:**

<table>
<thead>
<tr>
<th>Finish surface of door</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door shows &quot;distress&quot; consistent with age</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minor mechanical damage to door noted</th>
</tr>
</thead>
</table>

**Jamb/Opening:**

<table>
<thead>
<tr>
<th>Some mechanical damage to trim/jamb around door</th>
</tr>
</thead>
</table>

**Hinges:**

<table>
<thead>
<tr>
<th>Hinge pins out of place</th>
</tr>
</thead>
</table>

**Lockset & Security mechanisms:**

<table>
<thead>
<tr>
<th>Key pad not tested</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Dead Bolt</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Dead-Bolt present</th>
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</thead>
</table>

**Screen/Storm Door:**

<table>
<thead>
<tr>
<th>Present</th>
</tr>
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<table>
<thead>
<tr>
<th>Door operated normally</th>
</tr>
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</table>

**West Entry / Deck Door:**

<table>
<thead>
<tr>
<th>Double</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Stationary door, slide bolts:</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>Functional (with learning curve---repairs may be warranted)</th>
</tr>
</thead>
</table>

**Steel-Insulated**

<table>
<thead>
<tr>
<th>Weather-Stripping:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Side/top weather-stripping:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Weather-stripping is present on top and sides</th>
</tr>
</thead>
</table>

**Astragal weather-stripping:**

<table>
<thead>
<tr>
<th>Weather-stripping is present</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Weather-Stripping in poor condition</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Bottom of door weather-stripping:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Weather-stripping is present on bottom of door</th>
</tr>
</thead>
</table>

**Threshold:**

<table>
<thead>
<tr>
<th>Adjustable Type</th>
</tr>
</thead>
</table>

**Overall condition of door:**

<table>
<thead>
<tr>
<th>Jamb/Opening:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Some staining/moisture damage from water intrusion around bottom of door on both sides</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Hinges:</th>
</tr>
</thead>
</table>

**CHARLES BUELL INSPECTIONS INC, 17123 22nd Ave NE, Shoreline, WA 98155**
<table>
<thead>
<tr>
<th>Lockset &amp; Security mechanisms:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dead Bolt</td>
</tr>
<tr>
<td>Dead Bolt present</td>
</tr>
<tr>
<td>Deadbolt does not engage jamb properly</td>
</tr>
<tr>
<td>Double Pane Glass</td>
</tr>
<tr>
<td>Safety glass &quot;etching&quot; present</td>
</tr>
</tbody>
</table>

**West Basement Door:**

<table>
<thead>
<tr>
<th>Wood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall condition of door:</td>
</tr>
<tr>
<td>Not inspected, door in extremely poor condition and needs to be replaced</td>
</tr>
<tr>
<td>Single Pane Glass</td>
</tr>
<tr>
<td>NOT Safety Glass</td>
</tr>
<tr>
<td>At time of construction the glass in this type of door would not have been safety glass</td>
</tr>
</tbody>
</table>

**WINDOWS:**

Problems with single pane windows are common: broken sash joints, missing glazing, cracks, condensation issues, broken hinge mechanisms, latches, corrosion etc. Until these older units can be replaced, care must be exercised in their use due to the potential for injury from falling sashes, broken glass, and its presence in areas that would today require safety glass etc.

There is a presumption that single pane type windows are typically outdated by current standards and replacement is usually advised. Because of this, inspection of these older windows is more casual than it would be if the windows were double pane type windows. Cracks and other conditions consistent with the age of these windows should be anticipated.

Problems with double pane windows are common: sash issues, condensation issues, broken hinge mechanisms, broken/missing latches, corrosion, broken thermal seals, defective thermal coatings, failed paint, failed glazing etc.

While I attempt to identify as many defects with windows as possible, not all windows are tested and/or may be obstructed from view (screens, blinds, vegetation etc). This can mean that some issues may go undetected. Typically most issues with the individual windows would not typically be considered "deal breakers" in terms of the purchase of a home/building, and therefore the focus of the inspection is generally on more substantive issues.

In addition, windows are typically left the way they are found. If locked they are relocked, of not locked they are left unlocked, as the reasons for them being either locked or unlocked typically cannot be determined by the inspector. Obviously unlocked windows can represent a security/safety issue and this report will typically indicate when there are unlocked windows in the home.

- **Casement**
- **Fixed (picture)**
- **Single-Hung**
- **Slider**
- **Pocket**
- **Some windows with leaded glass**
- **Storm windows present**
  - On some windows |
  | Storm windows, while adding addition security and energy efficiency, can interfere with emergency egress from the windows. Consider upgrading windows to more modern insulating glass type windows.

**Exterior Window Sills:**

- **Painted wood:**
  - Some deterioration/weathering/paint failure in exterior wood sills noted |

**Interior Window Sills:**

- **Natural finish wood:**
  - Staining noted |
- **Painted wood:**
  - Staining noted |

**Vinyl:**

- **Double pane glass**
  - Some windows have broken thermal seals (or other internal cosmetic issue)
  - "Warm Edge" type spacer present on some windows
  - Most manufacturers of Vinyl windows sell a line of window with spacers between the glass referred to as: "Warm Edge Spacers." While most insulated glass have spacers and sealing systems that maintain the seals for as long as 25 years, this type of spacer is known to fail in less than 10 years and replacement of the windows may be warranted within that time frame.

**Sash components in poor condition**

- **Upper East room window has broken sash components**
- **Damaged/Missing Screens noted: repair/replace as desired."**
WOOD:

- Single pane
  - In some windows
- Some broken glass noted
  - Upper South room window
  - Dining room window
- Others should be anticipated

INTERIOR DOORS:

Turn-Button lock mechanisms present on some doors

- For emergency exit from locked rooms I recommend that turn-button type locksets be replaced with push-button type that unlock when the knob is turned.

  - Maintain

Doors missing at some locations

Styles of doors:

- Recessed Panel

General condition of doors:

- Doors show signs of "wear and tear" and some minor damage
- Doors noted binding on jambs
  - Several locations and all should be checked
    - Doors that bind on jambs should be cut off by homeowner/handyperson to prevent damage to the door and jamb.

  - Maintain

- Minor mechanical damage to trim/jamb around door(s)

Door stops:

- Door stops present at some locations

- Bi-fold doors present at some closets

DOORS & WINDOWS

Windows and door evaluations are based on a random sampling of a representative number of units. All units should be checked by the buyer for possible operational concerns or other deficiencies. Unless noted, presence of a safety glazing at windows/doors is not evaluated.

701 Exterior Doors

- Repairs/improvements recommended and/or necessary
  - It is considered good practice to change the locks on homes at the time of purchase.

- Doors that bind against the door jambs or don't close properly can generally be trimmed or adjusted to function properly. If this condition is caused by door frames that are out of square, it may indicate settlement or unusual movement of the structure, which should be investigated by a qualified engineer.

The basement exterior door is in need of repairs/weather-stripping and/or replacement. Replacement of the door can improve overall energy efficiency of the home as well as improve security of the home. Until this door can be replaced by a qualified door installation company, I recommend that it be maintained well painted and sealed to protect the home from damage from the elements.

Many of the exterior doors could benefit from upgrading for energy efficiency and safety. They have cosmetic as well as defects related to age and use. Replacement of the doors can improve overall energy efficiency of the home as well as improve security of the home. Until these doors can be replaced by a qualified door installation company, I recommend that they be maintained well painted and sealed to protect the home from damage from the elements.

The locking mechanisms for the west deck door do not operate properly and there is damaged weather-stripping that should be replaced. I recommend evaluation/repairs and/or replacement as deemed necessary by a qualified door installation contractor or other qualified party.
The lower hinge pin on the front entryway door is not properly placed which can cause damage to the hinge. I recommend evaluation/repairs and/or replacement as deemed necessary by a qualified party.

