

Inspection report for the property at

Slightly Complex Ave Neat Custom Home, USA

This report is prepared exclusively for **Custom House** On: **2018-02-25**

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ICN#: 10296AR0011

Overview

Overall, this property if above average for age and type. It has a detached garage that dates from around 1995. The main house started before that but had an extensive remodel and addition done in 2008, which makes the house roughly a 2008 build. The house has a very neat custom feel with lots of unique and well-thought-out spaces. The largest concern is red flags of moisture issues at the exterior east wall off the covered porch. There are a number of other repair items here, consistent with a custom house that has been remodeled and of this age.

The Scope and Purpose of a Home Inspection

Purchasing property involves risk

The purpose of a home inspection is to help reduce the risk associated with the purchase of a structure by providing a professional opinion about the overall condition of the structure. A home inspection is a limited visual inspection and it cannot eliminate this risk. Some homes present more risks than others. We cannot control this, but we try to help educate you about what we don't know during the inspection process. This is more difficult to convey in a report and one of many reasons why we recommend that you attend the inspection.

A home inspection is not an insurance policy

This report does not substitute for or serve as a warranty or guarantee of any kind. Home warranties can be purchased separately from insuring firms that provide this service.

A home inspection is visual and not destructive

The descriptions and observations in this report are based on a visual inspection of the structure. We inspect the aspects of the structure that can be viewed without dismantling, damaging or disfiguring the structure and without moving furniture and interior furnishings. Areas that are concealed, hidden or inaccessible to view are not covered by this inspection. Some systems cannot be tested during this inspection as testing risks damaging the building. For example, overflow drains on bathtubs are generally not tested because if they were found to be leaking they could damage the finishes below. Our procedures involve non-invasive investigation and non-destructive testing which will limit the scope of the inspection.

This is not an inspection for code compliance

This inspection and report are not intended for city / local code compliance. During the construction process structures are inspected for code compliance by municipal inspectors. Framing is open at this time and conditions can be fully viewed. Framing is not open during inspections of finished homes, and this limits the inspection. All houses fall out of code compliance shortly after they are built, as the codes continually change. National codes are augmented at least every three years for all of the varying disciplines. Municipalities can choose to adopt and phase in sections of the codes on their own timetables. There are generally no requirements to bring older homes into compliance unless substantial renovation is being done.

This is just our opinion

Construction techniques and standards vary. There is no one way to build a house or install a system in a house. The observations in this report are the opinions of the home inspector. Other inspectors and contractors are likely to have some differing opinions. You are welcome to seek opinions from other professionals.

The scope of this inspection

This inspection will include the following systems: exterior, roof, structure, drainage, foundation, attic, interior, plumbing, electrical and heating. The evaluation will be based on limited observations that are primarily visual and non-invasive. This inspection and report are not intended to be technically exhaustive.For more about the scope of a home inspection see: ASHI National Standards at http://www.aareihome.com/standards.pdf or Washington State Home Inspection Standards at http://www.agov/RCW/default.aspx?cite=18.280.030

Your expectations

The overall goal of a home inspection is to help insure that your expectations are appropriate with the house you are proposing to buy. To this end we assist with discovery by showing and documenting observations during the home inspection. This should not be mistaken for a technically exhaustive inspection designed to uncover every defect with a building. Such inspections are available but they are generally cost-prohibitive to most homebuyers.

Your participation is requested

Your presence is requested during this inspection. A written report will not substitute for all the possible information that can be conveyed verbally by a shared visual observation of the conditions of the property.

How to Read This Report

Getting the Information to You

This report is designed to deliver important and technical information in a way that is easy for anyone to access and understand. If you are in a hurry, you can take a <u>"Quick Look"</u> at our summary page and quickly get critical information for important decision making. However, we strongly recommend that you take the time to read the full <u>Report</u>, which includes digital photographs, captions, diagrams, videos and hot links to additional information.

The best way to get the layers of information that are presented in this report is to read your report online. This will allow all you to expand your learning about your house. You will notice some words or series of words highlighted in <u>blue and underlined</u> – clicking on these will provide you with a link to additional information.

This report can also be <u>printed on paper or to a PDF document</u>.

Chapters and Sections

This report is divided into chapters that parcel the home into logical inspection components. Each chapter is broken into sections that relate to a specific system or component of the home. You can navigate between chapters with the click of a button on the left side margin.

Most sections will contain some descriptive information done in black font. Observation narrative, done in colored boxes, will be included if a system or component is found to be significantly deficient in some way or if we wish to provide helpful additional information about the system or the scope of our inspection. If a system or component of the home was deemed to be in satisfactory or serviceable condition, there may be no narrative observation comments in that section.

Observation Labels

All narrative observations are colored, numbered and labeled to help you find, refer to, and understand the severity of the observation. Observation colors and labels used in this report are:

🗥 Major Concern:

Repair items that may cost significant money to correct now or in the near future, or items that require immediate attention to prevent additional damage or eliminate safety hazards.

