

Confidential Home Inspection Report

Prepared for: **Mr. House Hunter**

Any Street
Lynnwood, WA 98000

March 3, 2016



Seaview Home Inspections, LLC
6624- 163rd Pl. SW
Lynnwood, WA 98037
425-742-1735

Michael A. Brisbin, ACI
Owner/Home Inspector
WA State Home Inspector License #278
SeaviewInspections@comcast.net
www.SeaviewHomeInspections.com

This report is the exclusive property of the inspection company and the client whose name appears herewith and its use by any unauthorized persons is prohibited.

Inspection Report- Table of Contents

Cover page	1
INSPECTION INFORMATION	3
MAIN STRUCTURE	5
CRAWL SPACE	8
WOOD DESTROYING ORGANISMS (WDO/WDI) and PESTS	11
HEATING/HVAC SYSTEM	14
PLUMBING	17
BATHROOMS	20
ELECTRICAL SYSTEM	22
KITCHEN	25
LAUNDRY	27
VENTING/ENERGY/CONDENSATION	28
INTERIOR	30
FIREPLACE(S)	33
ATTIC SPACE	34
GARAGE/CARPORT	36
ROOF and COMPONENTS	38
EXTERIOR	41
GROUNDS	43
PHOTO GALLERY	44

Report Summary Pages

Pre- Inspection Agreement

ASHI Standards of Practice

INSPECTION INFORMATION

The purpose of the inspection is to identify significant visible and identifiable defects, problems and/or conditions that may adversely affect the function and integrity of the items, components and systems inspected. An inspection is intended to assist the Customer/Client in the evaluation of the overall condition of the home. The inspection is based on the observation of the visible and apparent condition of the building and its components *at the time of the inspection*. The inspection is of readily accessible areas of the home and is limited to visual observations only.

When an item is reported to "**Appear Serviceable**" it is defined *as capable of being used as it was intended* with no significant visible defects or problems noted. Some "serviceable" items may, however, show signs of wear and tear or age- but should be considered to give generally satisfactory service with the limits of its age and the type of system/component it is. Visible defects, concerns and potential problems are reported during the inspection.

Life expectancy of a component will not be determined during the inspection.

Any area which is not exposed to view, is concealed, or is inaccessible because of soil, shrubs, walls, floors, carpet, ceilings, furnishings, siding, insulation, being locked or by design **is not included in this report**. These areas will be deemed as: **inaccessible, no/limited visibility, unable to verify/inspect, not visible** and so on. The inspector may elect not to go into areas that may be deemed unsafe or could cause potential damage to the home or injury (i.e. crawl spaces, attic spaces, the roof, etc.). Every effort will be made to traverse, enter or inspect all components and areas of the home.

The inspection report is based upon the standard of what is typical, standard or average wear for a home of this age, compared to homes of comparable age, style and type. Houses are not considered perfect or without flaw (even new construction). Items reported in the Summary Page(s) may be considered significant concerns, maintenance items, things to be aware of (and budget for replacement) or potential problems in the near and upcoming future. *The Customer* will need to determine which item(s) poses the greatest concern when making the decision to have items repaired, replaced, serviced, etc.

Maintenance and other items may be discussed, but are not part of this inspection. This report is not a compliance inspection, code conformity or certification for past or present building codes, mechanical, plumbing, fire codes and regulations of any kind. Codes will not be discussed or referenced during this visual inspection. The inspection report should not be construed as a compliance inspection of any governmental or non-governmental codes or regulations.

The report is *not intended to be a warranty or guarantee* of the present or future adequacy or performance of the structure, its systems, or their component parts. This report does not constitute any expressed or implied warranty of merchantability or fitness for use regarding the condition of the property and it should not be relied upon as such. Any opinions expressed regarding adequacy, capacity, or expected life of components are general estimates based on information about similar components and occasional wide variations are to be expected between such estimates and actual experience.

Follow-up Inspections:

Follow-up Inspections may need to be performed to determine if the items or areas of concern, during the original Home Inspection, have been repaired, replaced, removed or corrected in a satisfactory and workmanlike manner. Wherever possible, all work requested to be repaired/replaced or corrected, **should be performed by a qualified, licensed professional** in that particular field and warranty provided as needed. Having a Homeowner/Seller repair or correct a defect will probably not provide a warranty for the work.

A written document (Addendum/Amendment) shall be provided to this Company as to what repairs/work are to be re-inspected, *prior to the Follow-up Inspection*. **Sufficient notice is needed to allow the Follow-up Inspection to be worked into the schedule of the Inspector. Please allow 5-7 working days to allow for proper scheduling.**

A **Third-Party Agreement** should be utilized in all transactions of repair/work performed. ***This Company will not take any responsibility of repairs, replacement, corrections performed by other companies or individuals.*** Concealed and hidden repairs cannot be inspected, attempts should be made to inspect items during the repair or renovation stage to determine if these repairs are being completed in a satisfactory manner and that all necessary repairs are being performed. An earnest effort will be made to determine/discover that all the repairs or replacements were made (based upon the requests from the initial inspection). **Follow-up Inspections do not imply warranty or guarantees, implied or expressed.**

A minimum Fee of \$ 250.00 will be charged for all Follow-up Inspections performed.

Customer & Site Information:

Report File #	030316.
WSDA Inspection Control #	10000BE000.
WA State Licensed Home Inspector:	Michael A. Brisbin, ACI- License # 278 ASHI Certified Home Inspector WSDA- Structural Pest Inspector # 44353.
Date of Inspection:	March 3, 2016.
Client Name:	Mr. House Hunter.
Inspection Location:	Any Street Lynnwood, WA 98000.

Climatic Conditions:

Weather/Temperature and Soils:	Overcast, Rain. Approx. Temperature: 40's Soil Conditions: Wet.
--------------------------------	--

Building Characteristics:

Est. Age of House:	Years: 10.
Approximate Size:	Square Footage: 2879.
Property Information:	Single Family.

Utility Services:

Water Source:	Public (this was not verified- recommend making an inquiry with the Seller/Homeowner)
Sewage Disposal:	Public (this was not verified- recommend making an inquiry with the Seller/Homeowner)
Utilities Status:	All utilities are on at the time of the inspection.

General Information:

House is currently-	Occupied and furnished- limitations apply.
Persons' present at the Inspection:	Buyer(s), Present during the Inspection process; Buyer's agent/representative.
Inspection Start/Finish Times:	9:00 AM- 12 Noon.
Disclosure Form:	Was not available for review at this time.

MAIN STRUCTURE

The structural support framing of a house is generally inspected for visual and apparent problems. Because most of the exterior frame is covered with cladding/siding, on the exterior, and wall coverings on the inside, it is usually not possible to inspect these components/areas. Sub-framing can be inspected from the crawl space sub-area, in most cases, or from unfinished basements. The roof framing usually can be inspected from the attic space, if one is available. These areas are inspected for defects in installation practices and alterations/modifications to the structure, damage from wood-decay fungal rot and moisture/insect damage. Determining structural integrity is not part of this visual inspection. Visible or known defects and damage will be referred to professionals who specialize in these fields- general contractors or engineers.

The foundation system has two functions. First, it supports the building structurally by keeping it level, minimizing settling, preventing uplift from forces of frost or expansion soils and resisting horizontal forces such as winds and earthquakes. Second, a foundation system keeps the wooden parts of the building above the ground and away from the organisms and moisture, in the soil, that may destroy wood and cause fungal rot wood-decay. There are three common foundation types: Slab-on-grade, crawl spaces, basements.

Minor cracks are typical in many foundation walls and most do not represent a structural issue/problem. If major cracks are present, along with bowing, this company routinely recommends further evaluation be made by a qualified structural engineer. All exterior grades should allow for surface and roof water to flow away from the foundation and house wall. This will help prevent excessive moisture build-up around the house and possibly under it, as well.

All concrete floor slabs experience some degree of cracking due to shrinkage in the drying process. This is often visible in the garage flooring, but may also be present under the floor covering of a basement or lower level (Split and Tri-level houses). The cause of the cracks may be from soil type or soils compaction, rapid drying of the concrete slab, minimal or no reinforcing in the concrete. In most instances floor coverings prevent recognition of cracks or settlement in all but the most severe cases. Where carpeting and other floor coverings are installed, the materials and condition of the flooring underneath cannot be determined.

Structure Type:

Two Story, with crawl space.

Foundation Stem Wall:

Type:

Concrete (solid), With cripple/pony walls construction; 2x4's used.

Conditions:

Overall Condition- Appears serviceable; No apparent structural defects noted at the time of the inspection. Anchor bolts/strapping was installed on the foundation wall, holding down the sill plate to the foundation wall.



Floor Support:

Type:

Engineered "I" Joists- manufactured Truss Joist framing.

Sub-Flooring:

OSB (Oriented Strand Board)

Conditions:

Overall condition- Appears serviceable. No significant problems noted at the time of the inspection.

Beams/Girders:

Type/Size:

Solid/Built-up: 4x10's.

Conditions:

Overall condition- Appears serviceable. No visible evidence of structural issues/problems noted during the inspection.

Posts/Columns:

Type/Size:

Solid/Built-up: 4x4's, 4x6's.

Conditions:

Concerns/issues noted at the time of the inspection;
- Several of the structural posts are in standing water in the crawl space at this time, or have been wet recently. Despite being pressure-treated wood, the wood posts are prone to fungal rot damage overtime. The metal brackets attached to the posts are rusted/corroded and may not restrain the posts anymore.
Recommend further evaluation of all the posts in the sub-structure framing after the water is removed, to determine if replacement is needed for the posts. Possible need to add raised footings and replace the posts, to allow for the proper clearance above the soils grade level. Recommend contacting a qualified, licensed contractor to make further evaluations and make all necessary repairs/corrections as needed.



Footings/Piers:

Type Material(s):

Concrete- Continuous/strip footings.

Conditions:

Appears Serviceable- Overall condition. No visible evidence of significant structural issues/problems noted during the inspection.

Bearing Walls:

Type/Conditions:

2x6 Construction; Overall Condition- Appears Serviceable. Limited access/inspection; these areas may not be completely visible or accessible, verification of these components is limited.

Roof Framing:

Type:

Engineered trusses; 2x4- Top chord. Conventional, stick-framed on the side attic space.

Rafter Size(s):

2x6's.

Sheathing:

OSB (Oriented Strand Board)

Conditions:

Overall Condition- Appears Serviceable. No visible defects or concerns noted at the time of the inspection.

Roofs are constructed either with rafters (conventional stick-framed), engineered trusses (most common for newer construction), open beams or some combination of these types and styles. Stick-framed roofs are usually made with dimensional lumber (2x material), but may also use composite/engineered materials. Stick-framed is still used in many cases because it is the most flexible roof framing system. This is often found in complicated roofing systems, vaulted ceiling and low pitched roofing.

Trusses (engineered) are usually of small wood members (usually 2x3, 2x4's or 2x6's) joined in the factory to make a long structural assembly. Trusses can span much farther than stick-framed roofs, leaving large open areas below them or permitting partition walls

to be located without consideration of the roof structure above. Trusses go up quickly, usually resulting in a cost saving over stick-framed roofs on simple shaped building. Trusses are designed to use the minimal amount of lumber, span longer distances and provide adequate support to the roof covering. Altering, modifying or damage to the trusses will usually result in inadequately supported framing- this is common to find when new skylights, chimneys or pull-down ladders have been installed in the roof framing. Correcting/repairing trusses should always be done by a qualified, licensed contractor. It is recommended that a truss engineer, or truss designer/manufacturer, evaluate and determine the best repair solution for the truss repair.

Basements (lower levels- which are below grade-level) can come in several forms; the completely finished, the completely unfinished and any form in between. The finished basement is considered livable space; finished walls/ceiling (drywall), floor coverings (carpet, vinyl, tile, laminated materials, etc.), mechanical systems (heat, plumbing, outlets/fixtures, etc.). The unfinished basement may be in the same condition as when the house was built- open walls, framing, exposed plumbing, wiring, heating systems, exposed concrete walls and flooring.

Finished basement may be difficult to completely inspect due to the wall, ceilings and floor coverings. The inspection is usually based on how the basement was finished. Many homeowners will finish the basement themselves- whether they're qualified or not. **Items to be aware of will be recent repairs, patching or painting; newer carpet or floor covering- were these items installed to cover problems?** Were electrical outlets/receptacles/fixtures installed properly in the walls and ceilings- the locations installed, the quantity and are they safe? Recommend making inquiries with the Seller/Owner about any recent finish work in the basement.