Steel clad insulated doors have a wood frame behind the metal (west deck door). This wood must be kept well sealed maintained especially along the bottom of the door to prevent damage from water that can splash against the jamb and weather-stripping and Wick around the metal cladding and into the wood. This condition is exacerbated by draft-stop materials installed in the area that the edge of the door closes against. This is particularly problematic on doors exposed to the weather side of the home. Preventing this kind of damage on this type of door can be difficult. Other types of flashings and weather-stripping are available to minimize the chances of damage but keeping the area well painted and sealed should be considered the first line of defense. Once decay has begun it is likely the entire door will need to be replaced.

702 Windows:

- Repairs/improvements recommended and/or necessary

In newer construction, safety glass is required at specific locations. Safety glass is not found in many older homes, but upgrading at critical areas is suggested.

All bedrooms should have at least one window large enough to allow exit/entrance in case of a fire. The minimum net opening should be no less than 5.7 square feet, with a minimum width of 20 inches and a minimum height of 24 inches. The bottom of the window should be below 44 inches. (When the bottom of the window is above 44”, installation of a permanent step is considered acceptable and is recommended.) See the links below for more information about proper egress from windows.


If a double glazed window appears to be fogged, or there is moisture between the panes, it is an indication that the vacuum seal has failed. Sometimes this failed glazing is observable only under the right atmospheric conditions (as when sun hits the window). Screens, curtains, and blinds can hide these defects. Conditions such as temperature, humidity and lighting can limit the ability of the inspector to tell if windows have broke seals. This condition is primarily a cosmetic concern, as it does not significantly reduce the insulation value of the window.
Most of the windows in the home are older style (original) single pane wood windows. There are cracks and poor/missing glazing and some are painted shut or otherwise not functional. I recommend factoring replacement of all of the windows in the home by a qualified window installation company. All of these windows should be properly maintained until they can be replaced. Window replacement should include evaluation/repair/replacement of trim/sills and related components as well. Most of the windows that should open, appear to be pocket type windows. In other words they slide into the adjacent walls. Function should be verified especially in rooms where egress is necessary/required. I recommend evaluation/repairs and/or replacement as deemed necessary by a qualified party.

Listing information for homes often call rooms bedrooms according to appraiser records and various other determinations. In this report, while I may refer to rooms as bedrooms, technically rooms that do not have a means of heat, egress, or sufficient height do not mean current requirements to be considered “habitable.” As such the none of the basement rooms meet these criteria for height and egress if desired to be bedrooms.

The upper East Room window has broken plastic components. I recommend replacement of the sash as desired. I recommend evaluation/repairs and/or replacement as deemed necessary by a qualified party.
It was noted that some screens are damaged and/or missing. Replace/install as desired.

The vinyl windows that have been replaced have been replaced by a method where the flashing/flange that surrounds the window is either removed or simply not present and the window is inserted inside the original window's wood frame. This method of installation can be problematic because it relies on caulk at the window/trim connection to keep out water. Being vigilant about maintaining these seals is critical—especially on windows with more exposure to the elements.

703 Interior Doors:

**Repairs/improvements recommended and/or necessary**

Doors that bind against the doorjams or don't close properly can generally be trimmed or adjusted to function properly. If this condition is caused by door frames that are out of square, it may indicate settlement or unusual movement of the structure, which should be investigated by a qualified engineer.

Many of the interior doors have locksets with turn-buttons that must be turned before the knob is turned. As an upgrade, I recommend that these types of security locksets be replaced with locksets that unlock from the inside when the knob is turned for improved safety.

The West door of the main floor SE Bedroom binds on the jamb. I recommend proper adjustments by a qualified party to allow for proper operation of the door. Sticking doors can prevent rapid egress through the door when necessary.
The west closet door of the Upper North Bedroom and the low wall storage doors of the East Upper Room bind on the floor making operation difficult. I recommend evaluation/repairs and/or replacement as deemed necessary by a qualified party.

Inspection Limitations / Exclusions:
- Screens can limit inspection of windows from exterior
- Blinds can limit inspection of windows from interior
- Some windows painted shut or otherwise inoperable

No comments are offered on cosmetic finishes.

If the home was furnished (or “Staged”) at the time of the inspection, not all interior finishes were visible. I advise a careful walk through once all furnishings are removed.
The inspection of the interior includes the walls, ceilings, floors, windows, and doors; steps, stairways, balconies and railings.

1. The inspector will:
   - Verify that steps, handrails, guardrails, stairways and landings are installed wherever necessary and report when they are missing or in need of repair and report when baluster spacing exceeds four inches.
   - Inspect the overall general condition of cabinets and countertops.
   - Inspect caulking and grout at kitchen and bathroom counters.
   - Inspect the interior walls, ceilings, and floors for indicators of concealed structural deficiencies, water infiltration or major damage.
   - Inspect the condition and operation of a representative number of windows and doors.
   - Comment on the presence or absence of smoke detectors.
   - Describe any noncosmetic deficiencies of these systems or components.

2. The inspector is not required to:
   - Report on cosmetic conditions related to the condition of interior components.
   - Verify whether all walls, floors, ceilings, doors and window openings are square, straight, level or plumb.

The items listed below were present at the time of inspection. These items can conceal damage to walls/floors. Concealed defects are not within the scope of the home inspection. In areas where there is typically a high level of humidity, such as bathrooms and laundry rooms, any damage to the wall paper or paneling can allow moisture to accumulate behind the wall paper or paneling, promoting moisture damage and possible mold/fungal growth. Some of these conditions may only become apparent in the course of remodeling or other more invasive investigations. Area Rugs, Furnishings, Built-in Cabinets, Appliances, Storage Items, Curtains/Blinds, Paneling, Wallpaper, Paintings/Pictures, Staging Items, Mirrors, etc.

INDOOR AIR QUALITY – All houses are potentially subject to indoor air quality concerns due to numerous factors such as improper venting systems, out-gassing from construction materials, etc. Air quality can also be adversely affected by the growth of molds, fungi and other microorganisms – most are the result of adverse moisture conditions. A home inspection does not include assessment of potential health or environmental contaminants or allergens. If leakage occurs or detrimental moisture conditions exist or develop the possibility of potentially harmful contaminants exists and therefore should be immediately addressed. For air quality evaluations, a qualified testing firm should be contacted.

COMBUSTION/DILUTION & MAKEUP AIR – All combustion appliances require air for proper combustion. Homes with inadequate means of introducing air for these combustion appliances are at risk of the build-up of harmful combustion by-products and back-drafting of the exhaust from these systems. Other mechanical exhaust fans can also compete for intake air and complicate the problem. Assurances are warranted that there is adequate sources of makeup air for both combustion appliances and exhaust fans. For additional information on these issues please see the following link:

Homes with all direct vent gas appliances rarely have combustion-air related issues. Ranges should only be operated with the hood exhaust running.

Living Areas: Floor & Wall & Ceiling Finishes:
Generally, throughout the home (including bathrooms, kitchen, basement etc) the floors have mechanical damage and wear consistent with age and use. Concerns that warrant additional mention, if any, will be described in more detail in the flooring section of the individual rooms below.

Generally, throughout the home (including bathrooms, kitchen, basement etc) the walls and ceilings have some mechanical damage, settlement cracks and some painting/repair/touch up noted typical of most drywall/plaster installations. Concerns that warrant additional mention, if any, will be described in more detail in the walls & ceiling sections of the individual rooms below or in the narrative portion of the report.

Pre 1978 structures:

Homes constructed prior to 1978 most likely contain paints with some lead. These paints are not considered a problem as long as the paint does not become "friable" or air-borne. Keeping walls and woodwork well painted can minimize exposure to the lead paints. It is recommended that old painted wood be removed and properly disposed of as opposed to sanding and stripping of the woodwork. For additional information contact the EPA at:

LEAD Information, http://www.epa.gov/lead/
This inspector can have the home tested for lead based paints for an additional fee.