7 Repair

Repair and maintenance items noted during inspection. Please note that some repair items can be expensive to correct such as re-finishing hardwood floors, but are considered simply repair items due to their cosmetic nature.

🛠 Improve

Observations that are not necessarily defects, but which could be improved for safety, efficiency, or reliability reasons.

👁 Monitor

Items that should be watched to see if correction may be needed in the future.

Observation such as a buried oil tank that may require further investigation to determine the severity and / or urgency of repair.

Future Project

A repair that may be deferred for some time but should be on the radar for repair or replacement in the near future.

B Efficiency

Denotes observations that are needed to make the home more energy efficient as well as to bring the home up to modern insulation standards. This category typically includes windows and insulation. Other items, such as lighting and appliances, are not inspected for their energy status.

🔗 Notes and Limitations

Refers to aside information and /or any comments elaborating on descriptions of systems in the home or limitations to the home inspection.

₩DO

Denotes the presence of wood destroying organisms or conditions conducive to wood destroying organisms. Conducive conditions include but are not limited to, inadequate clearances, earth/wood contact, cellulose debris, inadequate ventilation, and excessive moisture. All observations with WDO are relevant to a WA State pest inspection.

Wood Destroying

This report includes a structural pest inspection embedded within the report. All observations in this report that begin with WDO are a part of a WA State Pest Inspection. Orca Inspection Services LLC employs Dylan Chalk, Licensed Structural Pest Inspector *#* 65540. Please note that most WDO observations are related to high moisture conditions that could be conducive to mold-like substances. Orca Inspection Services LLC is not a mold specialist and recommends consulting with an industrial hygienist or other mold remediation expert if concerned about mold or indoor air quality. Pest Inspection Standards in WA State - WAC 16-228-2045 - REQUIRES THAT A DIAGRAM / DRAWING BE PREPARED FOR WOOD DESTROYING ORGANISM (WDO) REPORTS. IF THE PHOTOS AND DESCRIPTIONS IN THIS REPORT ARE INADEQUATE, A DRAWING IS AVAILABLE UPON REQUEST.

Further Evaluation

Whenever further evaluation of a system or component is recommended or whenever due diligence is recommended, this further evaluation or investigation should be done by at least one licensed professional and qualified contractor prior to closing as there is a chance of hidden costs or problems associated with the system or component in question.

Summary Page

The Summary Page is designed as a bulleted overview of all the observations noted during inspection. This helpful overview is not a substitution for reading the entire inspection report. The entire report must be read to get a complete understanding of this inspection report as the Summary Page does not include photographs or photo captions.

Moisture Meter Testing

Where moisture meter testing is indicated in this report a Protimiter Survey Master Dual Function was used.

Quick Look

Major Concerns

(I-3) Interior: Multiple lost seals were noted in the glazing. This has resulted in fogging between the panes of glass that cannot be cleaned without glazing repair or replacement. Hire a glass replacement company to further evaluate and replace all windows with lost seals. I list as a major concern as this can be expensive to correct.

(RA-1) Roof/Attic: The garage roof covering is close to the end of its reliable service life. The average life of these roofs is 18-22 years and that is how old this roof looks. Hire a licensed roofing contractor to further evaluate and replace this roof soon to insure reliable roofing performance. During roof replacement, I always recommend doing a complete tear off, evaluating the roof decking for damaged or soft boards, evaluating roof venting and indoor fan terminations and replacing all flashings. I could not find leaks at the time of inspection, indicating that the roof has performed well to date.

(EG-1) Exterior/Garage: Visual inspection of the fiber cement siding installation showed the ne for repairs as well as some installation details that are not consistent with modern manufacturers installation requirements. This is typical for this age of construction, however, red flags at the exterior of the east porch indicate possible concealed water damage. Additional inspection is needed by a qualified contractor to further investigate the siding and determine the scope and extent of the needed repair. Examples of observations noted during inspection include:

- Blistering paint on fiber cement siding indicates likely saturated siding.
- High moisture meter readings where paint was bubbling
- Water stains indicate possible water behind siding
- Fungus growing at inside corner
- Siding run right to the horizontal flashing and sealed. This is not recommended but difficult to fix at this point.
- Missing back flashings at butt joints this can be retrofit on exposed sides of the building with metal flashing tabs or maintained with caulking.
- Signs of concealed water damage at inside corner below deck
- These stains are typical and should be distinguished from the red flags at the east side. These stains can be cleaned and siding re-painted if needed.

Repairs

(E-3) Electrical: The wiring to the sub-panel in the garage has been done to an older standard. The neutrals should be on a floating bus bar and should be separated from the equipment grounds to eliminate stray voltage. Hire a licensed electrician to further evaluate and repair this condition.