Unfinished (or partially finished) basements are a little easier to inspect- most of the components are exposed and are more readily accessible for inspection. It may be easier to inspect the foundation walls for cracks and water entry, the floor for water staining; improper wiring or plumbing and heating systems. The main restriction in basements is the amount of storage and personal belongings that may be present during the inspection. Shelving, benches and storage may not allow a complete inspection of the outer walls, floor or framing in some cases. The conditions, visible in the basement, may be quite different when the house is vacant. This company recommends a follow-up inspection of the basement if concerns/problems are present (and become visible) after the basement has been cleared of belongings.

CRAWL SPACE

The crawl space inspection has several purposes and is considered the most difficult part of the inspection. The inspection of the sub-area consists of several components; the sub-structure framing (joists, beams, posts, sub-flooring, etc.); the floor insulation; dampness/moisture problems and ventilation; wood-destroying insects and wood-decay fungal rot; mechanical systems (plumbing, heating ducts, electrical, etc.); accessibility of the entire sub-area.

The minimum requirement for the crawl space clearances is 18" below all the floor joists and 14" below the structural beams/girders. This provides adequate clearances for ventilation and "workable" space. However, there may be restrictions other than framing. The heat ducts and plumbing pipes (potable water and drain-waste pipes) also play a role in the accessibility of the crawl space. Many crawl spaces will have limited access due to the installation of these components. Other factors, which will limit access into the crawl space, may be excessive water on the floor, fallen floor insulation and excessive animal/rodent activity.

The floor insulation (when installed in the sub-framing) will obstruct the complete inspection of the sub-structure area. **All areas hidden by floor insulation are excluded from this inspection.** The majority of the sub-structure area may be excluded from the inspection when insulation is present; removing all the floor insulation, to inspect the framing, is very time consuming and is not part of this inspection. Every effort will be made to inspect areas that may be prone to problems. Exposed areas will be inspected; the inside perimeter of the crawl space, the corners of the crawl space, plumbing/bathroom areas, behind patios, porches, concrete steps and where staining or WDO signage may exist. Where floor insulation is fallen down/hanging, the removal of all fallen/damaged is recommended and an interim inspection should be performed to determine if any additional work is necessary.

Conditions Observed:

Access Location:	Interior of the house; Entry closet.
Access Conditions:	Access opening/framing to the sub-structure crawl space, appears serviceable and is functioning as intended.



Accessibility into Sub-Area:	Sub-structure crawl space is reasonably accessible- clearances are ample/adequate at this time, in most areas. Entered the sub-area for a full inspection.
Floor Type:	Dirt/Silt-type soils.
Dampness/Moisture:	<p>Evidence of excessive water/moisture conditions in the crawl space. Standing water under/above the plastic vapor barrier; standing water is present in over half the crawl space sub-area (limited access to all areas). Several of the wood posts are below the water level, or are covered with mud-sediment.</p> <p>Water entry through the foundation wall, located under the fireplace area; most of the water appears to be from high ground water.</p> <p>Recommend consulting a qualified, licensed professional drainage contractor for evaluation and recommendation for the best solution on removing/eliminating any excessive moisture conditions that may be present and provide a drainage solution to permanently remove any excess water/moisture from the sub-area. Recommend evaluations of the roof drainage system (dye testing if needed), surface drainage around the house and ground water to determine if these contribute to the water/moisture issues in the crawl space. Recommend eliminating all excessive moisture and conditions that may be present in the crawl space sub-area.</p>



Photo:



Vapor Barrier: The vapor barrier appears to be in poor condition: Plastic is covered with, mud/silt from past flooding, fallen/damaged fiberglass insulation. Recommend complete removal of the old plastic vapor barrier(s) in the crawl space sub-area, prior to installing the new materials. Recommend installing new **6 mil., black polyethylene plastic sheeting** to cover all soils in the crawl space. Overlap plastic at least 12" at all joints; do not run plastic up the base of the wood posts or framing, and secure the plastic with stones/bricks or fasteners to prevent movement.

Ventilation: Ventilation appears to be adequate/sufficient at this time. The quantity and location of the foundation vents appear to provide adequate air flow in the crawl space sub-area.

Sub-Floor Insulation: Fiberglass; Estimated R-factor: 19 (+/-). Evidence of rodent nesting and/or damage to the sub-floor insulation; urine staining, droppings and debris noted on/in the sub-floor insulation. Recommend removing and replacing all the damaged and infested sub-floor insulation in the crawl space sub-area as needed. All infested insulation should be removed. Recommend replacing insulation with similar R-value or improve as needed. Recommend contacting a qualified, licensed insulation specialist about the replacement of the sub-floor insulation.



Conducive Conditions: High moisture conditions observed during inspection- potential for wood-decay rot, molds/mildew and rodent and insect infestation. Posts are at/below grade level and are sitting in the water through the middle of the house.

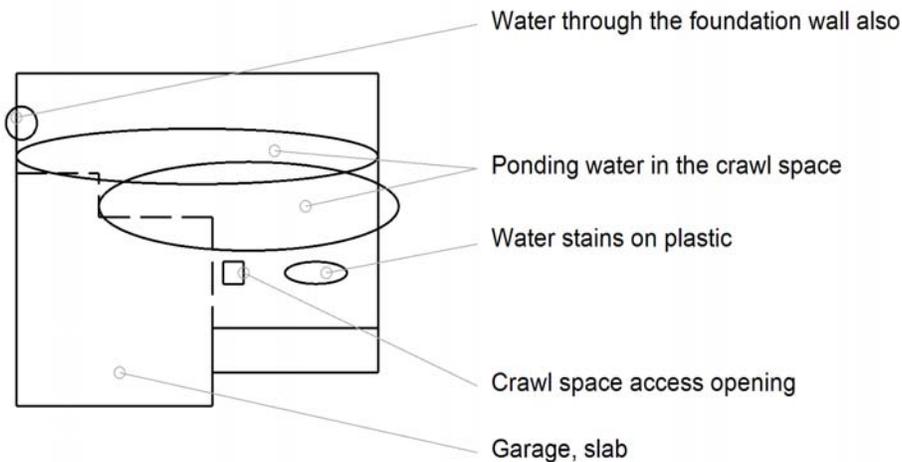
The **plastic vapor barrier** is needed throughout the crawl space sub-area to cover all the soils and to control moisture rising from the soils. Despite the appearance of dry soil in the sub-area, soil can produce several quarts of water per day. This moisture rises up through the crawl space and sub-framing, and possibly into the house, walls and attic space. Controlling this relative moisture is critical to the health of the house. The solution is to control the moisture with heavy plastic spread over all the soils, preferably 6 mil., *black polyethylene*. The heavy plastic, laid over the soil, will trap the moisture below the plastic and not allow it to rise into the

air. Black plastic is preferred because sunlight will not pass through it, and will also help prevent the growth of molds, fungi and organic growth.

Old, worn/torn and deteriorating plastic may not control moisture as needed and replacement is recommended. **Complete removal the old plastic is highly recommended; laying new plastic over old plastic may trap moisture and water between the layers. Where high moisture conditions in the sub-area are present, proper installation is critical.** The plastic should cover all the exposed soils through the crawl space sub-area; it should be overlapped at least 12", and secured in place with bricks or stones. The plastic should not be installed up to, or on, the base of the wood support posts and structural members, which may allow condensation to trap against the wood framing and cause wood-decay rot damage or insect infestation.

Construction and cellulose/wood debris should always be removed from the sub-area (as required); the presence of cellulose/wood materials is conducive to wood-destroying fungal rot and insect infestations, which may lead to other issues. Cardboard forms, often found around newer concrete footing pads, should be removed where needed (not as critical as wood forms). In some regions of the Puget Sound area, these cardboard forms are prone to subterranean termite infestations, which may lead to infestation in the wood framing also.

Crawl Space Conditions:



WOOD DESTROYING ORGANISMS (WDO/WDI) and PESTS

The definition of a **Wood Destroying Organism/Insect Inspection (WDO/WDI)**: An inspection of a structure for the purpose of determining (i) evidence of infestation(s), (ii) fungal rot damage to the structure, and (iii) conducive conditions which leads to damage to the structure. The WDO/WDI inspection will be performed by a licensed Structural Pest Inspector (SPI), in accordance with the provisions of RCW 15.58.210 and WAC 16-228-2005 through 16-228-2045.

The wood destroying organism inspection report is a written opinion of a qualified Washington State Licensed Structural Pest Inspector based upon what is visible and evident at the time of the inspection. As such, the inspection report does not in any way represent or guarantee the structure to be free from wood destroying organisms or their damage, nor does it represent or guarantee that the total damage or infestation is limited to that disclosed in this report.

The WDO/WDI inspector shall make a thorough inspection of the subject structure to render an opinion of the presence and extent of wood destroying organisms, as well as, those conditions which are conducive to such wood-destroying organisms. **This full Inspection Report** is considered a **Complete Wood Destroying Organism (WDO/WDI) Inspection**. *This WDO/WDI section of the report* will identify what WDO/WDI's were discovered, the general location and how significant the problem may be at the time of the inspection. The Diagram provided (where needed) will also help with locations of concerns.

The Complete Wood Destroying Organism Inspection report may not be complete without other sections of this full Inspection Report; these other sections of the report may include, but not limited to: the Exterior section, Crawl space section, Plumbing and Bathrooms sections, etc. The Structural Pest inspector will determine what sections of the report are needed to make a complete WDO Inspection Report.

To meet the needs of FHA and VA Pest Inspection requests, and to provide a Form 33 for these transactions, a complete and separate Wood Destroying Organism Inspection Report will be needed. All items called out on this WDO Inspection Report shall be corrected/completed prior to issuing the Form 33 report. Additional time will be needed to complete this separate WDO Inspection Report; if repairs and/or corrections are called for, an additional Re-Inspection* will also be needed to complete the transaction, and provide all necessary Forms. ***A Fee of \$250.00 will be charged for all Re-Inspections.**

Wood-Decay Fungi Rot (WDO)

Findings/Location(s)-
Exterior Roof Eaves/Trim:

Evidence of fungal rot decay/damage to the trim, located (but not limited to): at the trellis on the front of the house. Replace damaged wood as needed.



Wood-Destroying Insects (WDI)

Findings:

No visible evidence of wood-destroying insects noted/discovered at the time of the inspection.

Conducive Conditions:

Sub-area Crawl space:

Excessive moisture conditions observed during inspection- potential for wood-decay, insect infestation, mold/mildew, etc.
Fallen sub-structure floor insulation, restricts and limits air flow in crawl space area.
Several of the wood posts are at/below soils grade and *several of the posts are currently in the standing water.*

Rodent/Animal/Vermin Activity:

Type of Infestation(s) noted:	Rats.
Evidence of Infestation:	Rodent droppings noted, on the plastic vapor barrier, on/in the sub-floor insulation batts, on the heat ducting/insulation, throughout the crawl space sub-area. Insulation has been effected/damaged: sub-floor insulation has been pulled-down and/or damaged in the crawl space sub-area, staining from rodent droppings/urine Unable to determine if this infestation/problem is active or inactive- a specialist is needed to determine activity status.
Recommendations:	Recommend locating all the sources of the rodent/vermin entry into the house; (attic, garage and/or sub-area) and correct and seal off as needed, using approved methods and materials. Recommend contacting a licensed specialist in rodent clean-up and remediations. Make all necessary corrections/repairs to prevent further infestation and clean/sanitize the area(s) of infestation for health reasons. Recommend contacting a licensed, professional and certified pest management company (PCO) to prevent or remedy the pest activity/damage.

"Wood destroying organisms/insects" means organisms including, but not limited to: Subterranean termites, Dampwood termites, Carpenter ants, Wood-boring beetles of the family Anobiidae (Deathwatch beetles), and Wood-decay fungi (wood rot). Moisture ants also, but these are considered a secondary wood-destroying insect. *Note: Molds/mildew are considered a wood inhabiting organism, that does not cause structural damage, and therefore is not part of a WDO inspection.*

"Conducive conditions" means those conditions which may lead to or enhance an infestation of the wood destroying organisms. Conducive conditions shall include, but not limited to: Inadequate clearances to sub-framing, wood-soil contact, cellulose/wood debris in the sub-area and cardboard forms, vegetation- in direct contact with the exterior, restricted or non-functioning gutter systems, inadequate ventilation in the substructure area, bare/unimproved ground in the sub-area and excessive moisture/water or evidence of seasonal standing water in the sub-area, failed/missing caulk or grout water splash areas, plumbing leaks and other sources that may contribute to damage by WDO's.