As of April 22, 2010, new Lead Safety protocols became effective, and any work done on homes built prior to 1978 are required to have paint tested for the presence of lead whenever remodeling or painting that would result in the paint becoming airborne. Testing and removal of lead based paint must meet strict abatement protocols and work must be performed by qualified persons with Lead Abatement certification and training. There are procedures to allow for homeowners to perform this work themselves but they too must follow the safety guidelines. For additional information see the link to the EPA's website:


Safety
Maintain
**Tile areas:**

*Kitchen and Bathroom*

When buying a home with tile floors/walls, it is important to keep in mind that it is not within the scope of a Standard Home Inspection to determine if loose tiles are present. This is obviously true in areas that are covered with belongings and/or carpets. Cracks in tiles and/or grout are often consistent with loose tiles and any such conditions noted should be seen as an indication of at least some loose tiles. Typically tiles can be re-adhered without difficulty but it can sometimes be an indication of inadequate substrate and/or installation that would be difficult to determine in the course of the inspection.

- Evaluate
- WDO (Wood Destroying Organisms & conducive conditions)
- Maintain
- Energy Conservation & IAQ

**Finish floors over concrete with no access:**

It is usually not possible to determine how floors were installed over concrete and as to whether necessary moisture barriers/separations are present or not, or how well they will perform if they are present.

- Evaluate
- WDO (Wood Destroying Organisms & conducive conditions)
- Maintain
- Energy Conservation & IAQ

### Main Living Area(s): (this includes rooms like Living & Dining that are on the same floor level)

**Floors:**
- Wood
  - Some Stains/Wear present (consistent with age of flooring)
  - Past water leaks at the SE corner

**Walls:**
- Plaster

**Ceilings:**
- Plaster

**Heat:**
- Forced Air
  - Rise in temperature noted during operation of heating system

### Main Floor SE Bedroom:

**Egress:**

- Egress Window present (though difficult with the windows possibly being painted shut and the storm windows at the exterior)
  
  Current safety guidelines require bedroom windows that are used to meet secondary egress requirements, meet certain size parameters. Not only are they required to be a "minimum" of 24" high and a "minimum" of 20" wide, these minimum dimensions will vary depending on how tall or wide the window opening is as well as whether the window is at grade or at upper levels of the home. There must also be a minimum of 5 sq ft of "net opening" for windows at grade (5.7 sq ft at higher floor levels). The bottom of the window opening must also not be more than 44" above the floor as well. Upgrading older windows to meet current standards is recommended—especially when replacing the windows.

  Upgrading older windows to meet current standards is recommended—especially when replacing the windows.

  **Above note not repeated for other sleeping rooms.**

**Floors:**
- Wood

**Walls:**
- Plaster

**Ceilings:**
- Plaster

**Heat:**
- Forced Air
  - Rise in temperature noted during operation of heating system

### Main Floor SW Bedroom:

**Egress:**

- Egress Window present

**Floors:**
- Carpet

**Walls:**

---

CHARLES BUELL INSPECTIONS INC, 17123 22nd Ave NE, Shoreline, WA  98155
Plaster Ceilings:
- Plaster
  - Some peeling paint evident—repair as desired

Heat:
- Forced Air
  - Rise in temperature noted during operation of heating system

### Upper South Bedroom:

Egress:
- Egress Window present
  - Function not verified

Floors:
- Wood

Walls:
- Drywall/Plaster
  
  In older homes that have undergone renovation there can be a combination of plaster & lath and drywall walls and ceilings. Unevenness, cracks, evidence of patching, and defects hidden behind wall paper, are all fairly common. While the inspector may comment on such flaws, cosmetic issues are not the focus of the inspection.

  Above note not repeated for other instances of Drywall/Plaster.

Ceilings:
- Vaulted ceilings present
- Plaster board/Plaster

Heat:
- Forced Air
  - Rise in temperature noted during operation of heating system

### Upper North Bedroom & East Extension to room:

Egress:
- Egress Window present (may not meet current standards)

Floors:
- Wood
  - "Pergo" type Laminate (East room)

Walls:
- Drywall/Plaster

Ceilings:
- Vaulted ceilings present
- Drywall/Plaster

Heat:
- Forced Air
  - Rise in temperature noted during operation of heating system

  No heat source found for east room area

### Basement Finished Rooms (2 areas):

Egress:
- Secondary egress requirements for this building not determined
- NO egress/improper egress if area is considered to be a bedroom

Floors:
- Some sloping of floors noted
  - "Pergo" type Laminate over concrete
    - It is usually not possible to determine how floors were installed over concrete and as to whether necessary moisture barriers/separations are present or not.

  Interlocking foam tiles over concrete
    - Areas with discoloration consistent with moisture under the panels
    - Areas with moisture indicated by moisture meter

  Vinyl Tiles over concrete
    - Less than professional installation noted

Walls:
- Drywall
- Paneling

Ceilings:
Drywall
Heat:
  Electric Forced Air in South area
    Rise in temperature noted during operation of heating system
  Forced Air
    Rise in temperature noted during operation of heating system

Stairs:

Stairs to Second Floor:
  Carpet & Wood
  Headroom:
    Headroom adequate
  Side Barriers:
    Side barriers adequate
  Handrail:
    A proper handrail has a "grippable" rail 1-1/4"-2-5/8" wide, spaced at least 1-1/2" away from the wall, and the ends return to wall/post (or designed so as to not "catch" clothing, belongings, or persons). The rail should be 34"-38" above the stair nosing.
    Handrail present
    Handrail does not conform to current safety standards
    Handrail does not return to wall at top and bottom of railing
    When the handrail does not return to the wall at the top and the bottom, I recommend that a qualified stair installation company or other qualified repair person repair/replace the hand rail to prevent the snagging of belongings or persons which could lead to injury/falls. I recommend that the handrail be properly installed by qualified stair installation company or other qualified repair person.
    Repair/Replace/Install
    Safety

Stairs to Basement:
  Carpet & Wood
  Headroom:
    Inadequate headroom typical of age and type of construction
  Side Barriers:
    Side Barriers NOT adequate
  Handrail:
    Handrail does not conform to current safety standards
    Handrail does not return to post at top of railing
    When the handrail does not return to the wall at the top and the bottom, I recommend that a qualified stair installation company or other qualified repair person repair/replace the hand rail to prevent the snagging of belongings or persons which could lead to injury/falls. I recommend that the handrail be properly installed by qualified stair installation company or other qualified repair person.
    Repair/Replace/Install
    Safety

Fireplaces:

Washington State, Home Inspector Standards of Practice related to the Fireplaces and Stoves:
Includes solid fuel and gas fireplaces, stoves, dampers, fireboxes and hearths
(1) The inspector will:
  Describe fireplaces and stoves.
  Inspect dampers, fireboxes and hearths.
  Describe any deficiencies of these systems or components.
(2) The inspector is not required to:
  Inspect flues and verify the presence of flue liners beyond what can be safely and readily seen from the roof or the firebox of a stove or fireplace.
  Ignite fires in a fireplace or stove.
  Determine the adequacy of draft.
  Perform a chimney smoke test.
  Inspect any solid fuel device being operated at the time of the inspection.
  Evaluate the installation or adequacy of fireplace inserts.
  Evaluate modifications to a fireplace, stove, or chimney.
  Dismantle fireplaces or stoves to inspect fireboxes or remove rain caps to inspect chimney flues.
Masonry Fireplace:

Living Room Fireplace

Chimney needs to be cleaned/inspected by CSIA-Certified, qualified chimney sweep

The integrity of the firebox area must be maintained at all times. Damage or deterioration of liners, mortar, brickwork or any gaps should be corrected prior to use.
All units should be cleaned regularly (before heavy soot or creosote buildup occurs). Do not use any unit with significant buildup; heavier buildup may exist in areas not observable.

Maintain

Clearances and conditions:
Firebox bricks/joints NOT satisfactory
Screen present
Glass doors NOT present

Wood/Other

Damper:
Damper open at time of inspection
Leaving dampers open when the Fireplace is not in use can waste a great deal of heat up the chimney.