(E-4) Electrical: The white-insulated conductors in the sub-panel that are being used as hots have not been correctly identified. These conductors should be colored black or red or wrapped in appropriate tape to insure proper identification inside the panel.

(E-5) Electrical: The loose receptacle in the family bath should be secured to prevent accidental damage to the wiring connections.

F (E-6) Electrical: Install the missing light cover to the back door exterior light.

F (E-7) Electrical: The installation of carbon monoxide detectors is recommended for all homes that have fuel burning appliances such as gas or oil furnaces, gas water heaters, gas ovens and cook-tops, gas fireplaces and wood stoves. In addition, Washington State law (WAC 51-51-0315) now requires UL 2034 approved carbon monoxide detectors in all homes and condominiums being sold in Washington State. Location should be outside of all sleeping areas and one on each floor of the home. Best practices are to have these detectors hardwired with a battery back-up - though generally installation must meet manufacturer's specifications. Carbon monoxide is a colorless, odorless gas that can cause sickness, nausea and potentially death. For more information, consult the Consumer Product Safety Commission at 1-800-638-2772 (C.P.S.C.).

(E-8) Electrical: A missing smoke alarm was noted at the time of inspection - see loft. Replace all missing smoke alarms.

(E-9) Electrical: The 2009 edition of NFPA 54, National Fuel Gas Code, includes new requirements for bonding CSST gas piping systems to the grounding conductor of the building's electrical system, to reduce the possibility of damage by lightning strikes by reducing the electrical potential between metallic objects and building systems, including gas distribution. I did not find bonding or grounding at the metal gas pipe where it enters the building. Have this further investigated by a qualified electrician and repaired as recommended.

(HCF-4) Heating, Cooling and Fireplaces: This heat pump was operating at the time of inspection. Heat pumps have fairly unpredictable service lives that can range from as little as 7 to as many as 30 years. The unit was working and making heat today even in cold temperatures. The system seemed to be keeping up well with the thermostat. The outdoor unit was making a bit of a noise as though the fan is loose. I recommend having this system serviced and have the outdoor unit fan evaluated. At the time of inspection the filter was clean. The system was tested in heating mode only.

(HCF-5) Heating, Cooling and Fireplaces: A <u>recalled model of Cadet heater was noted</u>. I counted three on the 2nd floor - in bedrooms and the toe kick in the bathroom. ZA models. *All recalled Cadet heaters should be repaired or replaced* as recommended by the Cadet Recall. These heaters are a latent fire hazard until serviced or replaced. For more information on the Cadet recall call 800-567-2613.

(HCF-6) Heating, Cooling and Fireplaces: Seal up the hole in the wall behind the gas pipe at the propane furnace in the garage office. Also, install a CO alarm for this space.

(P-5) Plumbing: Some older-looking waste piping in the old part of the crawl space is screed off. I did not smell any sewer gas, so this may be disconnected from a sewer line. Just in case, I recommend capping so this pipe is properly sealed.

(P-6) Plumbing: The discharge tube for the water heater relief valve is using a supply connector. This restricts the diameter of the opening and is unsafe and non-standard. Hire a licensed plumber to further evaluate and repair.

(MB-1) Master Bathroom: Use caulking to seal between the backsplash and sink behind the bath sink. Also be sure the sink to countertop juncture is well sealed.

(MB-2) Master Bathroom: A slow drain was noted at the left side master bathroom sink indicating that the drain may be obstructed. Repair as needed so drain keeps up with supply.

(MB-3) Master Bathroom: The shower head in the master bath is leaky and requires repair to prevent wasting water and to control water flow.

(MB-4) Master Bathroom: The tile and grout should be cleaned and sealed with grout sealer to prevent water damage to the tile - see especially inside shower surrounds in bathrooms. This should be a routine procedure with tile unless epoxy grout was used. If this is not done in epoxy grout plan on cleaning and sealing tile grout inside the shower surround annually to prolong the useful life of the tile.

F (FB-1) Family Bathroom: Re-caulk the inside corners of the small tub tile surround - 2nd floor.

(I-1) Interior: Cracks were noted in the walls - see south side in master bedroom. Cracking can be due to routine settlement or moderate seasonal expansion and contraction of the home. It can also be related to workmanship and nailing of framing and drywall. The seasonal types of cracking can be most problematic as they will tend to re-open after repair. Repair and paint cracks as needed and monitor.

(I-4) Interior: Some window screens were noted in the basement. Inquire with the seller if these go to the windows that do not have screens.

(RA-3) Roof/Attic: The weather strip for the attic access hatches is not seated properly and the hatch is leaking air. This should be better air sealed to prevent heat migration into the attic.

(RA-4) Roof/Attic: The attic insulation in the garage is rodent-damaged and incomplete. Remove all contaminated insulation and complete repairs to fans, wiring, ventilation.... Once repairs are complete re-insulate to modern standard or to best possible levels. Be sure to seal up all air leakage points during repairs and prior to insulating to modern standard be sure all rodent issues have been resolved and all projects like wiring and bath fans have been completed.