Due to the natural habits of the **Carpenter ants** to go dormant during the colder/winter months, Carpenter ants may go undetected if this inspection was performed during their dormant season. We do not assume any responsibility for the Carpenter ant infestations that were not detected during their dormant season.

Structural assessment may be possible, during the inspection, for severely damaged materials. However, structural integrity may not always be possible with minor rot problems or wood-destroying insect damage. It is recommended that a *qualified, licensed contractor* or professional Engineer evaluate damaged building materials, if there is any doubt about the overall condition or structural strength. When in doubt, it is better to *remove and replace all damaged materials* then to leave it behind, to be discovered by the next inspector.

Inaccessible Areas (where applicable): The following areas are considered *inaccessible* for inspection and may not be economically practical to make these areas accessible for inspection. However, these areas may be subject to attack by wood destroying organisms. No opinion is rendered concerning the conditions in these areas and is therefore excluded from the scope of the inspection:

- A) The interiors of hollow walls, and all enclosed spaces, such as between floor and porch/deck and the ceiling or soffit below.
- B) Portions of the sub-floor concealed or made inaccessible by heating systems or ducting or **sub-floor insulation**.
- C) Enclosed bay windows.
- D) Areas beneath wood floors over concrete (sleeper floors).
- E) Areas concealed by built-in cabinets
- F) Areas concealed by floor coverings, such as wall-to-wall carpeting, linoleum/vinyl, ceramic tile, etc.
- G) Areas concealed by built-in appliances; refrigerators, washer/dryers, dishwashers, etc.
- H) Exterior decks concealed by artificial turf, planters, hot tubs, minimal clearances to the ground, etc.

Currently, no opinion is rendered concerning the condition in these areas, at this time, and is specifically excluded from the scope of the inspection:

- A) Areas concealed by interior furnishings and stored items (covering walls and flooring).
- B) Areas concealed by "free standing" appliances such as washer/dryer, refrigerator, dishwasher, freezers, etc.
- C) Areas concealed by heavy vegetation on the exterior of the house.
- D) Areas/rooms which are locked, remain inaccessible and/or prevent access.

Rodent Infestations (where applicable): Rodents are considered a nuisance pest- whether they're rats or mice. They typically do not fall under the same category as wood-destroying insects. These typically need some type of control- whether a home owner or a professional company is contracted. The perfect rodenticide is one which will eliminate, repel, or change the habit of the rodent. Houses and buildings are prone to both rat and mice infestations. Rodents are attracted to easy food sources, living habitats in the crawl space, attic space, wall cavities, garages and storage sheds. Controlling the rodents in the house is only part of the problem, the main concern is attempting to locate how the rodents have entered the house. Common areas to check: Trees, limbs, vines in contact with the roof or gutters; vines running along the house wall or chimney; openings in or damage to foundation vent screens; improperly or inadequately installed crawl space access openings; animal doors cut into exterior doors; foundation drain pipes that open into the crawl space and the list goes on. They may be attracted to an easy food or water source: pockets of water under the house; lakes/ponds, streams or drainage ditches in the surrounding area; fruit trees nearby; feeding animals outdoors (dog food); bird feeders; feeding squirrels; household garbage.

Rats and mice are not effected by fiberglass insulation- in fact, this is one of their favorite nesting materials. That is why sub-floor and attic insulation is often damaged or destroyed and will need replacing in many cases. Other types of insulation will not be effected as much- cellulose and mineral wool materials.

HEATING/HVAC SYSTEM

The Heating system design may be as simple as a single baseboard heater in each room, or more complicated, such as air distribution systems, heat pumps or hydronic systems (hot water). All systems, however, have four things in common. Each system has a heat producer, oil or gas burners or an electric element, and a heat exchanger- a furnace where air is heated or a boiler where water is heated. A heat distribution system- which may be ducts and registers that circulates air flow, or pipes/tubes and radiators that circulate water. Finally, a control for the system- a thermostat of some type.

Air distribution systems: When the thermostat calls for heat, air is warmed by gas, oil or electric burners, electric heating elements (strips) or heat pump coils in the furnace. The blower distributes the heated air throughout the house via a ducting system (ducts and registers). Adjustable dampers in the ducts can regulate the flow of air to different parts of the house and adjustable registers regulate the air flow to particular rooms.

Water distribution systems (hydronic): When the thermostat calls for heat, water is warmed in a boiler by gas- or oil-fired burners. The pump distributes the heated water via pipes or tubes to radiators, registers, baseboards or convectors. Systems vary, in series loop- radiators are connected in series; one pipes systems and two pipe systems- the most efficient. Each radiator draws hot water from the supply main and returns it to a return main. The water in the last radiator is almost as warm as the first one. Newer systems commonly use plastic tubes (PEX) to distribute warm water.

Heating System Description:

Location- Primary HVAC system:	Garage.
Central Forced-Air system:	Trane; Fuel Type; Natural Gas.
Capacity of Unit:	BTU Rating (Input): 80,000.
Approximate Age:	Original equipment, Years: 10+
Observations of the Heating system- prior to operation:	No Service stickers noted on the HVAC system at the time of the inspection. Recommend inquiring with the Seller/Homeowner about the last known service call.

HVAC; Air Distribution system:

Forced-Air Operation:	System appears to be operational/serviceable. No significant problems noted with the furnace operation at time of the inspection. Recommend contacting a qualified, licensed HVAC contractor for a complete Tune-up and general maintenance of the heating system as needed.
-----------------------	---



Burners/Heat Exchanger*:	In-Shot burners appear to be serviceable- with no apparent visible issues noted.
Gas Pipe/Valve:	Valve is located next to the furnace compartment; Appears Serviceable.
Blower Fan:	Appears Serviceable- no visible problems detected.
Combustion Air:	Appears serviceable/adequate at this time.
Exhaust Venting:	Overall condition- Appears serviceable.

Plenums:	Appears serviceable, with visible issues noted.
Thermostat/Controls:	Appears serviceable/operational.
Filter Condition:	Filter system currently installed; Disposable. Appears serviceable; Clean or change on a regular basis.



Observations/Recommendations:	Bi-Annual service calls/inspections of the heating system for general maintenance, service and Tune-up.
-------------------------------	---

Heating/Air Distribution components:

Type(s):	Sheet metal air ducting, insulated, Flexible round air ducts (insulated)
Overall Conditions:	Appears serviceable, heat (and/or airflow) appears to be distributed/provided to all habitable rooms as intended; With the notable concerns/issues/exception:
Air Quality/Conditions:	Debris noted in the heat/air ducts, visible through the floor registers. Recommend cleaning the ducts as needed.
Concerns/Issues- Metal/Flex ducts:	<p>Conditions noted with the metal/flex ducting:</p> <ul style="list-style-type: none"> - The flex ducting appears to be damaged in the dining room; the inside of the ducting is torn/damaged (fiberglass is exposed). Recommend replacing the flex-ducting as needed. - Recommend replacing the damaged duct insulation in the crawl space as needed. <p>Recommend contacting licensed HVAC/Mechanical contractor, or handyman, to make further evaluations of the ductwork system. Repair/replace ducting as needed using approved materials and installation practices.</p>



Ducting in the dining area

Photo:	
--------	--



Rats on the main heat trunk

The **Heat Exchanger*** is a component of the gas furnace (where applicable) in which combustion occurs. As the heat exchanger

wears out, cracks or holes may develop and the combustion gases may mix with the household air. A test for Carbon Monoxide (CO) gas will be made *at the furnace vent pipe*, as well as visible inspection of the flame, burners and the burner compartment, using a Bacharach Monoxer II. The furnace and house may be checked for excessive CO build-up (measured in parts per million). The heat exchanger, in both oil and gas furnaces, is mostly hidden from view; it cannot be completely examined and its condition determined without being disassembled. Gas furnaces with In-shot burners (newer style), closed systems (high efficiency furnaces) and some older models cannot be easily inspected due to the design. Every effort will be made to inspect these systems.

The inspector is not equipped to inspect the furnace heat exchangers for evidence of cracks or holes, during the visual Home Inspection. This is beyond the scope of this inspection. Some closed furnaces are designed in such a way that inspection of the heat exchanger is almost impossible.

The inspector can not light pilot lights. Safety devices are not tested by the inspector.

Heat ducts are a common source of the heat loss in the most house. As much as 25% of the heat could be leaking from the heat ducts and registers. This not only is a significant waste of energy, but may be a potential health hazard as well. Leaking ducts in the livable space may not be significant, but loosing heat into the crawl space, sub-area or attic space, could pose serious health issues. Older gray "duct" tape has been found to deteriorate over time and loose it's adhesiveness, and the duct joints would separate and open. Dark staining on duct insulation is an indication of heat loss into the crawl space and is common on most houses older than 10 years. To save energy and limit contamination into the heating system, the ducts should be re-sealed at all the joints and the floor registers attached and sealed at the floor. Recommend removing and replacing all old duct tape with an ASTM approved taping system or sealants. This can accomplished by the homeowner or a licensed heating contractor.

Limitations of the Heating System Inspection:

Thermostats are not checked for calibration or timed functions. They will be activated during the operation of the heating system. Adequacy, efficiency or the even distribution of air throughout a building cannot be addressed by a visual inspection. Electronic air cleaners, humidifiers and dehumidifiers are beyond the scope of this inspection. Have these systems evaluated by a qualified individual.

The inspector does not perform pressure tests on coolant systems, therefore no representation is made regarding coolant charge or line integrity. Subjective judgment of system capacity is not a part of the inspection. Normal service and maintenance is recommended on a yearly basis.

Determining the condition of Oil tanks, whether exposed or buried, is beyond the scope of this inspection. Leaking oil tanks represent an environmental hazard which is sometimes costly to remedy.

PLUMBING

Potable water lines (drinking water) and Drain-Waste-Vent pipes are inspected for leaks, installation techniques and non-professional workmanship. Proper sizing of pipes, venting and plumbing codes are not part of this inspection. All underground piping related to water supply, waste, gas or lawn sprinkler system use, are excluded from this inspection. Leakage or corrosion in underground piping cannot be detected by a visual inspection. *Excluded from this report will be piping that is part of any manufacturer recalls and their conditions.* These pipes will be identified but an overall analysis of their condition should be determined by a professional licensed plumbing contractor.

Water pressure and water flow for houses; these two are not always directly related, you may have high water pressure, but low water flow. This is often caused by a constriction in the supply pipes. The constriction is usually a result of mineral deposits built-up inside the pipes (common for aging galvanized pipes) or undersized pipes. A normal water flow in a house should be able to deliver 4 or more gallons per minute. Replacement of older galvanized water pipes may be the only solution for better water flow into houses. The average life span for galvanized potable water pipes is 40-50+ years (average); these will last longer, but restrictions will occur and the potential for leaks increases.

Static water pressure, for most residential houses is typically between 40-60 psi (pounds per square inch) or up to 75 psi. With private/community wells, the pressure may be as low as 30 PSI.

If the water pressure exceeds 80 PSI, on a continuous basis, it is recommended (required by most codes) that a **pressure reducing valve** (PRV) be installed to protect the pipes, fixtures and appliances in the house. With the installation of the PRV valve, an expansion tank should also be installed in the system. With the installation of the pressure reducing valve, the water supply system becomes a "closed" system; as the water heats up, it will expand in the pipes, but the PRV valve will prevent the excessive pressure to push back into the main water line. The pressure reducing valve allows water to expand into the house, putting pressure on the system. The expansion tank with "absorb" the thermal expansion and pressure that builds-up when the water is heated. This is currently required in most new construction and new installations. Water temperature for the potable water supply, in the house, should not exceed 120F (Fahrenheit) degrees. The safe temperature for humans is considered 120F degrees; this temperature should be adequate for cleaning, sanitizing and bathing in the house. When the temperature exceeds 125F it is potentially dangerous, causing scalding and burns, not to mention it is a waste of resources. The water heater tank has to hold and maintain the higher water temperatures, thus wasting fuel. This also causes the tank to wear prematurely. Recommend insulating all exposed water pipes, lines and tubing in the garage and sub-areas of the house to prevent heat loss and freezing.