Damper condition:
Damper NOT functional
Damper control arm became disconnected during testing and no determination was made as to whether it can be repaired.
Some rust and corrosion of damper noted

Hearth extension:
Present
Extensive mechanical damage to hearth noted
Cracks
Cracked tiles
Loose tiles

Noxious or Other Odors Noted (as related to interior spaces):

Mold or Mold-like/Fungal Growth/Musty odors
Associated with moisture condition under basement floor coverings

INTERIORS

The interior of the home has been repainted recently. It is very common for homes to be repainted prior to sale. This painting often times conceals damage to the walls and ceilings that would otherwise be apparent. Water damage, repairs, cracks, stains and poor paint coverage are some of the conditions that might be concealed. Some of these conditions will reveal themselves over time.

Monitor
Evaluate

It is common to see Mold or Mold-like/Fungal Growth on floor, wall and ceiling surfaces in homes when adverse moisture conditions persist. Poor air circulation behind curtains/furniture, inadequate moisture, electric heat, missing/not used exhaust fans, life-style, and temperature are often adequate to promote Mold or Mold-like/Fungal Growth.
Some should be anticipated in the basement space related to the ongoing leaking into the south room
See 1201 for EPA (and others) recommendations/information about cleaning and safety.

Monitor
Evaluate
Repair/Replace/Install
The upper east room does not have a source of heat as would be required to be considered "habitable space." I recommend that a source of heat be provided by a qualified party and that clarification be made as to the room's status as a bedroom.

This building could greatly benefit from a full evaluation by a qualified Building Performance Professional, to determine how best to address air quality issues as well as improvements for overall energy efficiency. For further information you can contact Home Performance Washington for a list of qualified professionals.

http://homeperformancewashington.org/

801 Floors:
Condition typical of age and use, visual limitations apply

Inspection of the flooring is intended to identify major defects, where visible. Of greatest concern is moisture damage due to leaks from plumbing fixtures, piping, roofs and windows.

The floors show minor cosmetic concerns typical of a home of its age and type of construction. There is some unevenness/sloping, prior patching, staining, mechanical damage, etc. No further recommendation----repair/replace/maintain as desired.

Homes of this age and type of construction often have uneven floors. Much of the "roll" in these floors is normal and considered part of the "charm" of older homes. Excessive unevenness can be an indication of framing and foundation issues that may warrant further evaluation by licensed engineers.

The sleeper floors over the concrete floors in the basement may not be satisfactory as there appears to be inadequate sealing of the floor to prevent cupping of the wood floors. These types of sleeper floors often conceal hidden damage and I must, as a Structural Pest Inspector, report them as being a conducive condition. Removal and installing more appropriate coverings is encouraged.

Squeaking floors (when walked upon) are common in all types of construction, show up under different conditions and are not always apparent during inspection. Newer construction utilizes adhesives to reduce the likelihood of squeaks. Their presence sometimes indicates that adhesive has been omitted. There are many other causes of squeaks as well. Sometimes squeaks can be minimized by removal of carpeting and screwing the subfloor to the joists.

802 Walls:
Condition typical of age and use, visual limitations apply

The walls show minor cosmetic concerns typical of a home of its age and type of construction. There is some unevenness, mechanical damage, drywall joints, plaster cracks, failing wallpaper/wall surfaces, evidence of previous repairs, staining, damaged areas at corner under windows, painting touch-up/discoloration etc. No further recommendation----repair/replace/maintain as desired.
Homes that have been staged sometimes have hidden damage that only becomes apparent when things are moved out. Check hidden areas to your satisfaction and bring any defects to the attention of the builder/seller for repairs to your satisfaction.

- Upgrade
- Maintain

803 Ceilings:
- Conditions typical of age and use, visual limitations apply

  Like the walls some of the ceilings show minor cosmetic concerns typical of a home of its age and type of construction. There is unevenness, minor mechanical damage, plaster cracks, falling wallpaper/wall surfaces, evidence of previous repairs, painting touch-up/discoloration etc. No further recommendation----repair/replace/maintain as desired.

- Upgrade
- Maintain

804 Stairs & Railings:
- Repairs/improvements recommended and/or necessary

  A proper and secure handrail should be provided for all interior stairs. Stairs that are open on one or both sides should have openings no greater than 4 inches. To prevent a trip hazard, stairs should have a consistent rise and run. Doors should open to a landing, not into a stairwell.

  In new construction, accessible space under stairs should have walls, under stair surface and any soffits protected on the enclosed side with 1/2-inch (12.7 mm) gypsum board.

  It is very common for stairs to the basement and attic levels in homes of this age to not meet current standards. Improper side barriers, handrails, tread spacings, head room etc. Changes to these stairs for safety may be warranted but often times adjustments are difficult and/or expensive.

  It is very common for stairs to the basement to be of lower quality than stairs in finished areas of the home. Improper side barriers, handrails, tread spacings, head room etc. Changes to these stairs for safety may be warranted but often times adjustments are difficult and/or expensive.

  The barrier railings at the basement stairs do not meet current spacing requirements (less than 4”) and upgrading for safety is recommended. Openings in guards larger than 4” represent a safety hazard for small children. Consult with railing installation contractor as to options.

- Evaluate
- Repair/Replace/Install
- Safety

  Modern standards require that stairwells be a minimum of 36” wide. Stairwells to Attic spaces and Second floor remodeled areas are often less than 36” wide, are steep and have other defects. Care must be exercised using these stairs to avoid injury to persons. Relocation/changes to these stairs (while recommended) is usually very difficult.

- Upgrade
- Evaluate
- Repair/Replace/Install
- Safety

  Improving of the hand railings of both sets of stairs by a qualified stair railing installation company, so that the ends return to the wall, is recommend for improved safe use of the stairs. Handrail ends should be either returned to the post, returned to the wall, or should terminate at newel posts or safety terminals. Ends that are not properly terminated can snag belongings and lead to injuries of persons using the railings.
**805 Fireplaces:**

D. Repairs/improvements recommended and/or necessary

Chimneys of solid fuel burning fireplaces should be cleaned as necessary. Excessive creosote buildup may result in a chimney fire. When buying a new home it is a good idea to establish a cleaning and maintenance history for the fireplace/chimney by having it cleaned upon taking occupancy and prior to use.

Maintaining/refurbishing these old chimneys/fireplaces suitable for use as wood burning fireplaces can be difficult and may not be cost effective. As a safety and energy efficiency upgrade I recommend conversion of the fireplace to a gas type fireplace by a qualified gas fireplace installation company. If these units are to be used for wood burning a full evaluation/repair of all fire-boxes/chimneys is recommended by a qualified masonry contractor that specializes in masonry fireplaces.

The hearth is in poor condition and should be repaired by a qualified party as desired.

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The damper was open at the time of inspection and the handle fell out of place during testing. This causes heat to be continually exhausted up the chimney. Keeping the damper closed when the fireplace is not in use is recommended to prevent heat loss. Having a glass enclosure professionally installed over the fireplace opening is recommended to improve efficiency. I recommend evaluation/repairs and/or replacement as deemed necessary by a qualified party.
Inspection Limitations / Exclusions:

- Furnishing/Storage/Staging limited inspection
- Floor coverings over concrete limited inspection of Concrete Slab. Hidden conditions are common, including: cracks, settlement etc.
- Area-Carpets limited inspection of floors: hidden conditions are common, including: previous repairs, water & pet damage etc.
- Sleeper floors over concrete limited inspection of Concrete Slab. Hidden conditions are common, including: cracks, settlement, or even whether there is concrete present etc.

No comments are offered on cosmetic finishes.

Effectiveness of the chimney draw is not determined.

If the home was furnished (or “Staged”) at the time of the inspection, not all interior finishes were visible. I advise a careful walk through once all furnishings are removed.

**PETS/PESTS** – No determination was made regarding any damage and/or lingering odors/waste that may exist from pest infestation or household pet activity, unless specifically noted. Such conditions may not surface or become apparent for some time or until carpeting or other obstructions are removed. If pets have been kept in the house, there are likely some resultant conditions or residue.

**Non-Wood Destroying Organisms (Household Pests):**

While this inspector may comment on evidence of Rodent or other vermin activity within the home, it is beyond the scope of this inspection to determine the "current" presence or absence of Rodents/Vermin.