(EG-2) Exterior/Garage: The tannin stains at the west / back door appear to be from pressure washing. No elevated moisture meter readings were found at the tie of inspection. Clean stains, repaint if needed and monitor.

(EG-3) Exterior/Garage: Birds appear to have been roosting at the exterior - see bird feces on the side of the building in places. I did not see any nests in the attic though some of the eave areas were not visible to inspection. Implement exclusion work and / or anti-roosting provisions as needed.

F *(EG-4)* **Exterior/Garage:** Install diverter shingles or flashings above the exposed fascia, next to the gutters to protect this wood from rot and decay.

F (EG-5) Exterior/Garage: Several areas of soffit vent screen were noted to be loose, missing and in need to repair to prevent bird and rodent entry - see SW corner of garage.

F (EG-8) Exterior/Garage: Hire a qualified contractor to make some tune-up repairs to the decks. A few sections of decking are missing bolts to secure the ledger board to the house. I also noted missing hangers for the joists at the ramp that leads between the garage and the house.

F (EG-10) Exterior/Garage: A rain cap and spark arrestor is recommended for the chimney flue to prevent water damage inside the flue.

(EG-11) Exterior/Garage: Hairline cracks were noted in the east face of the masonry brick chimney. These were small and minor at the time of inspection. Monitor - no repair appears

needed at this time. I did note some minor mortar failure as well. Have this further investigated by a qualified mason during the next chimney sweep and repair as recommended.

(EG-12) Exterior/Garage: A level II cleaning and inspection is recommended for the chimney flues. Regular cleaning and inspection is recommended for safe and reliable operation of the chimney. Chimney flues are not visible and are beyond the scope of a home inspection. Hire a licensed chimney sweep to clean and further evaluate the flues; if this has been recently done, please disclose for buyers.

Geta (EG-13) Exterior/Garage: Mold-like substances were noted on the back side of the garage doo For improved indoor air quality in the garage I recommend priming and sealing these stains with an appropriate sealer and finish paint. Please note this can be a red flag indicating excessive moisture in the garage slab or just related to parking wet cars in the garage. This is difficult to verify during a one-time inspection. Additional repair options include installing a fan to better ventilate the garage and / or sealing the concrete with a sealer to help reduce moisture evaporation into the garage.

(EG-14) Exterior/Garage: The overhead garage door does not reverse under resistance to closing - north side. Adjustment of the sensitivity is recommended for improved safety. This typically involves adjusting a small plastic screw on the opener.

Improves

(E-2) Electrical: The arc fault protection breakers in this panel are an older "branch feeder" mode AFCI. These are first generation technology and they will not perform as reliably as new versions of arc fault protection known as "Combination" AFCI. Updating is recommended. Consult with a licensed electrician about updating to a combination AFCI where arc fault protection is desired and please note that our standards of where arc fault protection is required has changed over the years. How far you wish to go with updating is discretionary.

(FSD-1) Fuel Storage and Distribution: The propane tank for the home has not been strapped o braced to secure the tank in the event of an earthquake. This is not required but seems a logical safety improvement. I recommend bracing this tank for improved safety.

% (I-2) Interior: The ends of the hand rail should return into the wall to prevent clothing or accessories from catching on the end of the railing and creating a trip hazard.

(G-3) Grounds: The exterior back stairs are missing a graspable handrail for safety. This should be a round railing 1 and 1/4 inches - 2 inches in diameter. If the railing is not round it must have a finger groove that is 3/4 of an inch down from the tallest point of the rail. The graspable handrail should also be 1.5 inches from the wall. 2x material is not considered a graspable handrail. Have a qualified contractor build suitable railings to reduce the potential for falls.

Monitors

(PWDO-1) Pests and Wood Destroying Organisms: Rodent traps were noted in the crawl space. This is evidence of prior rodent problems. I recommend disclosing the extent and scope of prior rodent control work. Unless noted elsewhere in this report, no fresh evidence of rodents was visible at the time of inspection. I did see an old dead one under the older p[art of the house.

If (PWDO-2) Pests and Wood Destroying Organisms: <u>Anobiid beetle exit holes</u> were noted in some of the wood around the house. This is common in older lumber that was often not properly

kiln dried. No powdery frass was found during visual inspection and only a minor amount of damaged wood was found - see peeler poles at east porch. Monitor for any signs of frass which could indicate a treatment is needed.

(CS-2) Crawl Space: I noted an old sump pump below the old part of the house and a few moisture stains. No water was note during inspection. This may be old - from before the remodel work was done.

(K-1) Kitchen: Kitchen sink disposers are not recommended on septic systems. Refrain from using except for the items that get away from you.