Main Water Supply:

Material:	Copper to the house.
Condition(s):	Water Main Shut-off Valve is located, in the Garage, Front corner. Valve appears to be Operational (but not tested, testing may cause it to leak). Appears serviceable, no visible issues noted.



Pressure/Flow:	Static Water pressure (PSI): 55-60; Appears to be adequate (within normal range) at the time of the inspection. Water Flow: Appears to be Average flow for the age of the house. A pressure reducing valve is currently installed in the system. Valve is located near the Main water shut-off.
Potable Water Temperature:	Temperature Settings; 130F+ degrees (considered excessive). Adjust/correct the potable water temperature as needed- <u>standard/acceptable temperature is 120F degrees</u> (most Water Heater Manufacturer's recommend no greater than 125F degrees)

Water Supply Lines:

Materials (visible):

Plastic(s)- PEX (Cross-linked polyethylene- black, red, blue, white or clear plastic). Braided stainless steel (usually supplying fixtures in the house).

Conditions noted:

Overall condition- Appears serviceable, with no visible concerns noted. No evidence of active/current leaks detected or significant problems/concerns noted at the time of the inspection.

Gas Supply Lines:

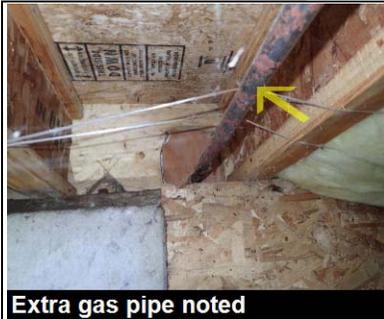
Materials (visible):

Black Iron pipe, Flex steel connectors.

Conditions:

Overall condition- Appears Serviceable, no gas leaks detected at this time, no significant visible problems noted.

Note: Extra gas pipe noted under the kitchen area (terminates at the outside wall). This may have been designed for an exterior gas connection?



Drain-Waste Lines:

Materials (visible):

Plastic(s); ABS (Black), PVC.

Conditions noted:

Overall condition- Appears serviceable. No visible problems detected at this time. No evidence of significant leaks detected or concerns/problems noted at time of the inspection. With the concerns/issues/exception noted during the inspection:

- Open drain-waste pipe located under the kitchen sink (drain system was modified with the replacement of the sink). Recommend replacing with the proper drain pipes/fitting. Recommend contacting a qualified, licensed plumbing contractor for evaluation and repair/correct as needed.



Hose Faucet/ Bibb:

Operation/Condition:

A sample exterior spigot/faucet(s) was tested and operated- Appears serviceable/operational.

Water Heater:

Location:	Garage.
Type and Size:	Gas appliance, 50 Gallons.
Estimated Age:	Original equipment. Years: 10+ (Manufactured in 2005). Water heater is approaching the end of it's useful life (average life expectancy is approx. 10-12 years). Recommend replacing in the near future. Recommend installing the new water heater with all updated requirements (as they apply); recommend installed with proper/improved earthquake strapping, expansion tank and in a pan, on a foam pad or platform where applicable, for safety.
Gas Pipe/Valve:	Valve is located next to the water heater; Appears Serviceable.
Water Heater Installation:	Overall condition- Appears serviceable; with no visible issues noted at this time. - Temperature & Pressure relief valve (T&P or TPR)- appears to be installed properly in the tank. (Note: This is not tested for operation). The overflow discharge pipe, on the T&P valve, appears to be installed properly. This overflow pipe/tube is designed to drain the hot water out of the tank and prevent the tank from bursting. The overflow discharge pipe terminates, to the exterior of the house (visible). - Exhaust vent appears serviceable, no visible issues noted. - Earthquake/seismic strapping appears to be, adequate/serviceable. - An Expansion tank, has been installed and appears serviceable at this time.



Plumbing Maintenance for the Home:

- Always remove garden hoses from the hose bibb /spigot (sillcock) when not in use; this is most critical during colder, winter months when the pipes are prone to freeze. Leaving the hoses attached may freeze the water in the hose and has the potential to freeze water in the spigots and water pipes also (even if it's frost-proof sillcock).
- Newer hose bibbs come with an anti-siphon device built-in to the spigot, but older models do not, and may allow water from the hose to be pulled back into the house drinking water. Older hose bibbs should be upgraded or replaced where possible to prevent cross-contamination
- Recommend insulating all potable water pipes and lines in the house, garage and/or crawl space areas. This will conserve energy and protect pipes/lines from freezing in colder weather.
- Recommend turning down the water temperature at the water heater to vacation mode (approximately <100F degrees) during extended leaves or vacations to prevent wasting hot water. Upon returning from the vacation you should turn the water temperature back to high (130-140F+ degrees) for a short period, to kill off any bacteria that may be in the tank. The standard potable water temperature should be set at approximately 120F degrees to protect against scalding and burns.
- Note: Anti-scalding (tempering) devices are being installed in many new homes, with the intent to keep the temperature in the water heater tank high, to kill bacteria, but maintaining a reasonable temperature at the faucets and supply lines. Tankless water heaters do not have this issue, because there is no standing water in the system.
- Many water heater manufacturer's will recommend draining the tank once a year to keep it clear of sediment and debris. This is probably a good idea, but only if this has been completed annually, since the tank was new. Starting this draining maintenance after the water heater has been used for a number of years, may cause damage to the tank and significant leaks.

BATHROOMS

The inspection of the bathroom is to check the main components; the toilet, sink and cabinets, shower and/or tub surrounds, flooring, ventilation and electrical components (noted in the Electrical section). The most significant concern in most bathrooms is moisture-related damage. Damage may occur in the tub or shower surrounds and/or in the flooring. These areas will be inspected for past and current concerns/problems or potential problems- leading to damage.

Caulking and sealing all the edges and openings, of the tub/shower surround (and door assembly, if it applies), will help control water intrusion and potential for damage.

Shower pans are visually checked for leakage, but leaks often do not show except when the shower is in actual use. Determining whether shower pans, tub/shower surrounds are water-tight is beyond the scope of this inspection. It is very important to maintain all grouting and caulking in the bath areas. Very minor imperfections can allow water to get into the wall or floor areas and cause moisture damage. Often, recommendations are made to *prevent* problems from occurring. This may as simple as replacing existing caulking or regrout. But, it may include replacement of existing floor covering, tub surround materials or repairing fixtures.

Ventilation is essential in the bathroom. Without proper ventilation, discoloring and molds/mildews will form on the walls and ceilings; wallboard fasteners may rust and discolor the walls/ceilings over time. Windows are used for ventilation and are commonly found in older houses (usually in bathrooms on the outer portion of the house), but may not be readily used during colder weather. Exhaust fans are the best solution for ventilation. Quality exhaust fans are powerful *and* quiet, and are more readily used than windows. Consider installing fans in all bathrooms and replace all noisy fans.

BATH #1:

Location:	Main Floor, Hallway.
Type:	1/2 Powder Room.
Condition of Toilet:	Appears serviceable and operates/functions as intended.
Bathroom components:	Overall the sink/component conditions- Appear serviceable. Pedestal sink/stand- Appears Serviceable. Drain line appears serviceable at this time.
Ventilation:	Exhaust fan- Appears serviceable (operated when tested).
Floor Covering(s):	Hardwood.
Flooring Condition(s):	Overall Condition- Appears Serviceable.

BATH #2:

Location:	Master Bedroom.
Type:	Full- Tub surround and Shower surround.
Tub/Shower Enclosure:	Tile- Ceramic/Porcelain/Stone, with Plastic pan.
Enclosure Conditions:	Overall condition of the shower enclosure appears serviceable. - Recommend sealing (clean as needed) the grout lines in the surround to protect against water penetration. - Replace caulking at the door frame as needed.



Tub Condition(s):	Tub appears serviceable. The tub enclosure/surround appears serviceable.
Tub/Shower Plumbing Fixtures:	Appears serviceable- fixtures were operational/functional when tested. Tub spout appears to be serviceable. Shower head appears serviceable/operational. Drain appears serviceable- visual inspection only, with limited testing.
Condition of Toilet:	Appears serviceable and operates/functions as intended.
Bathroom components:	Overall the sink/component conditions- Appear serviceable. Counters/cabinets appear serviceable. - The right sink drain appears to be clogged- drained very slowly when tested.
Ventilation:	Exhaust fan- Appears serviceable (operated when tested).
Floor Covering(s):	Vinyl.
Flooring Condition(s):	Overall Condition- Appears Serviceable.

BATH #3:

Location:	Upstairs Hallway.
Type:	Full- Tub & Shower surround combination.
Tub/Shower Enclosure:	Thermoplastic/Fiberglass.
Enclosure Conditions:	Overall condition of the tub/shower enclosure appears serviceable.
Tub/Shower Plumbing Fixtures:	Appears serviceable- fixtures were operational/functional when tested. Tub spout appears to be serviceable. Shower head appears serviceable/operational. Drain appears serviceable- visual inspection only, with limited testing.
Condition of Toilet:	Appears serviceable and operates/functions as intended.
Bathroom components:	Overall the sink/component conditions- Appear serviceable. Counters/cabinets appear serviceable. Drain line appears serviceable at this time.
Ventilation:	Exhaust fan- Appears serviceable (operated when tested).
Floor Covering(s):	Vinyl.
Flooring Condition(s):	Overall Condition- Appears Serviceable.

ELECTRICAL SYSTEM

Electrical Inspections- Any electrical repairs or corrections attempted by anyone, other than a qualified, licensed Electrical contractor, should be approached with caution. Repairs and/or corrections should always be completed by a qualified, licensed electrical contractor (or Handyman), for safety reasons. Licensed electricians will guarantee that the repairs made are completed to current safety and industry standards, and electrical codes.

Please note that every outlet/receptacle in the house cannot be tested or checked during the inspection due to: time restraints and/or personal belongings, which may block access and be present in the house during the inspection. If defects or problems are noted during the inspection, careful attention will be placed on the outlets and any safety problems they may pose. Light fixtures are now commonly referred to as "luminaires", so as not to confuse them with plumbing "fixtures".

The minimum required electrical service for a single-family residence is 100-amps. This is often found in older homes where the service has not been upgraded. The round meter base (or "A" base) is often an indicator of older/original services- despite the newer panel boxes which may be installed in the home. Upgrading the service conductor is as important as a new panel box.

Recommend changing out the smoke detectors in the house (not just the batteries) every 10 years; most ionization smoke detectors will not adequately function past this point, and may not detect smoke and fires at all. Recommend replacing with a new Photoelectric smoke detector(s)- which is less likely to nuisance trip.

As of the 2009 Electrical Code cycle (2009 IRC), CO detectors are required in all new construction homes; the installation began in 2011, as cities and counties adopted the new rules. Houses with fuel-fired appliances or with a garage attached to the house, require at least one detector outside the sleeping areas of the house; for one-story houses this would mean the main hallway, for multi-level houses it may mean one on each level of the house. If the house has no gas appliances of any type and there is no garage attached, there will probably not be a CO detector installed. WA State requirement (as of April 2012) went one step further and require CO detectors in all houses, condos, Manufactured homes, etc., regardless of the gas appliances or the garage installation.

Electrical Service:

Service Drop:	<u>Underground cable</u> ; buried from the pole/vault to the meter. Overall condition- Appears serviceable at the time of the inspection.
Service Grounding:	Conditions noted: Limited observation of the grounding components; grounding-conductor wire is visible, but the grounding-electrode (rod) is not visible (typically buried in the ground).

Main Electrical Panel:

Main Panel Location/Condition:	Garage. Overall condition- Appears serviceable; no significant problems noted with the panel box and cover.
Main Service Conductors:	Size Wire (approx.): 4/0 Aluminum (Stranded wire is considered safe and used in current building practices); Anti-oxidant paste is visible/present (this paste prevents oxidation/corrosion on the aluminum wire conductors).
Service Equipment & Main Disconnect:	Voltage Rating- 120/240 Volts. Amperage Rating- 200 amps. Main service disconnect is present in the panel box.
Overcurrent Protection:	Circuit breakers. Expansion appears to be currently available.
Observations/Notes:	Panel Appears Serviceable- No significant problems noted at time of the inspection.



Wiring/Conductors:

Wiring Overview:

Wiring methods/types noted or visible during the inspection; Thermoplastic-sheathed wiring (trade name- Romex). Overall Condition- Appears serviceable; No significant problems with the wiring observed during the inspection. The electrical system, in the house, appears to be grounded (random testing in various rooms of the house). Bonding wire/clamp for the interior metal water pipes/system, is visible/accessible at the gas pipe.