None indicated--visual limitations apply
## Main Floor Full Bath:

### Floors:
- **Tile**
  - Some *mechanical* damage tiles noted
  - Some *cracked* tiles noted

### Walls:
- **Plaster**

### Ceilings:
- **Plaster**

### Sink:
- **Flow of water**:
  - Flow of water apparent
  - Leaking at control lever
  - Functional flow worsens with multiple fixtures running
- **Water shut-offs present**

### Sink Drainage:
- Sink drained
- Pop-Up Stopper:
  - Pop-Up stopper not functional

### Type of sink:
- Porcelain
- Pedestal

**Verify that sink is properly attached and caulked to the wall**

### Tub/Shower:
- **Flow of water at tub**:
  - Water flowed
- **Flow of water at shower**:
  - Water flowed
  - Functional flow inadequate when multiple fixtures are running

### Tub Drainage:
- Water drained
- Pop-Up Stopper missing

### Type of tub:
- Cast Iron Tub
  - Stains present---consistent with age of tub

### Tub/Shower Walls:
- Tile/Stone Wall enclosure
  - **Caulk noted at tile wall/tub connection**
    - Caulking the connection between the tile and the tub can trap moisture that gets behind the tile and prevent it from having a way out of the wall.
    - This connection should be maintained well sealed with sanded caulk, or grouted, but not just caulked.

### Enclosure:
- **Curtain Rod**:
  - Present

### Safety Glass:
- **Windows around tub**:
  - Glazing within 60° of tub and less than 60° above the floor
  - *Window safety glass not determined-----I recommend verifying that safety glass etching is present for safety*

### Toilet:
- **Flow of water to toilet**:
  - Flow apparent
  - Water shut-off present

### Flushed properly at time of inspection
- Tank lid is broken

### Bowl:
- Caulked to floor
### Accessories:
- Towel bars/hooks present
- Toilet Paper holder present

### Exhaust Fans:
- **Shower Area Vent Fan:**
  - Vent holds tissue paper
- **Through the wall type**
  - Venting to exterior:
    - West side of home
- **Exterior Cap**
  - Exterior cap with back draft damper is present

### Heat:
- **Forced Air**
  - Rise in temperature noted during operation of heating system

### Upper Bathroom:

#### Floors:
- **Vinyl**
  - Stains and Mechanical damage to vinyl floors is common. This inspector while making note of staining, can often not make any conclusions as to the cause of the stains/mechanical damage.
  - Areas with discoloration consistent with Past moisture under the vinyl

#### Walls:
- Drywall

#### Ceilings:
- Drywall

#### Sink:
- **Flow of water:**
  - Flow of water apparent
- **Sink Drainage:**
  - Sink drained
  - Pop-Up Stopper:
    - Pop-Up stopper not functional
- **Type of sink:**
  - Cast Plastic-----with integral top and backsplash

#### Cabinets:
- Stained Finish Wood Cabinets
  - Past water leaks under sink in cabinet evident----tested negative for moisture at the time of inspection----I recommend monitoring

#### Toilet:
- **Flow of water to toilet:**
  - Flow apparent
  - Water shut-off present
  - Flushed properly at time of inspection
- **Bowl:**
  - Caulked to floor
  - Past leaking noted

#### Accessories:
- Towel bars/hooks present
- Toilet Paper holder present

#### Exhaust Fans:
- None present---**strongly recommended**
  - Would be required by current standards

#### Heat:
- None present / is recommended even if not required
The interior of the bathroom(s) have been repainted recently. This painting often times conceals damage to the walls and ceilings that would otherwise be apparent. Water damage, repairs, cracks, stains and poor paint coverage are some of the conditions that might be concealed. Some of these conditions will reveal themselves over time.

901 Floors / Walls / Ceilings:
- Conditions consistent with age and use
  - Condition of walls and ceilings consistent with other walls and ceilings throughout the home.
    - Upgrade
    - Maintain
  - There is some cracking of the main floor bathroom tile floor, consistent with age and use. Upgrade as desired.
    - Upgrade
    - Maintain

902 Sinks & Faucets:
- Repairs/improvements recommended and/or necessary
  - Fixtures shutoff valves to faucets (and toilets) are not tested during an inspection, as they have generally not been used for some time and are prone to leakage if turned on or off.

The pop-up stopper is missing/not functional at both of the bathroom sinks. The faucet on the Upper Bathroom sink is broken on the cold side. I recommend repairs by homeowner/handyperson. These pop-up stoppers are readily available at Lowes/Home Depot.

There is also staining below the sink in the upper bathroom that should be monitored. It likely will leak again. I recommend evaluation/repairs and/or replacement as deemed necessary by a licensed plumber or other qualified party.

903 Cabinets, Countertops & Accessories:
- No defects noted, visual limitations apply---conditions consistent with age
  - The countertop to backsplash and sink to countertop connections in bathrooms should be kept sealed with appropriate caulk.

904 Bathtubs, Faucets & Enclosure:
- Repairs/improvements recommended and/or necessary
Caulk and/or grout adjacent to tub and shower surrounds should be maintained in good condition to prevent leakage and resulting wall or floor damage. Deteriorated caulk or grout should be removed prior to re-caulking. Proper sealing of all of the grout joints is recommended.

The grout around the bottom of the tiles where they connect with the tub have been caulked over. Caulking this connection can result in trapping of moisture behind the tiles/caulk resulting in mold growth behind the caulk. This connection should either be grouted only or per current best practice recommendations should be filled with sanded caulk. I recommend proper repairs of this connection by a qualified tile installation company.

The grout around the bottom of the tiles where they connect with the tub have been caulked over. Caulking this connection can result in trapping of moisture behind the tiles/caulk resulting in mold growth behind the caulk. This connection should either be grouted only or per current best practice recommendations should be filled with sanded caulk. I recommend proper repairs of this connection by a qualified tile installation company.

The pop-up stopper is missing in the Bathroom tub. I recommend repairs by qualified plumber or other qualified repair person. These pop-up stoppers are readily available at Lowes/Home Depot.

The window within 60" of the tub/shower (the bottom of which is less that 60" from the floor) in the Main Floor Bathroom does not appear to be safety glass and could cause injury to person if it were to break or if someone was to fall against it. I recommend replacement of the glass with safety type glass by a qualified glass installation company---perhaps in conjunction with upgrading of the windows.

### 905 Shower Stalls, Faucets & Enclosures:
- N/A

### 906 Toilets:
- Repairs/improvements recommended and/or necessary

Toilets should be tight on the floor, as a loose toilet can be prone to leakage. Floor damage or evidence of excess moisture adjacent to the toilet base may indicate a faulty wax seal at the toilet to floor connection.

The lid on the toilet tank of the Main Floor Bathroom is broken. Replacement may require replacement of the toilet. I recommend evaluation/repairs and/or replacement as deemed necessary by a licensed plumber or other qualified party.
### 907 Ventilation / Heat:
- ☑ Repairs/improvements recommended and/or necessary

Bathrooms with a tub or shower should have ventilation provided by an opening window or an exhaust fan vented to the building exterior. Ducts serving exhaust fans should not terminate in the attic, and should be insulated to prevent condensation.

The upper bathroom has no ventilation fan. Bathrooms are particularly susceptible to moisture build-up and should always include mechanical ventilation to the exterior (even if not required at time of construction). I recommend that a proper timer controlled exhaust fan be installed in the bathroom by a qualified ventilation contractor.

- ☑ Upgrade
- ☑ Evaluate
- ☑ Repair/Replace/Install
- ☑ WDO (Wood Destroying Organisms & conducive conditions)
- ☑ Maintain
- ☑ Energy Conservation & IAQ

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**Inspection Limitations / Exclusions:**

Sink and Tub overflows are not tested.