(RA-5) Roof/Attic: The attic and roof cavity ventilation look to be non-standard. Proper attic ventilation is important for the roofing materials to perform as intended and to reduce chances for condensation problems and heat build-up in the attic. The problem here is the use of ridge vents and gable vents. Most ridge vent manufacturers recommend ridge and soffit vents only to get convective ventilation across the roof decking; the gable wall vents can disrupt this convective air flow. No evidence of problems from this configuration was noted to date and depending on occupant behavior this may not ever cause a problem. I would leave as is, especially as the roofline has been remodeled. It seems to be performing well to date. Monitor.

Due Diligences

(PWDO-3) Pests and Wood Destroying Organisms: Localized moisture ant frass was noted during inspection today - see above door to the newer crawl space. Moisture ants are a wood destroying organism that are indicative of a moisture problem. They will often form nests and tunnels and can damage structural wood. Repairs need to be made to eliminate wet wood and repair all hidden damage to the building. Once the source of moisture is removed and all wood is repaired the ants should go away. During inspection today I found no live ants suggesting this may be an older water problem. But I am concerned this is related to the other red flags in that east wall by the covered porch. Additional evaluation is needed.

P (P-3) **Plumbing:** This home's sewage appears to employ an on-site private septic system. Please note that an evaluation of this system is beyond the scope of this inspection. I recommend having this system further evaluated by a septic specialist.

(G-1) Grounds: An arborist should be hired to further evaluate the large trees on the property and prune or remove as recommended. Whenever large trees are located near a house a higher level of maintenance should be expected to keep trees safe and healthy and to eliminate the risks of damage to the home or building materials and to eliminate rodent entry points.

Notes

(SB-1) Structure and Basement: Evidence of seismic retrofitting protection was noted.

(CS-1) Crawl Space: Please note that this house has two crawl spaces - one older one for the original house and a newer one.

(E-1) Electrical: I was unable to get the dead front cover of the electric panel fully open today. The generator transformer made removal of the cover difficult - removal of the transformer switch risks damaging or loosening the breakers.

(FSD-2) Fuel Storage and Distribution: The propane tank looks to be a leased tank. A sticker for Cennex @ 800-562-2667 indicates they are the owners of the tank. Consult with this company for

lease information and filling terms and prices.

(HCF-2) Heating, Cooling and Fireplaces: The Duro Dyne mechanical ventilation timer was set at the time of inspection - this appeared to be operating when tested. The goal of this fan is to provide fresh air for the house and to control relative humidity. During winter months try and keep relative humidity below 55%.

(HCF-3) Heating, Cooling and Fireplaces: The forced air heating system seems to have two zones. They were both operating today as far as I could tell. This can allow you to zone the heat in the house for improved control of temperature.

(HCF-7) Heating, Cooling and Fireplaces: This house has a **<u>Rumford fireplace design</u>**. These are characterized by shallow and tall fireboxes that project heat into the room - see both inside and out.

(HCF-8) Heating, Cooling and Fireplaces: Exterior combustion air has been provided for the wood stove to improve the energy efficiency and safety of the wood stove. This helps the wood stove run more efficiently because it uses outside air for combustion.

(P-1) Plumbing: This shows the main water shut off below the mudroom bench.

(P-2) Plumbing: I noted that the water heating system has a circulation pump. This appeared to be operating at the time of inspection. For improved efficiency these are often put on timers so the pump can be timed to go off at night and in the middle of the day. I noted a timer for the pump - I recommend setting as desired so the pump is operating during your likely hot water demand times.

(P-4) Plumbing: For more information about septic systems and how they work, please see this web site from the EPA - a homeowners guide to on-site septic systems: <u>https://www3.epa.gov/npdes/pubs/homeowner_guide_long.pdf</u>

(PB-1) Powder Bathroom: During inspection today I operated all plumbing fixtures in bathrooms. I ran a moisture meter around toilets and tile shower enclosures to check for concealed leaks. I also sounded for loose finishes in shower and tub enclosures. I felt for loose waste pipe below sinks and where accessible and checked for leaks below sinks. I do not test bathtub overflow drains during inspection as this risks damaging finishes around the tub. I did not see any signs of previous leaks relating to the overflow during inspection today. I recommend monitoring tubs while filling and *avoid pushing water into the overflow*. Even well-installed overflow drains can leak as the gaskets that seal the overflow will dry out over time and may no longer provide a watertight seal. Monitor plumbing after moving into a new home as testing during inspection presents significantly less stress on plumbing than daily use. Any defects uncovered during inspection are listed in this report.

(RA-2) Roof/Attic: The roof for the garage and the house was not fully visible for inspection today due to snow and ice cover. I recommend having the roof inspected at a later time when the snow has cleared off. logical time would be when updating the garage roof.

(EG-7) Exterior/Garage: Snow cover limited inspection of the decks - the decking condition was not visible.