Conditions:

Overall wiring practices appear to be serviceable/operational.

Switches/Receptacles/Fixtures:

Conditions noted:

A representative sampling of switches and receptacles/outlets were tested. As a whole, receptacles/outlets and switches throughout the house, appear to be in serviceable condition. Fixtures appear to be in overall serviceable condition.

Ground Fault Circuit Interrupters (GFCI):

GFCI's protected locations:

Kitchen- countertop. Bathroom(s)- All locations. Exterior, Garage.

Operation/Condition(s):

The installed Ground Fault Circuit Interrupter(s) appears to be serviceable/operational when tested. With the notable exception/concern/issues;
- The garage GFCI was painted and may not trip off as intended. Recommend replacing the GFCI for safety reasons.



Smoke Detector(s):

Location(s) and Type(s):

Installed detectors are located in, all areas which require smoke detectors, when the house was built; Hallways (all levels), bedrooms and habitable spaces. Hardwired- with a battery back-up.

Condition:

Appear to be operational/functional (but were not tested at this time)- All areas where detectors are installed, *with the exception noted*;
- Detector is missing in the middle bedroom. Replace as needed, for safety reasons.



Carbon Monoxide Detectors:

Type/Location:

Battery only. Kitchen wall.



Condition:

Appears functional/operational, but was not tested.

- The CO detector is poorly located and should be re-located into the center hallway area.
 - Recommend installation of a CO detector(s) in all levels of the house and near the sleeping areas of the house, as required by WA State RCW 19.27.530 and the State Building Code. CO detectors should comply with UL 2034; as required by WAC 51-51-0315. Install CO detectors according to the Manufacturer's installation instructions.

Knob-n-Tube wiring (*where applicable*; circa. 1950 and earlier homes) is the earliest form of residential wiring. This was named for the ceramic insulators used to secure the wires to the wood framing (knobs on the wood, tubes through the wood). This rubber or cloth-wrapped wiring system has separate hot and neutral wires, running parallel in the framing.

Knob-n-tube wiring is not considered inherently unsafe, but it is considered substandard for several reasons: it lacks grounding; it typically does not include a sufficient numbers of circuits for contemporary use; and burial beneath the attic insulation can cause overheating of the wires. Upgrading is generally not mandatory, but it is advised where the system may be over used- such as at the kitchen outlets, appliances, bathrooms and garages. Upgrading is also recommended where electronic equipment is being used; computers, TV/Media, stereo systems and other sensitive equipment.

Two-prong outlets (not equipped with grounding), located in older homes, may be associated with knob-n-tube wiring. This is considered obsolete, but replacement in most areas is not required. However, where electronic equipment, computers and appliances are installed, grounded outlets are strongly advised, as they are needed for proper function of surge suppressors.

Altering, modifying and splices into the Knob-n-Tube wiring, and also burying the Knob-n-tube wiring in the attic insulation, can be a potential hazard and some of the most common problems and concerns with this style of wiring. Any modification to this wiring should be completed by a qualified, licensed electrical contractor. Recommend consulting with your Homeowners Insurance company about having this type of wiring in the house.

Fuse boxes, with multiple sub-panel boxes, is typically an indication of a over-extended and outdated electrical service. This usually is an indication that the service needs to be replaced and upgraded. The replacement may include the electrical mast, meter and panel box. This should always be evaluated by a licensed electrical contractor to determine what is needed. Recommend increasing the service panel to meet the needs of the existing house and future needs.

KITCHEN

The kitchen is one of the most used rooms in the house. There are several components that are inspected in the kitchen; besides the appliances, there are plumbing, electrical and mechanicals systems to be inspected, the counters/cabinets and general interior components.

Countertops and cabinets are usually inspected for wear and tear. There is a potential for water-related damage to the countertops around the sink and the cabinet compartment under the sink. The cabinet compartments under the sink is closely inspected for plumbing, electrical and mechanical problems. The most common problems under sinks are poor plumbing installations and poorly installed wiring to disposals and switches/outlets.

Countertops are prone to damage if all the edges are not sealed properly. The sink may not be sealed at the countertop, the backsplash may not be caulked along the edge. If the countertop is ceramic tile with grout, has it been sealed properly? All new tile and grout should be sealed as soon as possible to prevent moisture penetration. In new construction houses, the tile and grout countertops and floors, are not sealed by the Builder.

The electrical system, in the kitchen, is a key issue also. The kitchen is supposed to have two appliance circuits along the countertops, and the appliances have their own separate circuits. However, this only applies to newer homes; older homes may only have one circuit for the entire kitchen. Older houses were not designed for dishwashers, disposals, microwaves, etc. This may mean upgrading the electrical in the kitchen, to avoid overloading the circuit(s). If the kitchen has 2-prong (ungrounded receptacles) this should be the first upgrade. These receptacles are not equipped for modern, grounded appliances and could be a potential hazard.

Interior Components:

Countertops:

Tiles; Granite. Overall condition- Appears Serviceable. Appears to be functional/useable, with no apparent significant defects.
Recommend sealing the countertop surfaces (stone sealer) and backsplashes (grout sealer), as needed, to prevent moisture penetration and discoloring/staining.

Cabinets:

Overall Condition- Appear serviceable. Appear to be functional/operational- as intended.

Flooring:

Hardwood. Overall Condition- Appears serviceable.

Kitchen Sink(s):

Type & Condition(s):

Stainless Steel; Overall condition- appears serviceable. Appears to be functioning as intended.

Hardware conditions:

Faucet appears operation/serviceable at this time. Sprayer appears serviceable/operational as intended. Drain line/system appears to be serviceable and functional at this time.

Garbage Disposer:

Condition:

Appears operational/serviceable. Appears to be functioning as intended.

Dishwasher:

Condition:

Appears serviceable. Dishwasher was operated during the inspection and appears to be functional/operational.
An air gap is not provided in the dishwasher drain line. This drain line may hold water and not drain properly; recommend adding a high loop under the sink or add an air gap (if possible/practical).

Range/Oven:

Type/Condition:

Electric appliance; Appears serviceable, and appears to be operating/functioning as intended. The oven and broiler elements appear to be operational. (Note: These are not tested for accuracy).

Cooktop:

Type/Condition:

Gas cooktop; Appears serviceable. Burners appear to be functional/operational as intended.

Ventilation:

Type/Condition:

Exhaust Hood/Fan system- Appears operational/functional and appears to be operating as intended. Appears to be venting out of the kitchen area.
- Exhaust fan/filter system is dirty and needs cleaning for efficiency.
- Rust/corrosion on the metal duct in the crawl space. This duct was not insulated. Recommend adding insulation to reduce condensation issue.



Refrigerator:

Condition:

Appears serviceable- limited inspection of this component.

No opinion is offered as to the adequacy of dishwasher operation. Dishwashers will be operated, when possible, during the inspection process. These are typically checked for leaks and damage.

Portable dishwashers are typically not inspected (as they require a special connection to facilitate testing) because they are considered personal items- not "built-in" appliances. Recommend having the Seller demonstrate the dishwasher or guarantee their operation.

Self or continuous cleaning operations of the oven, clocks, timing devices, lights and thermostat accuracy are *not tested/inspected* during this inspection.

LAUNDRY

Laundry Facilities and components

Laundry appliances are tested only if they are a part of the sale of the property (clothing will not be removed to test system). Recommend having Homeowner/Seller demonstrate appliances if needed to determine how the plumbing functions. Appliances will not be moved during the inspection and the condition of any walls or flooring hidden by them cannot be judged. Stackable units, in closets, are often very difficult to evaluate/inspect and most of the components are inaccessible for visual inspections.

Drain lines and water supply valves serving washing machines are not operated/tested, unless they are part of the sales transaction. Drain lines in older houses (metal) are prone to clog over time and back-up. These may need to be tested or demonstrated by the Homeowner or a written guarantee that this pipe will function properly.

Water supply valves may be subject to leaking if turned on during the inspection. Electrical receptacles, hoses, exhaust lines, etc. may not be readily accessible for inspection in some instances.

Laundry Facilities:

Location:	Utility Room.
Plumbing:	Overall plumbing appears serviceable, No visible problems noted. Did not test the water supply valves/lines or drain system for operation at this time. - Water supply lines/valves: recessed in the wall (plastic washer box); Appears serviceable, no visible problems noted. - Washer drainage: Drain line (standpipe)- is recessed in the wall (plastic washer box); Appears Serviceable, but was not tested for operation.
Electrical:	- A 120-volt electrical outlet for the washer, appears to be grounded and operational. - A 240-volt outlet/receptacle was installed for the electric dryer. Outlet type provided- with four-prongs (newer wiring requirements- two hot wires, one neutral, one ground), Appears Operational.
Dryer Exhaust:	Appears to vent properly to the exterior of the house.
Ventilation:	Exhaust fan- Appears Serviceable and is operational and functioning as intended.
Flooring:	Flooring appears serviceable.

VENTING/ENERGY/CONDENSATION

Whole House Ventilation System:

System type:	Intermittent Ventilation using Exhaust fans and Fresh Air intake, (WA State Ventilation and Air Quality Code 303.4.1), This balanced fresh-air system uses an oversized exhaust fan, with outdoor air inlets. Fresh-air inlets are distributed in each habitable room of the house (typically through the window or door frame). The exhaust fan is energized by a 24-hour clock timer; the fan will draw stale air out of the house and replace it with fresh air, via the inlet vents.
Intake Air Source:	Ventilators built-into the windows and/or doors; located in the habitable rooms of the house.
Exhaust System:	Whole house exhaust fan is located, in the laundry room. The 24-hour timer is located, in the laundry room.



Condition:	The ventilation system appears serviceable/operational and is functioning as designed/intended, but the window ventilators were not installed in all the bedrooms, as designed. The first and third smaller bedrooms do not have window ventilators; the family room has ventilators in both windows instead. The system will not function as intended.
------------	--

Molds/mildews (as applicable) are a symptom of a moisture problems in the home. Molds are naturally occurring microorganisms that exist in a wide range of environments. Mold growth is based upon several factors in and around the house; temperature (warmth), oxygen (air), water/moisture and a food source. Remove one of these factors and mold will have a hard time growing. Since temperature and oxygen are difficult to eliminate in a house, the food source and the water need to be controlled. Food sources for molds/mildew can be almost anything; furniture, clothing, wallboard/drywall, carpet, not to mention wood (cellulose). Therefore, controlling the moisture (vapor or liquid form) is the only real controllable solution in most cases. Simply cleaning mold/mildews off the walls, ceiling, floors, attic spaces (or wherever), isn't going to solve the problem. Reducing or eliminating the moisture is the key to controlling molds.

Mold colonies that are visible can have a variety of appearances. They can be small circles to large sheets; the surface may be fuzzy, velvety, powdery or slimy. Their colors range from white, yellow, green, gray, brown, red, blue, and black depending on the food source and the environmental conditions. The visual observation of black mold is not sufficient to conclude that it is toxic. Many common, non-toxic mold species can also be black in appearance.

If there are significant concerns with the presence of molds/mildews in the house, it is recommended that a licensed or certified hygienist be contacted for further inspections and evaluations/testing to determine the type of molds, possible causes and any abatement (if needed) that may be necessary. Simply testing for the presence of molds will not inform you about the cause molds/mildew and how to rectify the problem.

Condensation of moisture on windows and other cold surfaces should be controlled as much as possible. Excessive moisture can cause nuisance staining of window frames and wall finishes, growth of molds/mildew, and can lead to serious structural damage, insect infestations and health problems. Generally, improved control of moisture/condensation can be achieved by increasing ventilation and reducing moisture sources. "Tight" or new construction is prone to these conditions due to the lack of air movement/circulation. Whole house ventilation systems, in newer homes, should be utilized as much as possible.

Building materials such as gypsum wallboard (drywall) and plaster can appear to be dry and intact upon visual observation and may even be dry to the touch, while actually containing enough moisture to support mold growth. Handheld, battery-powered moisture meters are used to detect and locate excess moisture. The two common types of meters work through electrical conductivity or radio waves- these are used to test wet and dry materials. Pin-type and pad-type are the most frequently used meters; pin-type require insertion of metal pins directly into the material being tested. Consequently, these meters leave holes in the material and may be

unsightly in some areas. Pad-type meters are placed on the material to be tested and do not cause any damage. Both meters have limitations and can cause false readings at times. One or both of these type of meters will be used during most inspections, to determine if there are any moisture conditions exist in the house.