**Concealed plumbing, including the water-tightness of shower pans, is beyond the scope of this inspection.**

No determinations were made regarding adequacy of, or need for, supplemental bathroom heating or any such supplemental units currently installed.
### Kitchen, Floor/Walls/Ceiling:

**Tile areas:**

When buying a home with tile floors, it is important to keep in mind that it is not within the scope of a Standard Home Inspection to determine if loose tiles are present. This is obviously true in areas that are covered with belongings and/or carpets. Cracks in tiles and/or grout are often consistent with loose tiles and any such conditions noted should be seen as an indication of at least some loose tiles. Typically tiles can be re-adhered without difficulty but it can sometimes be an indication of inadequate substrate and/or installation that would be difficult to determine in the course of the inspection.

- **Evaluate**
- **WDO** (Wood Destroying Organisms & conducive conditions)
- **Maintain**

#### Floors:
- Tile

#### Walls/ceiling:
- Plaster

#### Heat
- Not determined-----I recommend verifying heat source to room

### Cabinets & Countertops:

#### Countertops:
- Partially visible due to belongings present
- Tile
- Back Splash:
  - Same as countertops

#### Cabinets:
- Plastic Finish Cabinets
  - Some delamination of edge materials noted
- Euro-Style Hinges
  - Loose hinges noted
  - Euro-Style hinges are prone to loosening, and need to be tightened periodically.
  - **Maintain**

#### Sink:
- Flow of water:
  - Water flowed
- Sink drainage:
  - Sink Drained
- Type of sink:
  - Enamel Cast Iron
  - Hot Water Tap
  - Single bowl
  - Past water leaks under sink in cabinet evident----tested negative for moisture at the time of inspection----I recommend monitoring
  - Sink not properly caulked at connection with countertop

### Dishwasher:

- **Make:** Miele
- **Model #:** G842U PLUS
- **Serial #** 2765028537
- **Est. Age (mfg):** 2006
  - 10 Years old (Average expected life, 12yrs)
- **Water shut-off valve:**
  - Not determined-----verify that water shut-off is present--may be in basement below unit
- **Function:**
  - Turned on, run through "rinse" cycle
  - Secured in opening:
  - Air Gap Device:
Air Gap device missing / but is recommended

Without an air gap, there is always a chance (however slim) of siphoning contaminants from your sewage system into your drinking water system.

Dishwasher drain hose terminates at:
Garbage disposer

Electrical connection:
Electrical disconnect at Electrical Service Panel

“Lockout device” is NOT present / but recommended

A “lock-out” device on the circuit breaker for the Dishwasher is to ensure the safety of service personnel working on the Dishwasher, and is required/recommended when the Dishwasher is not within sight of the electric panel. I recommend that when a licensed electrician is on the premises for other reasons, that a lock-out device appropriate to the Dishwasher breaker be installed.

Garbage Disposer:

Manufacturer Information:
Leaking of Garbage Disposers is common and can occur where not visible at the time of inspection—especially units approaching their expected life. It would be unlikely a disposer would be tested at the time of inspection in a manner that duplicated real life use. Monitoring is recommended.

Make: In-Sink-Erator
Model #: PRO ESSENTIAL
Serial # 09051834996
Est. Age (mfg): 2009
7 Years old (Average expected life, 10yrs)

Function:
Unit operated, using switch

Electrical connection
Improper power cord attachment

Drain Guard:
Present

Hot Water Tap

Make: In-Sink-Erator
Model #: SST
Serial # 11118771464
Est. Age (mfg): 2011
5 Years old (Average expected life, 11yrs)

Temperature:
184 Degrees F

Hot water taps can get VERY hot and can easily scald small children or others unaware. Great care should be exercised in allowing children and the infirm to have access to this hot water source. Child-safe faucets are recommended.

Range:

Manufacturer Information:
Est. Age (mfg), Model # & Serial # NOT determined---data plate missing

Anti-Tipping Device:
To prevent injury to persons, when heavy objects are placed on the oven door in the open position, the installation of an anti-tip device is required on most ranges.

Not Determined, I recommend verifying

Function:
Left Rear burner not functional

Condition:

Refrigerator:
Manufacturer Information:
Make: Kitchen Aid
Model #: KSRS25IHSS02
Serial #: SL1230500
Est. Age (mfg): 2001
15 Years old (Average expected life, 17-19yrs)

Operation:
Operational

Refrigerator Temperature:
Maintaining proper temperatures inside of refrigerators/freezers can be difficult. Obtaining thermometers to place in refrigerators and freezers to continually monitor interior temperatures is recommended for food safety.

Safety
Maintain

When the temperature of the refrigerator compartment is above 38 degrees F, the setting should be lowered for the safe keeping of food.
When the temperature of the freezer compartment is above 5 degrees F, the setting should be lowered for the safe keeping of food.

Verify proper temperatures

Ice Maker
Ice Cubes present

Ice Dispenser
Not operated

Water Tap
Not operated
Not functional

Piercing Valve Seen at:
Laundry area
Piercing valves are connections to the supply piping that are frequently used to achieve water supply to the Refrigerator. They are prone to leaking/failure. As an upgrade I recommend installation of a proper "T" with shut-off by a qualified plumber.

2nd Refrigerator and/or freezer: Located in:

Manufacturer Information:
Basement
Not Inspected

Built in Microwave/Hood Vent:

Manufacturer Information:
Heated wet paper towel at 20 seconds
Make: Samsung
Model #: ME16H702SES
Serial #: 078N7WTF802958E
Est. Age (mfg): 2014
2 Years old (Average expected life, 11yrs)

Filters/Grease Screens are present
With Exhaust Fan
Re-circulating (vents to interior)
Some means of mechanical ventilation is required by modern standards

Unit not on dedicated circuit

KITCHEN

1001 Floor / Walls / Ceiling:
Conditions consistent with age and use---some upgrading might be warranted
Kitchen flooring, walls, and ceiling are inspected for noteworthy damage. Cosmetic flaws are not generally reported.

1002 Cabinets & Countertops:
Conditions consistent with age and use
The countertop to backsplash and sink to countertop connections should be sealed with appropriate caulk.

The Kitchen cabinets are older style painted wood cabinets and are consistent with age and type of construction. Doors and drawers that do not operate properly are common with these older cabinets. Non adjustable shelves and drawers without runners are typical. The fronts of drawers are often poorly attached to the drawer boxes and evidence of past repairs is common.

There is some minor delamination and mechanical damage of the laminate countertops. Upgrade as desired.

The shrink-wrap finish cabinets are prone to damage from heated surfaces such as ranges. While primarily a cosmetic issue, replacement of the doors with more durable types of materials is recommended. Consult with qualified cabinet installation contractor as to options. Delamination was noted at many locations with some mechanical damage to surfaces as well. Replacement is likely the best solution.

Some damage noted at cabinets next to range.

1003 Sinks & Faucets:
- No defects noted, visual limitations apply

As with bathroom sinks, the supply shutoff valves to the faucets are not tested. Inspection of the sink includes testing faucets, drain fittings, vegetable sprayer (if applicable), and functional flow and drainage. All sinks and faucets should be properly sealed with caulk at their connections to sinks/countertops.

1004 Range / Oven (s):
- Repairs/improvements recommended and/or necessary

Ranges, cook tops, ovens, and exhaust fans are checked for basic function, including controls, door seals, exhaust venting, hinges, lights, etc. Thermostat calibration is not tested. Self-Cleaning functions are not tested.

I did not verify that the anti-tip device is properly installed on the range. I recommend further evaluation and repairs as deemed necessary by a qualified appliance installation contractor---perhaps in conjunction with repairs to the Microwave/hood to be discussed later in this report.
The left rear burner was not functional at the time of inspection. I recommend evaluation/repairs and/or replacement as deemed necessary by a qualified party.

**1005 Range Hood Vent: See, 1006 Microwave/Hood Vent:**

**1006 Built in Microwave/Hood Vent:**
- Repairs/improvements recommended and/or necessary
  - The hood to the range does not vent to the exterior. These hoods collect grease and can be a fire hazard if not maintained properly. I recommend that a proper hood, vented to the exterior, be installed by qualified ventilation company. Kitchen exhaust fans can help control the overall moisture levels in the home.