(EG-9) Exterior/Garage: To see a prescriptive guide for residential wood deck construction see this link: <u>https://getscribeware.com/blog/wp-content/uploads/2017/11/AWC-DCA62012-DeckGuide-1405.pdf</u>

G-2) Grounds: Rodent bait stations were noted at the exterior of the building: Sunrise Pest Control @360-373-9109. Inquire with this company regarding the extent of rodent control work

Structure and Basement

Foundation

% of Foundation Not Visible 30% Evidence of Seismic Protection Present Building Configuration Crawl space, Basement Foundation Description Poured concrete

Floor, Wall and Ceiling Framing

Wall Framing Not visible
Wall Insulation Not visible
Wall Sheathing Not visible
Floor Framing Partly visible, TGI Joists, 2x12
Sub-Floor Material Not visible
Ceiling Framing Not visible

🕉 (SB-1) Note: Evidence of seismic retrofitting protection was noted.



Basement

Partial

Basement Moisture

Pests and Wood Destroying Organisms

Pests and Rodents

Some signs

(PWDO-1) Monitor: Rodent traps were noted in the crawl space. This is evidence of prior rodent problems. I recommend disclosing the extent and scope of prior rodent control work. Unless noted elsewhere in this report, no fresh evidence of rodents was visible at the time of inspection. I did see an old dead one under the older p[art of the house.



Wood Destroying Organisms

Visible Evidence of Active Wood Destroying Insects None noted Visible Evidence of Inactive Wood Destroying Insects Present Visible Evidence of Active Wood Decay and Fungi Present Visible Evidence of Damage from Wood Destroying Organisms None noted Visible Evidence of Conditions Conducive to Wood Destroying Organisms Present



✔ ♥ (PWDO-3) Due Diligence (WDO): Localized moisture ant frass was noted during inspection today - see above door to the newer crawl space. Moisture ants are a wood destroying organism that are indicative of a moisture problem. They will often form nests and tunnels and can damage structural wood. Repairs need to be made to eliminate wet wood and repair all hidden damage to the building. Once the source of moisture is removed and all wood is repaired the ants should go away. During inspection today I found no live ants suggesting this may be an older water problem. But I am concerned this is related to the other red flags in that east wall by the covered porch. Additional evaluation is needed.



Crawl Space

Crawl Space Access

Method of Inspection Crawled

(CS-1) Note: Please note that this house has two crawl spaces - one older one for the original house and a newer one.

Vapor Barrier

Vapor Barrier Material Plastic

Crawl Space Ventilation

Ventilation Method Exterior wall vents

Posts and Footings

Standard

Insulation

Insulation Type Fiberglass Approximate R-Value R-19, R-30

Moisture Conditions

None noted

(CS-2) Monitor: I noted an old sump pump below the old part of the house and a few moisture stains. No water was note during inspection. This may be old - from before the remodel work was done.



Electrical

Service Equipment Volts 120/240 Service Drop Underground Meter Base Amperage 200 Service Entrance (SE) conductor Size Aluminum, 4/0, 200 amps Main Panel Amperage 200 amps Electric Service Amperage 200 amps Main Electric Panel Location Mud room

(E-1) Note: I was unable to get the dead front cover of the electric panel fully open today. The generator transformer made removal of the cover difficult - removal of the transformer switch risks damaging or loosening the breakers.



(E-2) Improve: The arc fault protection breakers in this panel are an older "branch feeder" model AFCI. These are first generation technology and they will not perform as reliably as new versions of arc fault protection known as "Combination" AFCI. Updating is recommended. Consult with a licensed electrician about updating to a combination AFCI where arc fault protection is desired and please note that our standards of where arc fault protection is required has changed over the years. How far you wish to go with updating is discretionary.



Garage Sub Panel

Sub-panel Sub-panel Main Conductor Copper, #6, 50 amps Sub--Panel Amperage 50 Sub-Panel Location Garage

(E-3) Repair: The wiring to the sub-panel in the garage has been done to an older standard. The neutrals should be on a floating bus bar and should be separated from the equipment grounds to eliminate stray voltage. Hire a licensed electrician to further evaluate and repair this condition.



(E-4) Repair: The white-insulated conductors in the sub-panel that are being used as hots have not been correctly identified. These conductors should be colored black or red or wrapped in appropriate tape to insure proper identification inside the panel.



Basement Sub Panel

Sub-panel Sub-panel Main Conductor Aluminum, #2, 100 amps Sub--Panel Amperage 100 Sub-Panel Location Basement

Branch Wiring

Wire Material Copper and Multi-strand Aluminum **Wiring Method** Non-metallic sheathed cable

Receptacles and Fixtures

Inspection Method Random Testing Outlets Three wire outlets

(E-5) Repair: The loose receptacle in the family bath should be secured to prevent accidental damage to the wiring connections.



7 (E-6) **Repair:** Install the missing light cover to the back door exterior light.