INTERIOR

Interior Inspections: This includes, but not limited to, the walls, ceilings, windows, doors and floor coverings. There are limitations for a full inspection of all these components when the house is occupied and/or furnished. Furniture is not moved to inspect hidden areas. Possible need for an additional inspection of the house, prior to closing, to inspect walls, flooring and doors for hidden issues. The problems normally encountered during the interior portion of the inspection are usually cosmetic in nature and will only need minor repairs or adjustments. Occasionally a crack in the wall or ceiling may be symptomatic of structural problems, but this is not common. Water staining is usually tested (when readily accessible) for active moisture conditions. **Recommend inquiring with the Owner/Seller when any recent patching/painting or repairs are noted in the ceiling areas.**

There are often minor problems with interior doors in the house; doors rubbing or not latching properly, hardware missing, holes and damage to the doors. These typically need minor repairs/adjustments and in some cases will require the door to be replaced.

As a general rule, cosmetic deficiencies and discoloring in the carpet are considered normal wear and tear and may not be reported. The Seller/Owner should be consulted for possible allowances to repair or replace as needed. Careful attention should be made during the initial walk-through of the house; wall coverings (pictures/posters, drapes) may be covering water staining, holes and damage. A final "walk-through" is recommended, prior to taking possession of your new home, to determine if there are conditions that were not readily visible due to personal belongings covering the floor/walls, etc.

Floor Coverings:

Type(s):	Hardwood, Carpet.
Conditions:	Overall condition- Appears serviceable, with no significant issues noted.

Walls:

Type(s):	Drywall/Gypsum wallboard.
Conditions:	Overall condition- Appears serviceable, with no significant defects or concerns visible at this time. - Small holes in the wallboard, located on both sides of the fireplace. Recommend sealing off all wall openings to keep the fire-stops intact, prevent heat loss and air movement through the walls.



Ceilings:

Type(s):	Drywall/Gypsum wallboard.
Conditions:	Overall condition- Appears serviceable, with no significant defects or concerns visible at this time. Nail/screw pops noted in the ceilings (upper hall bathroom). Truss-lift is a possible cause of nail pops; wood-framed roof trusses can expand and contract significantly due to temperature changes in the attic space. This may cause the lower truss chord to lift and pull away from the interior wall framing. The wallboard, attached to the lower chord, may move as well- causing fasteners to pull out over time.

Stairs & Handrails:

Conditions:

Interior stairs- Appear serviceable. Stair handrail appears serviceable, but is not fastened to the wall/framing sufficiently. Check brackets and fasten to the stud framing as needed.
Guard rail, around the stairwell, appears serviceable. Balusters are loose, but functional.



Doors:

Main Entry Door:

Fiberglass/Composite, Overall condition- Appears serviceable and operating properly.
Weatherstripping around door appears serviceable.

Exterior Door:

Located in, the Kitchen; Sliding glass- Vinyl. Overall condition- Appears serviceable.

Interior Doors:

Overall condition- Appears serviceable/operational. With the exception/concerns/issues noted;
- Minor damage behind the master bath and master closet doors. Add door stops as needed.
- Door stops are missing the rubber bumpers also- replace as needed.



Windows:

Frame Material(s):

Vinyl/fiberglass.

Frame Styles:

Fixed, Sliding, Single-hung (lower sash slides vertically)
Ventilators installed in the frame of the windows, located in the habitable rooms (part of the *Whole house ventilation system*).



Glazing type:

Double pane.

Conditions:

A representative sampling of windows were tested during the inspection process (as accessibility allows). Windows, as a grouping, are generally operational/serviceable.

Window/door screens, storm windows (interior or exterior) and window awnings are typically *not inspected and are not part of this inspection*. These type items may be considered removable and not a permanent fixtures with the house. They will not be addressed as deficient, defective/damaged or missing. If these items are in need of repair/replacement we recommend you contact the Owner/Seller directly to make requests for repair/replacement.

The condition of the underlayment, under floor coverings (carpet over hardwoods, multiple layers of flooring, etc.), cannot be inspected and is considered inaccessible.

Asbestos* (where applicable): A common concern of many home buyers is whether there is any asbestos in the house, if there is, is it in a condition that would be considered a health hazard? Asbestos is a naturally occurring fibrous mineral found in certain types of rocks. Asbestos fibers are strong, won't burn, resists corrosion, and insulates well. When the fibers are mixed, during processing with a material which binds them together, they can be used in many construction products such as vinyl flooring (backing for sheet vinyl, 9" & 12" resilient tiles and the glue mastic), ceiling acoustic tiles, textured paints or coatings, blown-in insulation (vermiculite), cement board siding products, flexible fabric connections on ductwork, boiler insulation, pipe insulation, roofing materials/mastic and portions of wood-burning stoves, artificial logs and the list goes on. Amounts of asbestos can vary from 1%- 11% and up to 75%.

Asbestos-containing material in the home doesn't necessarily pose a health risk. Asbestos materials become hazardous only when there is damage, disturbance or deterioration over time, they release fibers into the air. Of particular concern is asbestos-containing material that is friable. (Friable material can be crumbled, pulverized or reduced to powder by hand pressure.) As long as the asbestos-containing material is intact, it does not pose a health hazard. Always seek professional advice when dealing with asbestos materials.

Asbestos has been used in building products for decades; it can be found in houses from the turn of the last century to the late 1980's. When in doubt, assume there is asbestos. You should always assume it contains asbestos and take the necessary precautions to avoid harm to you and your family. State law requires homeowners to manage and dispose of asbestos materials in certain ways- be sure you know what they are. Recommend contacting the Puget Sound Clean Air Agency for further information and an Asbestos Removal form.

Clean Air Agency, 110 Union St. Suite 500 Seattle, WA 98101-2038; www.pscleanair.org

FIREPLACE(S)

Fireplaces or stoves come in many different forms. There are some basic forms: **Masonry fireplaces**, a hearth and fire chamber of solid masonry units, such as bricks or stones, listed masonry units or reinforced concrete, provided with suitable chimney.

Factory-Built (or Pre-Fab) fireplaces: a fireplace composed of listed components, assembled in accordance with the terms of the Manufacturer's specifications. Usually a metal housing, with refractory panels of the sides and back of the fireplace. **Fireplace Inserts**- whether wood-burning, gas-burning or pellet, designed to retrofit an existing masonry or factory-built fireplace. **Pellet stoves**, Free-standing or inserts; **Gas fireplaces**, Free-standing, Inserts or *Heatilators*; Zero Clearance fireplaces and the list goes on.

Inspection of the fireplace usually includes the firebox itself, where the burning and combustion takes place; the inspection of the damper and/or direct venting system; the hearth, and clearances to combustible materials. This inspection is primarily for safety reasons. Testing for proper drafting and chimney draw is not performed during this visual inspection. Recommend consulting a licensed chimney contractor about testing and evaluating the installation.

Damage to the firebox or hearth area, excessive soot build-up in chimney flues and inadequate clearances to combustible materials may lead to fires. Always burn seasoned wood and burn as hot as possible to prevent soot/creosote build-up and excessive carbon monoxide.

Combustible materials: The definition is made up of, or surfaced with wood, compressed paper, plant fiber, plastics or other materials that will ignite and burn, whether flame proofed or not, or whether plastered or not. Examples could be carpet, rugs, vinyl and wallboard/drywall, plaster board, to mention a few.

In most cases, the walls of a home are constructed of combustible materials. Wood studs with drywall/plasterboard is considered a combustible assembly. It is only a matter of time, in proportion to the amount of heat applied, before pyrolysis occurs in the wood framing. This can often result in spontaneous combustion if oxygen is present. (Pyrolysis is the chemical alteration of wood, by action of heat alone, in the absence of oxygen and hence without burning). Clearances to combustible materials should always be followed according to the Manufacturer's specifications (on Listed appliances). Air spaces and air circulation are the best protection available. For this reason, it should be obvious that applying brick, tile cement board or other noncombustible materials directly to the surface of a combustible wall will not provide adequate protection. The dense, noncombustible material will conduct the heat right through to the wall. Pyrolysis can still occur.

Fireplace #1:

Location:	Family room.
Type:	Heatilator-type.
Conditions:	Overall condition appears serviceable. No visible problems with the firebox. Direct vent system-appears serviceable. Gas logs/line appears operational/serviceable at this time. Gas valve has been installed-inside/under the cabinet.

ATTIC SPACE

The attic area is inspected for damaged, sub-standard and/or altered framing (See Structural section of report); determining the amount and condition/adequacy of the insulation and ventilation. In addition, the plumbing, electrical, mechanical and chimney conditions within the attic space are inspected.

Ventilation is also important in the attic space. Proper and adequate ventilation will allow moisture, that has accumulated in this area, to dissipate and helps to reduce the heat build-up that develops on sunny days. Some of the moisture, generated in the house, may work its way into the attic space. If this area is inadequately vented, the moisture build-up can lead to delaminated roof sheathing, dark staining/molds/mildew and possible wood rot, in extreme cases. Additional roof venting may be called for, during the inspection, due to conditions noted in the attic space. Another factor for moisture in the attic space is ceiling penetrations; fan housing, recessed lighting, light fixtures, ceiling fans, speakers, etc. These openings, if not sealed properly, can leak warm moist air from the house and trap in the attic pace

Contributing to the moisture conditions in the attic space are exhaust fans and vents; passing into or through the attic spaces from bathrooms, the kitchen and laundry rooms. Exhaust fans, in the older homes, quite often vented directly into the attic space, with no attempt to terminate them to the exterior of the attic or house. Another common practice is to vent exhaust fans into the soffit area. This practice often leads to moisture problems and damage to the underside of the roof, near the lower edges. **It is always recommended that exhaust fans vent through the roof or sidewall (exit to the exterior) using appropriate roof cap or housewall cap vents with back-draft dampers and screens.** The ducting used (solid or flex materials) should be sealed at all joints and insulated (if possible). Cheap, flex hoses are not recommended for this use because they are prone to deteriorate over time, they collect condensation and were not designed for this purpose.

Limitations in the attic space may be due to the installation of the insulation- which may affect several factors of the inspection process; deep insulation may prevent access because the framing is not visible and entering may significantly alter or damage the insulation and/or there is a potential to damage the ceiling materials below. The visible layer of insulation may be covering other layers (original materials) which may include asbestos-type materials (vermiculite) and covering mechanical systems and electrical wiring (knob-n-tube). Items and areas which are not readily accessible and visible are exempt from the inspection.

Attic Conditions:

Access Location(s):

Garage (2 locations) and Master bedroom closet.

Accessibility:

Scuttlehole opening (in ceiling). Entered this area for a visual inspection.
Viewed the garage attic from the openings.
- Access scuttle is partially damaged in the master bedroom closet- drywall is cracked or broken.
Watch for heat loss in this area.



Overall Conditions:

No significant structural issues/problems noted at the time of the inspection. Water staining noted in the attic space during the inspection- appears to be inactive, old and/or dry at the time of the inspection.
Water staining at the fall arrest roof anchor bracket- the cap was re-installed during the inspection, which should stop the leaks from re-occurring.



Water staining

Mechanical components/systems in Attic:

All the Bathroom exhaust fans vent/terminate to the exterior of the home, as required.



Ventilation:

Venting in the attic space appears to be adequate/sufficient at time of the inspection, with no adverse problems noted.

Insulation/Conditions:

Type(s):

Fiberglass- Blown-in/loose, Batts.

Approx. Depth and R-value:

14-17 inches, R-38 value.

Conditions:

Overall Condition- Appears serviceable, the insulation appears to be providing adequate and uniform coverage at this time.
 - Insulation was partially disturbed over the bathroom area- the exhaust vent was re-connected.



Insulation R-Factors: The effectiveness of insulation is rated by its ability to slow heat transfer, as measured by its R-factor. Because the R-factor varies according to the density and other properties of a material, it is also related to thickness. Typically, the deeper/thicker the insulation, the higher the R-value. In older homes, you may find minimal amounts of insulation, or you may also find multiple layers of different types of insulation, where they were added over the years.

Common types of insulation: Fiberglass, mineral/fiber wool, cellulose fiber, polystyrene, polyisocyanurate foam, fiberboard, vermiculite (contains asbestos), Silvawool (wood-fibers).

Attic spaces should be insulated to minimize heat loss from the house. Most installation practices would have the insulation on the floor of the attic space or on the sidewalls. The amount of insulation depends on the type and when it was applied. The correct installation is essential for maximum benefit of the insulation.