**1007 Dishwasher:**
- Repairs/improvements recommended and/or necessary
  - The dishwasher is not properly vented. I recommend that when a qualified plumber is at the home for other reasons a proper vent (air gap device) per the requirements of this jurisdiction. Some minor cosmetic mechanical damage was noted to the face of the appliance.

**1008 Waste Disposer:**
- Repairs/improvements recommended and/or necessary
  - Because the inspector does not grind anything when the unit is tested, no other statement about its function can be made.

  See electrical section regarding wiring to Disposer.

**1009 Refrigerator:**
- Repairs/improvements recommended and/or necessary
  - The water dispenser for the refrigerator was not functional for unknown reasons. I recommend evaluation/repairs and/or replacement as deemed necessary by a qualified party as desired.

**Inspection Limitations / Exclusions:**
- Furnishing/Storage/Staging limited inspection
- Area-Carpets limited inspection of floors: hidden conditions are common, including: previous repairs, water & pet damage etc.
- Some appliances not inspected or only partially inspected
  - Refrigerator
  - Dishwasher
  - Disposer
  - Microwave
Evidence of past leaks under kitchen sinks is common. While I endeavor to verify current leaks at the time of inspection sometimes leaks are incidental or due to specific uses not duplicated at the time of inspection. Monitoring of moisture conditions under sinks should be a normal part of routine home maintenance.

Appliances are not moved during the inspection.
Dishes and other kitchen storage items can limit inspection of cabinets and countertops. These areas should be reviewed during a final walk-through.

Oven self-cleaning operation, timers, and thermostat accuracy are not tested.
Refrigerators, freezers, water dispensers, and ice makers are not tested.
Portable appliances are not tested.
**Floors / Walls / Ceilings:**

- **Floors:**
  - Interlocking foam pads in some areas
  - Concrete

- **Walls:**
  - Damage to walls behind washers and dryers is very common and should be anticipated
  - Drywall
  - Concrete

- **Ceilings:**
  - Unfinished

**Vent Fan to Outside:**
None present but recommended

**Laundry Sink:**
- **Flow of water:**
  - Flow apparent
  - Water shut-offs present

- **Sink Drainage:**
  - Sink drained

- **Type of sink:**
  - Plastic
  - Stains present

**Cabinets & Countertops:**
Not inspected

**Heat:**
Furnace in same area

**Appliances:**

**Dryer:**
- Did not operate Dryer
- Make: LG Electronics
- Model #: DLE7177RM
- Serial #: 612K2Z6H06813
- Est. Age (mfg): 2006
  - 10
- Electric

**Dryer Venting:**
- Transition Duct (Dryer to permanent vent pipe)
  - Smooth wall metal vent pipe
  - X Maintain

  Dryer exhaust should vent to the exterior and the vent cap and vent pipe should be maintained free of lint as the build-up/blockages of lint can be a fire hazard.

**Vent pipe from Transition Duct to point of termination at Exterior:**

Dryer vent pipe requirements for any particular brand of dryer cannot usually be determined during a typical home inspection. All dryer manufacturers have maximum lengths of runs and those lengths can be greatly reduced by whether the vent pipe is vertical or horizontal, how many elbows the run has and even the type of termination cap. All new or replacement installations should verify that any piping already in place meets the requirements of the specific dryer manufacturer and modified as deemed necessary by the appliance installer per manufacturer's installation instructions.
Louver type cap
Damper NOT functional
Painted shut

Washer:
Did not operate Washer
Make: ______________________________
Est. Age (mfg), Model # & Serial # NOT determined
Model #: ______________________________
Serial #: ______________________________
Est. Age (mfg) NOT determined
Hot & Cold Supply:
Water shut-off's present
120 Volt Washer Outlet
Not GFCI protected---upgrading recommended
Drain in Laundry Tub

LAUNDRY

1101 Floor / Walls / Ceiling:
× N/A---semi-finished space

1102 Cabinets & Countertops:
× Not inspected

1103 Sinks & Faucets:
× Repairs/improvements recommended and/or necessary
The washing machine currently drains to the laundry sink. I recommend that a proper stand pipe be installed for the washing machine so that it doesn't have to drain into the sink.
× Repair/Replace/Install
× Safety
× Maintain

1104 Appliances Connections / Installation:
× Repairs/improvements recommended and/or necessary
Washing machine drain lines can be difficult (if not impossible) to fully assess in the context of a Standard Home Inspection. Back-ups and clogging of these drains is very common. Sometimes the drain only backs up after two or three loads and appears to drain satisfactorily with only occasional loads of laundry. Monitoring of these drains while using the washer is encouraged until a realistic level of confidence about the drains functionality can be determined. Water coming out of the drain indicated poor drainage and should be further evaluated by a qualified plumber.

Rubber hoses on washing machines are under constant pressure and are at risk of spontaneous rupture. Consider upgrading these hoses to newer stainless steel jacketed types; monitor existing hoses frequently.
× Upgrade
× Repair/Replace/Install
× Safety
× Maintain

GENERAL DRYER SAFETY INFORMATION & RECOMMENDATIONS:
Dryer exhaust ducts should be independent of all other systems, should convey the moisture to the outdoors, should terminate on the outside of the building in accordance with the manufacturer's installation instructions and should be equipped with a back-draft damper.
Exhaust ducts (from the Laundry Room wall to the point of termination at the exterior) should be constructed of rigid metal ducts, having smooth interior surfaces with joints running in the direction of air flow. Screens should not be installed at the duct termination. Exhaust ducts should not be connected with sheet-metal screws or any means which extend into the duct. (Screens and screws can trap lint.)

Transition ducts from the Dryer to the wall duct system must be UL-2158A listed and approved for the installation. Plastic ducts should never be used. Flexible corrugated metal pipe (fully stretched and cut to shortest length possible) or smooth wall metal pipe is considered the best choice. No type of Flexible foil pipe is allowed by most manufacturers even if the transition duct has a UL-2158A Standard listing.

Every dryer should have a screen filter to help keep dryer lint from entering the vent pipe itself. This filter must be maintained clean at all times and clogging this screen will result in increased drying time as well be a fire hazard. Some fabric softeners, sheet or liquid types, also clog these screens and air flow is reduced even when the screen "looks" clean. Avoiding these products is recommended and using more natural alternatives is a possibility.

For additional information on Dryer venting see the Consumer Products Safety Commission website at: 


The dryer exhaust cap at the west side of the home is painted shut. I recommend evaluation/repairs and/or replacement as deemed necessary by a qualified party to allow for proper venting of the appliance.

The dryer should not be used until repairs are made to the circuit breaker that protects the dryer circuit.

Inspection Limitations / Exclusions:
Storage in Laundry Room
Connections concealed behind washer/dryer
Washers and Dryers are not typically operated but are checked for how they are installed, vented, drained etc.
Appliances are not moved during the inspection.
Timer and thermostat accuracy are not tested.
## WOOD DESTROYING ORGANISMS

### & Household/Yard Nuisance Pests & Mold or Mold-like/Fungal Growth

### 1200 Wood Destroying Organisms (Insects & Fungi & Conducive Conditions):

- Repairs/improvements recommended and/or necessary

| In accordance with the provisions of the Revised Code of Washington (RAW) 15.58.450, this report relates to a single sale, transfer, exchange, or refinance and is not transferable to and may not be relied upon by parties involved in any subsequent sale, transfer, exchange, or refinance of the same property. |
| The findings listed within this report are determined by the inspector based on a visual inspection conducted in accordance with Washington Administrative Code (WAC) 16-228-2005 through 2045 and are subject to the limitations within this report, the standards listed below, and as modified by any and all associated reports attached. |
| This inspector endeavors to perform their services in a professional manner consistent with the care and skill ordinarily exercised by structural pest inspection professionals. This inspector will re-perform any services not meeting this standard without additional compensation. In any case, the inspector's total liability is hereby limited to amounts paid to the inspecting firm for the inspections made of the inspected structure. |
| For every inspection a "site-plan" diagram is prepared detailing the locations of Wood Destroying Organism issues. "WAC 16-228-2045 requires that a diagram be prepared for WDO Inspection Reports. A copy is available upon request." |

**Specific locations of Wood Destroying Organisms and Conducive Conditions are more completely described in the report component where the organisms and/or deterioration and or conducive condition was observed. This section gives more detailed information on the life cycles/habits of the various organisms and their recommended treatment/remediation; and, lists where the organisms were seen but does not preclude the possibility of other locations.**

### Wood Destroying Insects:

#### Moisture Ants:

*Moisture Ant* colonies typically start in already decayed wood and are considered a secondary infestation. Their nests are designed to promote moisture and further decay of the wood they cover. Removal of the damaged wood and replacement with sound wood will be required. Moisture ants require moisture to thrive, and eliminating the moisture source must be part of control measures.