Smoke and CO Alarm Systems

Non-standard

(E-7) Repair: The installation of carbon monoxide detectors is recommended for all homes that have fuel burning appliances such as gas or oil furnaces, gas water heaters, gas ovens and cook-tops, gas fireplaces and wood stoves. In addition, Washington State law (WAC 51-51-0315) now requires UL 2034 approved carbon monoxide detectors in all homes and condominiums being sold in Washington State. Location should be outside of all sleeping areas and one on each floor of the home. Best practices are to have these detectors hardwired with a battery back-up - though generally installation must meet manufacturer's specifications. Carbon monoxide is a colorless, odorless gas that can cause sickness, nausea and potentially death. For more information, consult the Consumer Product Safety Commission at 1-800-638-2772 (C.P.S.C.).

(E-8) Repair: A missing smoke alarm was noted at the time of inspection - see loft. Replace all missing smoke alarms.



Grounding Electrode / Conductor

Could Not Confirm

(E-9) Repair: The 2009 edition of NFPA 54, National Fuel Gas Code, includes new requirements for bonding CSST gas piping systems to the grounding conductor of the building's electrical system, to reduce the possibility of damage by lightning strikes by reducing the electrical potential between metallic objects and building systems, including gas distribution. I did not find bonding or grounding at the metal gas pipe where it enters the building. Have this further investigated by a qualified electrician and repaired as recommended.



Fuel Storage and Distribution

Oil Storage

None noted

Propane Storage

Present Storage Type Above ground tank Propane Tank Size 120 Gal Propane Tank Location West side of house Propane Shutoff Location At tank

(FSD-1) Improve: The propane tank for the home has not been strapped or braced to secure the tank in the event of an earthquake. This is not required but seems a logical safety improvement. I recommend bracing this tank for improved safety.



(FSD-2) Note: The propane tank looks to be a leased tank. A sticker for Cennex @ 800-562-2667 indicates they are the owners of the tank. Consult with this company for lease information and filling terms and prices.

Gas Meter

None noted

Heating, Cooling and Fireplaces

Heating System

Energy Source Electricity Heating Method Forced air furnace, Heat pump Manufacturer Lennox Capacity 4-tons

Age 2008 Last Service Record Air Masters Filtration System Electronic

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Electrostatic air filter noted

(HCF-2) Note: The Duro Dyne mechanical ventilation timer was set at the time of inspection - this appeared to be operating when tested. The goal of this fan is to provide fresh air for the house and to control relative humidity. During winter months try and keep relative humidity below 55%.



(HCF-3) Note: The forced air heating system seems to have two zones. They were both operating today as far as I could tell. This can allow you to zone the heat in the house for improved control of temperature.

Heat Pump Manufacturer Lennox Energy Source Electric Age 2008

(HCF-4) Repair: This heat pump was operating at the time of inspection. Heat pumps have fairly unpredictable service lives that can range from as little as 7 to as many as 30 years. The unit was working and making heat today even in cold temperatures. The system seemed to be keeping up well with the thermostat. The outdoor unit was making a bit of a noise as though the fan is loose. I recommend having this system serviced and have the outdoor unit fan evaluated. At the time of inspection the filter was clean. The system was tested in heating mode only.





Heating / Cooling Distribution Systems

Heat Source in Each Room Present Distribution Method Ductwork

Additional Heat Sources

Present

Description Wall mounted forced air heaters, Outdoor Heat lamp

(HCF-5) Repair: A <u>recalled model of Cadet heater was noted</u>. I counted three on the 2nd floor - in bedrooms and the toe kick in the bathroom. ZA models. *All recalled Cadet heaters* **should be repaired or replaced** as recommended by the Cadet Recall. These heaters are a latent fire hazard until serviced or replaced. For more information on the Cadet recall call 800-567-2613.



Gas Fireplaces

Present

Fireplace Types Propane wood stove

(HCF-6) Repair: Seal up the hole in the wall behind the gas pipe at the propane furnace in the garage office. Also, install a CO alarm for this space.



Solid Fuel Fireplaces

Present

Fireplace Types Masonry firebox, Masonry firebox, Wood stove

(HCF-7) Note: This house has a **<u>Rumford fireplace design</u>**. These are characterized by shallow and tall fireboxes that project heat into the room - see both inside and out.



(HCF-8) Note: Exterior combustion air has been provided for the wood stove to improve the energy efficiency and safety of the wood stove. This helps the wood stove run more efficiently because it uses outside air for combustion.



Plumbing

Water Service Supply

Pipe Material Unknown Well or Public Supply Public Water Pressure 65 PSI Pressure Reducing Valve None noted Main Water Shut-off Location Below mudroom bench

% (P-1) Note: This shows the main water shut off below the mudroom bench.