GARAGE/CARPORT

Garages and Fire Safety: It's important that any fire that breaks out in the garage doesn't spread to any living space, attic space or area attached to the house. To contain the fire within the garage, surfaces between the garage and living spaces must be fireproof. The definition of fireproof is normally given as being able to hold back a fire for a certain period of time. Acceptable time period is usually a one-hour fire rating. All repairs should be made with approved materials- fire-rated drywall, sheet metals, fire-rated sealants, etc.

Fire-rated drywall is typically 5/8" (doubled in some cases of newer construction) and fire-resistant door should be minimum of 1 3/8" thick. Typically doors are metal clad, solid-wood or vinyl-clad. Determining the heat resistance rating of fire walls and doors is beyond the scope of this inspection. Flammable materials should not be stored within closed garage areas and should be kept away from the gas appliances.

Garage door openers and operational safety: Federal law states that residential garage door openers manufactured after 1992 must be equipped with photoelectric eye sensors, or some other safety-reverse feature that meets UL 325 standards. It is always recommended that garage door openers have all the safety equipment that is available and in good working order. If the current garage door opener is older than 1992, you should consider upgrading the garage door opener. Recommend testing the safety equipment, at least once a year and correct/repair the equipment as needed.

Type Structure:

Style: Garage.

Location: Attached to house, Two vehicle.

Roof:

Type(s)/Material: Same material as the house.

Condition: Same as the House, See House Roof section of the report.

Floor:

Conditions: Overall condition- Appears serviceable, with no significant issues noted.

Fire Wall:

Conditions: Overall condition of the firewall- Appears serviceable, and appears to be providing adequate separate between the garage and house.

Fire/Man Door (Interior):

Type/Condition: Solid Core; The door Appears to be Serviceable/Operational and Fire-rated (or equivalent). The door closes and latches automatically, as required- the spring-loaded hinges are operational.

Step/Landing: Appears serviceable/functional. The handrail on the landing/stairs appears to be serviceable and adequate.
Railing was modified to install the ramp to the storage area.

Vehicle Door(s):

Condition(s): Overall condition- Appears serviceable and functions as intended. With the concerns/issues noted;
- Slight bent at the upper bracket. Possible need for reinforcement of this bracket and door connection. Recommend contacting a qualified/trained door system technician for further evaluations and make all corrections/repairs to the garage door as needed, for safety.



ROOF and COMPONENTS

The foregoing is an opinion of the general quality and condition of the roofing material. The inspector cannot and does not offer an opinion or warranty as to whether the roof leaks or may be subject to future leakage. This report is issued in consideration of the foregoing disclaimer. The only way to determine whether a roof is absolutely water tight is to observe it during a prolonged rainfall. Many times, this situation is not present during the inspection. Every effort will be made to determine the condition of the existing roof.

Standard roof shingles are available varying degrees of quality, rated for 15-50 years of expected life. Materials are checked for proper installation, degree of wear, physical damage and areas where leakage appears likely. Multiple layers of roofing may shorten the life expectancy. Most newer houses have 30-year laminated asphalt shingle roofing installed.

Wood shakes and wood shingles also come in varying degrees of quality, from 15-40 years of duration. Wood shakes have lost popularity for several reasons, fire hazards, lesser quality materials and higher maintenance costs. These roofs' require ongoing maintenance to keep them water-tight. Pressure washing (and air cleaning) and keeping debris off the roof will prolong the life of the roof.

Low-slope roofing is often with a minimal (or no) slope and is prone to holding water and leaking. Low slope roofing may be installed with asphalt-impregnated papers installed with hot tar, modified-bitumen single-ply materials (torch-down) or various synthetic products. Concerns are usually based on installation practices, patching/repairs, signs of leakage, weathering and wear.

Roofing/Components/Venting:

Style:	Gable roof- Triangular end portion of a building from the eaves to the ridge of the roof.
Primary Materials:	Asphalt/fiberglass composition shingles; made with fiberglass/organic felt base that is impregnated with asphalt and covered on the surface with granulated stone (which protects against UV damage and provides the color). Architectural grade; multiple-layer laminated construction shingles. Heavyweight shingles with an average life-span of 25-50 years (depending on the type and thickness).
Accessibility:	Walked on the roof.
Specific conditions of roofing materials;	Asphalt shingles with the following conditions visible: - Evidence of prior pressure washing noted on the roofing materials; surface granules are loose/missing/worn-off. Minor wear and damage to the front porch roof.



Ventilation for the roof:	Vent type(s) installed in the roof; jack/roof cap vents, soffit/eave, gable ends. Venting appears to be adequate/sufficient at time of the inspection.
---------------------------	--

Exposed Flashing:

Types noted:	Metal- galvanized, Neoprene/thermoplastic/flex-flashing.
Overall Conditions:	Overall condition- Appears serviceable, no significant issues noted at this time. With the exception/concern/issues noted; - Kick-out flashing is needed at the roof/housewall intersection or junction- located at the end of the step flashing. This will divert water run-off on to the roof or into the gutter system and not behind the siding/cladding or trim.



Roof Layers:

Findings:

Approximate number of layers of roofing materials observed: One layer (visible); this is the preferred installation and will help to achieve the life expectancy of the roofing materials.

Overall Condition of the Roof:

Conditions/Findings:

General condition- Appears Serviceable; conditions are based on the age/type and the typical wear of the roofing material. No significant problems or issues noted at the time of the inspection.
Build-up and debris noted on roofing material; Moss/fungus (green mass build-up/staining). Recommend cleaning off the excessive debris from the roofing materials, to prevent premature wear and tear. Recommend cleaning off and treating the roof with an approved fungicide, or moss inhibitor, to prevent further growth of the moss.



Gutter System:

Types/Conditions:

Metal gutters; Overall Condition- Appears serviceable. The overall gutter system appears to be controlling the water run-off as needed.
- Debris in the gutters (and holding water)- recommend cleaning the complete gutter system and check for leaks. Recommend detaching the downspout drain pipes when cleaning, so that debris does not drain into the underground drain system.

Downspouts/Drain pipes:

Type/Conditions:

Metal, Overall condition- Appears serviceable. Appears to be controlling water drainage adequately, as intended.



Roof drainage control:

Draining system(s) installed:	Underground piping system, plastic drain lines; solid tightline.
Conditions:	Overall Condition- Appears serviceable. The drainage system appears to controlling the majority of water run-off as intended. Limited viewing of this type of underground system. (Underground drainage systems cannot be inspected during this visual inspection)

Controlling roof drainage is critical to protect the housewall from water/moisture problems and damage, and preventing excessive surface water at the foundation wall. This may be controlled as easy as cleaning the gutter system; replacing all rusted/leaking gutters/downspouts; making sure all connections are water-tight and made appropriately; and that all gutter system components have been installed.

The most effective way to control drainage is to tightline the system- connecting all downspouts to a solid plastic pipe, to move water away from the house (preferably a gravity system). Older systems commonly used concrete (or clay) drain tiles, but these are not as reliable, often clogging, deteriorating/breaking and leaking. The least expensive way to control roof drainage is with elbows and splashblocks (as long as they are sloped appropriately away from the foundation).

The roof drainage, gutter system is not tested during the inspection. Gutters, downspouts and drain pipes can only be inspected effectively during rainy periods. Visual inspections, of these systems during dry periods, are limited to staining on the gutters and wood members. If the gutters are full of debris they should be disconnected from the downspouts and cleaned. Inspect the joints, corners and outlets for openings and wear. Plastic/vinyl gutter systems, though inexpensive, are not as reliable as continuous metal gutter systems, because they are more prone to sag, leak and over-flow if not installed properly.

Older, wood gutters will rot and deteriorate over time and have a limited life span. These gutters are also very shallow and cannot control water as well as deeper, metal gutters.

Galvanized metal gutters and downspouts also have a limited life span (approximately 25 years) before rusting through and leaking also. Aluminum is the preferred gutter system and has an extended life expectancy. Professionally installed, these systems will last decades, with minimal maintenance (cleaning and sealing joints).

EXTERIOR

Exterior Cladding: The main purpose of the exterior cladding/siding is designed to protect the building from water penetration and the weather (moisture, wind, temperatures). Moisture barriers, located under the cladding/siding, have the potential to prolong the life of the wall framing beyond the life of the siding alone. As long as the siding materials are installed in a shingle-type manner, moisture should not be an issue for the house. It is essential that the exterior housewall be maintained to prevent premature wear and tear and damage to the house.

Exterior cladding/siding comes in many forms; Wood (horizontal/vertical, shingles, plywood), OSB/hardboards, Cement-fiber, Vinyl, Aluminum, Brick/Stone veneers, Stucco and EIFS and the list goes on. The basic inspection of exterior cladding/siding is for installation practices, soil clearances/contact and damage. Soils should never be built-up against the housewall/siding, regardless of the materials. Even if the exterior wall is not wood (brick, vinyl, stucco, etc.) built-up soils on the walls, can have an effect on the house.

Flashing: Flashing is essential to keeping water away (shedding) from the structure and the interior of the building. It is used wherever there is a horizontal or sloped penetration of the outer building skin or a juncture of dissimilar materials that is likely to be exposed to the weather. Flashing provides a permanent barrier to the water and directs it to the outer surface of the building, where gravity carries the water down to the ground. All housewall penetrations should be flashed watertight.

Common flashing materials include galvanized steel, baked-enamel steel and aluminum (less common materials- stainless, copper and lead). Caulking and sealants should not be considered permanent and adequate flashing, as these will require ongoing maintenance and replacement over time.

Walls/Cladding:

Materials Used:

Fiber-cement materials (lapped, panels and/or shingles)- Hardiplank products. Cultured Stone Veneer.

Conditions Observed:

Overall Condition of the siding materials- Appears Serviceable, and the exterior cladding appears to be performing as intended.
 - Prior repairs to the lapped siding at the back steps- gas pipe was passing through the wall at this location.



Eaves/Trim/Flashing:

Materials used:

Wood.

Conditions noted:

Overall condition- Appears Serviceable. With the notable concerns/issues/exception;
 - The front column trim boards are separating at the joints and will be prone to water intrusion and moisture-related damage. Recommend re-installing the boards tight and caulk/seal the joints and re-paint as needed.



Porch #1:

Location:	Front.
Type:	Concrete landing/steps.
Conditions:	Overall condition- Appears Serviceable.

Chimney #1:

Location:	Sidewall mounted.
Material/Type:	Metal.
Conditions:	Appears Serviceable- no significant problems noted at the time of the inspection.

Exterior/Grounds

This inspection is designed to evaluate the conditions on the exterior, around the house/building and how these conditions may effect the house structure; siding, foundation, roof and other components. If these components are a sufficient distance from the housewall there overall condition may not effect the house and may be considered aesthetic only and not a functional part of the house. Fences that are in average or poor condition may not directly effect the house and may not be reported as a significant issue; but this does not mean you don't want to negotiate with the Homeowner about possible compensation for repairs or replacement. Retaining walls may be considered a significant problem in some cases, despite not directly effecting the house. These walls may be preventing soil movement and erosion, which may indirectly effect the house and property.

This inspection is not intended to address or include any geological conditions or site stability information. For information concerning these conditions, a geologist or geotect engineer should be consulted. Determining soil type or stability conditions is not part of this inspection. Any reference to grade is limited to immediate areas around the exterior of the exposed areas of the foundation or exterior housewalls. This inspection is visual in nature and does not attempt to determine drainage performance of the site or the condition of any underground piping, including municipal water and sewer service piping or septic systems. Surface water should always be drained away from the foundation/housewall using protective slopes: approximately 3% grade for grassy/landscaped areas and approximately 1% for paved/impervious surfaces. Trenching or built-up yards, around the foundation and structure can potentially cause moisture related problems for the building. Corrections are recommended.

GROUNDS

Exterior/Grounds

This inspection is designed to evaluate the conditions on the exterior, around the house/building and how these conditions may effect the house structure; siding, foundation, roof and other components. If these components are a sufficient distance from the housewall there overall condition may not effect the house and may be considered aesthetic only and not a functional part of the house. Fences that are in average or poor condition may not directly effect the house and may not be reported as a significant issue; but this does not mean you don't want to negotiate with the Homeowner about possible compensation for repairs or replacement. Retaining walls may be considered a significant problem in some cases, despite not directly effecting the house. These walls may be preventing soil movement and erosion, which may indirectly effect the house and property.