There is evidence of past infestation of Moisture Ants in the floor structures at the SE corner of the living room visible from the crawl space.

- **WDO** (Wood Destroying Organisms & conducive conditions)

### Wood Decay Fungi:

*Wood Decay Fungi* (wood rot), are filamentous organisms which begin as microscopic spores that land on the surface of wood, and germinate to produce thin strand like cells called hyphae. Hyphae grow through the wood and secrete enzymes which degrade and weaken the wood. Decay requires: (1) adequate moisture, (2) ambient temperature (32° to 110°), (3) oxygen, (4) a food source. Wood moisture levels above 20-30% are considered conducive to wood fungal rot. Damaged wood typically will need to be replaced. Ultimately the source of moisture must be eliminated even if all of the fungal organism cannot be eliminated.

There is evidence of Fungal rot at some trim components too close to the ground and in water damaged area of the floor system at the SE corner of the living room.

- **WDO** (Wood Destroying Organisms & conducive conditions)

### Conducive Conditions:

*Conducive Conditions*, consists of any materials on the property or in the crawl space that can provide food or habitat for wood destroying organisms. These materials can consist of plumbing leaks, form boards left in place, storage items, roots and other vegetation etc.

Inadequate clearances to finish grade are considered a conducive condition.
Inadequate termination of roof water drains is a conducive condition.
Decaying tree stumps around the home are considered a conducive condition.
There is minor conducive debris located at several locations in the crawl space
Missing crawl space ventilation is considered a conducive condition.
Leaks through the foundation are considered a conducive condition.
Elevated moisture levels in finished floors is considered a conducive condition.
Any home with below grade finished spaces are by definition more vulnerable to leaks and water infiltration
and therefore must be considered a conducive condition tempered by whatever provisions have been made to minimize
water impact. Monitoring of these spaces for signs of moisture issues is a normal part of maintaining homes with
finished spaces below grade.
Sleeper floors installed over basement floors can lead to conducive conditions.
Clogged gutters is considered a conducive condition.
Roof downspouts that terminate next to the foundations is considered a conducive condition.
Improper roof ventilation is considered a conducive condition.
Missing caulk at exterior trim/siding components is considered conducive conditions.
Improper/missing deck flashings are a conducive condition.
Concrete stoops installed over trim boards is considered a conducive condition.
Untreated wood components buried in dirt are considered conducive conditions.
Pain failure at exterior trim/siding.
No exhaust vents in kitchen is considered a conducive condition.

**1200-B Household / Yard Nuisance Pests:**

[ ] Repairs/improvements recommended and/or necessary

**Rodents:** There are many rodents that represent a nuisance as well as health hazards within homes. Rats (Norway
Rats and Roof Rats), squirrels, mice (including White Footed Deer Mice), and voles are common in our area. Control of
these animals when they become a nuisance requires many different solutions and often professional intervention by
a licensed Pest Control Operator. Vermin that enter homes must be kept out by properly maintaining the home well
sealed against infiltration and restricting food sources by keeping the premises clean with food sources inaccessible.

There is evidence of past/ongoing infestation of rodents in the attic as indicated by screening installed above the
gutter. If further evidence is noted, proper treatment by a licensed pest control operator is recommended.

**1201 Mold or Mold-like/Fungal Growth:**

The Standard Home Inspection does not attempt to identify whether the type of Mold or Mold-like/Fungal Growth seen on
the premises are of types considered to have adverse health affects. Concerns regarding the toxicity of Mold or Mold-
like/Fungal Growth is deferred to Licensed Mold Specialists who should be contacted regarding any concerns that you might
have about Mold or Mold-like/Fungal Growth found on the property. Please see the information below regarding Mold from
the EPA.

**Mold** (a type of fungus) is a wood inhabiting organism, not a wood destroying organism.
Mold or Mold-like/Fungal Growth should be anticipated in relation to leaking under the basement floor covering in
the South Room.

**Ten Things You Should Know About Mold (from the EPA):**

1. Potential health effects and symptoms associated with mold exposures include allergic reactions, asthma, and other respiratory complaints.
2. There is no practical way to eliminate all mold and mold spores in the indoor environment; the way to control indoor mold growth is to control
   moisture.
3. If mold is a problem in your home or school, you must clean up the mold and eliminate sources of moisture.
4. Fix the source of the water problem or leak to prevent mold growth.
5. Reduce indoor humidity (to 30-60%) to decrease mold growth by: venting bathrooms, dryers, and other moisture-generating sources to the
   outside; using air conditioners and de-humidifiers; increasing ventilation; and using exhaust fans whenever cooking, dishwashing, and cleaning.
6. Clean and dry any damp or wet building materials and furnishings within 24-48 hours to prevent mold growth.
7. Clean mold off hard surfaces with water and detergent, and dry completely. Absorbent materials such as ceiling tiles, that are moldy, may need to be replaced.

8. Prevent condensation: Reduce the potential for condensation on cold surfaces (i.e., windows, piping, exterior walls, roof, or floors) by adding insulation.

9. In areas where there is a perpetual moisture problem, do not install carpeting (i.e., by drinking fountains, by classroom sinks, or on concrete floors with leaks or frequent condensation).

10. Molds can be found almost anywhere; they can grow on virtually any substance, providing moisture is present. There are molds that can grow on wood, paper, carpet, and foods.

The EPA and MOLD, [http://www.epa.gov/iaq/molds](http://www.epa.gov/iaq/molds)
The following link is a very good "practical" video about dealing with mold in the home:

NW Clean Air Agency, [http://www.nwcleanair.org/aqPrograms/indoorAir.htm](http://www.nwcleanair.org/aqPrograms/indoorAir.htm)
The following link is a very good source for the most current information regarding mold in the home:


- Monitor
- Evaluate
- Repair/Replace/Install
- Safety
- WDO (Wood Destroying Organisms & conducive conditions)
- Maintain

### Inspection Limitations / Exclusions:
Many Wood Destroying Organisms have dormant periods and can operate unseen behind walls and insulation. While I attempt to identify rot and insect infestation whenever I can, there can never be any guarantee that there are no infestations of any kind in the home just because infestations were not seen at the time of inspection. Maintaining the home free of Wood Destroying Organisms is an ongoing process that requires vigilance and immediate attention when discovered.

Some attic spaces were inaccessible at time of inspection
I recommend that the inaccessible areas listed below be made accessible for inspection and that I be called back for further evaluation/recommendations.

- All knee-wall attic spaces that require access should be made accessible for inspection and maintenance

Interiors of walls and finished floors/ceilings/roofs can not be "directly" inspected for Wood Destroying Organisms.

No treatment of Wood Destroying Organisms is provided as part of a Standard Home Inspection.

### Last but not least:
- Ask seller for samples or records of paint colors used on the premises.
- Ask seller for records of major improvement /repairs (remodeling, decks, pest treatments, electrical work, HVAC work, plumbing work, etc.).

Remember to get documentation related the installation of insulation over the knob & tube wiring in the attic.

- Ask seller for all available owner's manuals for: Furnace, Thermostats, Appliances, Lawn Irrigation System, Electric Wall Heaters, Water Heaters etc.
- Obtain keys/combinations to all locks.

Remember to get the remote for the paddle fan(s) if there are any.

Remember to get certificate of Oil Tank decommission/removal.