This inspection is not intended to address or include any geological conditions or site stability information. For information concerning these conditions, a geologist or geotect engineer should be consulted. Determining soil type or stability conditions is not part of this inspection. Any reference to grade is limited to immediate areas around the exterior of the exposed areas of the foundation or exterior housewalls. This inspection is visual in nature and does not attempt to determine drainage performance of the site or the condition of any underground piping, including municipal water and sewer service piping or septic systems.

Surface water should always be drained away from the foundation/housewall using protective slopes: approximately 3% grade for grassy/landscaped areas and approximately 1% for paved/impervious surfaces. Trenching or built-up yards, around the foundation and structure can potentially cause moisture related problems for the building. Corrections are recommended.

Grading/Site Drainage:

Site Conditions:

The site is relatively flat or has a positive slope (away from the house) around most of the foundation/housewall. Overall condition- Appears Serviceable. No apparent significant drainage problems noted at the housewall at this time.

Driveway:

Type(s):

Concrete.

Condition:

Overall condition- Appears serviceable; appears to be functioning as intended. Overall drainage for the driveway- Appears serviceable, with no adverse affects to the house/garage areas.

Sidewalk/Walkway:

Type:

Concrete.

Conditions:

Overall condition- Appears serviceable.

Patio:

Type:

Concrete. Pavers.

Condition:

Overall condition- Appears serviceable.

Fences & Gates:

Type:

Wood.

Condition:

Overall condition- Appears serviceable.

Landscaping:

Conditions:

Generally maintained- adequate clearances of shrubs and trees to the housewall and/or roof components.

PHOTO GALLERY

Photo #1



REPORT SUMMARY

The following items are Significant/Major deficiencies and/or areas of concern noted during the inspection and should be addressed as soon as possible. The Summary page is not a substitute for reading the entire Inspection Report. Items noted below will included on the corresponding pages. Diagrams and photos, of pertinent issues, are provided in the main body of this Inspection Report:

MAIN STRUCTURE

Posts/Columns:

Conditions:

Concerns/issues noted at the time of the inspection;

- Several of the structural posts are in standing water in the crawl space at this time, or have been wet recently. Despite being pressure-treated wood, the wood posts are prone to fungal rot damage overtime. The metal brackets attached to the posts are rusted/corroded and may not restrain the posts anymore.

Recommend further evaluation of all the posts in the sub-structure framing after the water is removed, to determine if replacement is needed for the posts. Possible need to add raised footings and replace the posts, to allow for the proper clearance above the soils grade level. Recommend contacting a qualified, licensed contractor to make further evaluations and make all necessary repairs/corrections as needed.

CRAWL SPACE

Conditions Observed:

Dampness/Moisture:

Evidence of excessive water/moisture conditions in the crawl space. Standing water under/above the plastic vapor barrier; standing water is present in over half the crawl space sub-area (limited access to all areas). Several of the wood posts are below the water level, or are covered with mud-sediment.

Water entry through the foundation wall, located under the fireplace area; most of the water appears to be from high ground water.

Recommend consulting a qualified, licensed professional drainage contractor for evaluation and recommendation for the best solution on removing/eliminating any excessive moisture conditions that may be present and provide a drainage solution to permanently remove any excess water/moisture from the sub-area. Recommend evaluations of the roof drainage system (dye testing if needed), surface drainage around the house and ground water to determine if these contribute to the water/moisture issues in the crawl space. Recommend eliminating all excessive moisture and conditions that may be present in the crawl space sub-area.

Vapor Barrier:

The vapor barrier appears to be in poor condition: Plastic is covered with, mud/silt from past flooding, fallen/damaged fiberglass insulation. Recommend complete removal of the old plastic vapor barrier(s) in the crawl space sub-area, prior to installing the new materials. Recommend installing new **6 mil., black polyethylene plastic sheeting** to cover all soils in the crawl space. Overlap plastic at least 12" at all joints; do not run plastic up the base of the wood posts or framing, and secure the plastic with stones/bricks or fasteners to prevent movement.

Sub-Floor Insulation:

Fiberglass; Estimated R-factor: 19 (+/-).

Evidence of rodent nesting and/or damage to the sub-floor insulation; urine staining, droppings and debris noted on/in the sub-floor insulation. Recommend removing and replacing all the damaged and infested sub-floor insulation in the crawl space sub-area as needed. All infested insulation should be removed. Recommend replacing insulation with similar R-value or improve as needed. Recommend contacting a qualified, licensed insulation specialist about the replacement of the sub-floor insulation.

HEATING/HVAC SYSTEM

HVAC; Air Distribution system:

Forced-Air Operation:

System appears to be operational/serviceable. No significant problems noted with the furnace operation at time of the inspection.

Recommend contacting a qualified, licensed HVAC contractor for a complete Tune-up and general maintenance of the heating system as needed.

Heating/Air Distribution components:

Concerns/Issues- Metal/Flex ducts:

Conditions noted with the metal/flex ducting:

- The flex ducting appears to be damaged in the dining room; the inside of the ducting is torn/damaged (fiberglass is exposed). Recommend replacing the flex-ducting as needed.

- Recommend replacing the damaged duct insulation in the crawl space as needed.

Recommend contacting licensed HVAC/Mechanical contractor, or handyman, to make further evaluations of the ductwork system. Repair/replace ducting as needed using approved materials and installation practices.

The following items are Minor deficiencies, and areas of concern, and potential problems with the house; General maintenance and upkeep items. Diagrams and photos, of pertinent issues, are provided in the main body of this Inspection Report. Further evaluation/attention may be needed; action may be required at this time:

WOOD DESTROYING ORGANISMS (WDO/WDI) and PESTS

Wood-Decay Fungi Rot (WDO)

Findings/Location(s)- Exterior Roof Eaves/Trim:

Evidence of fungal rot decay/damage to the trim, located (but not limited to): at the trellis on the front of the house. Replace damaged wood as needed.

HEATING/HVAC SYSTEM

Heating/Air Distribution components:

Air Quality/Conditions:

Debris noted in the heat/air ducts, visible through the floor registers. Recommend cleaning the ducts as needed.

PLUMBING

Drain-Waste Lines:

Conditions noted:

Overall condition- Appears serviceable. No visible problems detected at this time. No evidence of significant leaks detected or concerns/problems noted at time of the inspection. With the concerns/issues/exception noted during the inspection:

- Open drain-waste pipe located under the kitchen sink (drain system was modified with the replacement of the sink). Recommend replacing with the proper drain pipes/fitting. Recommend contacting a qualified, licensed plumbing contractor for evaluation and repair/correct as needed.

BATHROOMS

BATH #2:

Location:

Master Bedroom.

Bathroom components:

Overall the sink/component conditions- Appear serviceable. Counters/cabinets appear serviceable.

- The right sink drain appears to be clogged- drained very slowly when tested.

ELECTRICAL SYSTEM

Ground Fault Circuit Interrupters (GFCI):

Operation/Condition(s):

The installed Ground Fault Circuit Interrupter(s) appears to be serviceable/operational when tested. With the notable exception/concern/issues;

- The garage GFCI was painted and may not trip off as intended. Recommend replacing the GFCI for safety reasons.

Smoke Detector(s):

Condition:

Appear to be operational/functional (but were not tested at this time)- All areas where detectors are installed, *with the exception noted;*

- Detector is missing in the middle bedroom. Replace as needed, for safety reasons.

Carbon Monoxide Detectors:

Condition:

Appears functional/operational, but was not tested.

- The CO detector is poorly located and should be re-located into the center hallway area.

- Recommend installation of a CO detector(s) in all levels of the house and near the sleeping areas of the house, as required by WA State RCW 19.27.530 and the State Building Code. CO detectors should comply with UL 2034; as required by WAC 51-51-0315. Install CO detectors according to the Manufacturer's installation instructions.

KITCHEN

Dishwasher:

Condition:

Appears serviceable. Dishwasher was operated during the inspection and appears to be functional/operational.

An air gap is not provided in the dishwasher drain line. This drain line may hold water and not drain properly; recommend adding a high loop under the sink or add an air gap (if possible/practical).

Ventilation:

Type/Condition:

Exhaust Hood/Fan system- Appears operational/functional and appears to be operating as intended. Appears to be venting out of the kitchen area.

- Exhaust fan/filter system is dirty and needs cleaning for efficiency.

- Rust/corrosion on the metal duct in the crawl space. This duct was not insulated. Recommend adding insulation to reduce condensation issue.

INTERIOR

Stairs & Handrails:

Conditions:

Interior stairs- Appear serviceable. Stair handrail appears serviceable, but is not fastened to the wall/framing sufficiently. Check brackets and fasten to the stud framing as needed.

Guard rail, around the stairwell, appears serviceable. Balusters are loose, but functional.

GARAGE/CARPORT

Vehicle Door(s):

Condition(s):

Overall condition- Appears serviceable and functions as intended. With the concerns/issues noted;

- Slight bent at the upper bracket. Possible need for reinforcement of this bracket and door connection.

Recommend contacting a qualified/trained door system technician for further evaluations and make all corrections/repairs to the garage door as needed, for safety.

ROOF and COMPONENTS

Exposed Flashing:

Overall Conditions:

Overall condition- Appears serviceable, no significant issues noted at this time. With the exception/concern/issues noted;

- Kick-out flashing is needed at the roof/housewall intersection or junction- located at the end of the step flashing. This will divert water run-off on to the roof or into the gutter system and not behind the siding/cladding or trim.

Overall Condition of the Roof:

Conditions/Findings:

General condition- Appears Serviceable; conditions are based on the age/type and the typical wear of the roofing material. No significant problems or issues noted at the time of the inspection.

Build-up and debris noted on roofing material; Moss/fungus (green mass build-up/staining). Recommend cleaning off the excessive debris from the roofing materials, to prevent premature wear and tear. Recommend cleaning off and treating the roof with an approved fungicide, or moss inhibitor, to prevent further growth of the moss.

Gutter System:

Types/Conditions:

Metal gutters; Overall Condition- Appears serviceable. The overall gutter system appears to be controlling the water run-off as needed.

- Debris in the gutters (and holding water)- recommend cleaning the complete gutter system and check for leaks. Recommend detaching the downspout drain pipes when cleaning, so that debris does not drain into the underground drain system.

EXTERIOR

Eaves/Trim/Flashing:

Conditions noted:

Overall condition- Appears Serviceable. With the notable concerns/issues/exception;

- The front column trim boards are separating at the joints and will be prone to water intrusion and moisture-related damage. Recommend re-installing the boards tight and caulk/seal the joints and re-paint as needed.

The following items are future expenditures or items with a limited life expectancy. Recommend budgeting accordingly and/or anticipate replacement in the near future:

PLUMBING

Water Heater:

Estimated Age:

Original equipment. Years: 10+ (Manufactured in 2005).

Water heater is approaching the end of it's useful life (average life expectancy is approx. 10-12 years). Recommend replacing in the near future. Recommend installing the new water heater with all updated requirements (as they apply); recommend installed with proper/improved earthquake strapping, expansion tank and in a pan, on a foam pad or platform where applicable, for safety.

The following items are Pest Inspection (WDO/WDI/Rodent)- related items/issues- action may be needed:

WOOD DESTROYING ORGANISMS (WDO/WDI) and PESTS

Rodent/Animal/Vermin Activity:

Type of Infestation(s) noted:

Rats.

Evidence of Infestation:

Rodent droppings noted, on the plastic vapor barrier, on/in the sub-floor insulation batts, on the heat ducting/insulation, throughout the crawl space sub-area.

Insulation has been effected/damaged: sub-floor insulation has been pulled-down and/or damaged in the crawl space sub-area, staining from rodent droppings/urine

Unable to determine if this infestation/problem is active or inactive- a specialist is needed to determine activity status.

Recommendations:

Recommend locating all the sources of the rodent/vermin entry into the house; (attic, garage and/or sub-area) and correct and seal off as needed, using approved methods and materials. Recommend contacting a licensed specialist in rodent clean-up and remediations. Make all necessary corrections/repairs to prevent further infestation and clean/sanitize the area(s) of infestation for health reasons. Recommend contacting a licensed, professional and certified pest management company (PCO) to prevent or remedy the pest activity/damage.

Seaview Home Inspections, LLC (425) 742-1735

Michael A. Brisbin- Owner/Inspector

WA State Home Inspector License #278

E-Mail: seaviewinspections@comcast.net