Distribution Pipe

Pipe Insulation Present Supply Pipe Materials Copper, PEX Functional Flow Average

★ (P-2) Note: I noted that the water heating system has a circulation pump. This appeared to be operating at the time of inspection. For improved efficiency these are often put on timers so the pump can be timed to go off at night and in the middle of the day. I noted a timer for the pump - I recommend setting as desired so the pump is operating during your likely hot water demand times.



Waste Pipe and Discharge

Discharge Type Septic system Waste and Vent Pipe Materials ABS plastic **P** (P-3) Due Diligence: This home's sewage appears to employ an on-site private septic system. Please note that an evaluation of this system is beyond the scope of this inspection. I recommend having this system further evaluated by a septic specialist.

(P-4) Note: For more information about septic systems and how they work, please see this web site from the EPA - a homeowners guide to on-site septic systems: <u>https://www3.epa.gov/npdes/pubs/homeowner_guide_long.pdf</u>

(P-5) Repair: Some older-looking waste piping in the old part of the crawl space is screed off. I did not smell any sewer gas, so this may be disconnected from a sewer line. Just in case, I recommend capping so this pipe is properly sealed.



Water Heater

System Type Tank Manufacturer Bradford-White Size 80 gal Age 2008 Energy Source Electricity Temperature Pressure Relief Value Present - Not Tested

(P-6) Repair: The discharge tube for the water heater relief valve is using a supply connector. This restricts the diameter of the opening and is unsafe and non-standard. Hire a licensed plumber to further evaluate and repair.



Exterior Hose Bibs

Operating

Additional Sinks

Tested

Sewage Ejector Pumps

None noted

Sump Pumps and Drains

Floor Drain None noted Sump Pumps None noted

Washer

Not tested, clothes in washer

Dryer

Tested Power Source Electric Duct to Exterior Ducted

Additional Plumbing

None noted

Master Bathroom

Sinks and Cabinets

Tested

(MB-1) Repair: Use caulking to seal between the backsplash and sink behind the bath sink. Also be sure the sink to countertop juncture is well sealed.



(MB-2) Repair: A slow drain was noted at the left side master bathroom sink indicating that the drain may be obstructed. Repair as needed so drain keeps up with supply.



Toilet

Tested

Bathtub / Shower

(MB-3) Repair: The shower head in the master bath is leaky and requires repair to prevent wasting water and to control water flow.



(MB-4) Repair: The tile and grout should be cleaned and sealed with grout sealer to prevent water damage to the tile - see especially inside shower surrounds in bathrooms. This should be a routine procedure with tile unless epoxy grout was used. If this is not done in epoxy grout plan on cleaning and sealing tile grout inside the shower surround annually to prolong the useful life of the tile.



Bathroom Ventilation

Type Fan and window

General Bath Condition Standard

Powder Bathroom

Sinks and Cabinets

Tested

Toilet			
Tested			
Bathtub / Shower			
None noted			
Bathroom Ventilation			
Type Fan and window			

General Bath Condition

Standard

PB-1) Note: During inspection today I operated all plumbing fixtures in bathrooms. I ran a moisture meter around toilets and tile shower enclosures to check for concealed leaks. I also sounded for loose finishes in shower and tub enclosures. I felt for loose waste pipe below sinks and where accessible and checked for leaks below sinks. I do not test bathtub overflow drains during inspection as this risks damaging finishes around the tub. I did not see any signs of previous leaks relating to the overflow during inspection today. I recommend monitoring tubs while filling and **avoid pushing water into the overflow**. Even well-installed overflow drains can leak as the gaskets that seal the overflow will dry out over time and may no longer provide a watertight seal. Monitor plumbing after moving into a new home as testing during inspection presents significantly less stress on plumbing than daily use. Any defects uncovered during inspection are listed in this report.

Family Bathroom

Sinks and Cabinets

Tested

Toilet

Tested

Bathtub / Shower

Tested



Bathroom Ventilation

Type Fan and window

General Bath Condition

Standard

Kitchen

Sinks and Faucets

Tested

Cabinets and Countertops

Countertop Material Slab Surface Cabinet Material Wood laminate

Ventilation Method

Fan ducted to exterior

Appliances

Refrigerator Operating Dishwasher Operated Dishwasher Air Gap Present Range/ Oven /Cook-tops Gas and electric Disposer None noted

(K-1) Monitor: Kitchen sink disposers are not recommended on septic systems. Refrain from using except for the items that get away from you.

General Kitchen Condition

Standard

Interior

Floors

Floor Materials Hardwood, Tile, Carpet Floor Settlement None noted

Walls, Ceilings and Closets

Wall and Ceiling Materials Drywall

(I-1) Repair: Cracks were noted in the walls - see south side in master bedroom. Cracking can be due to routine settlement or moderate seasonal expansion and contraction of the home. It can also be related to workmanship and nailing of framing and drywall. The seasonal types of cracking can be most problematic as they will tend to re-open after repair. Repair and paint cracks as needed and monitor.



Stairs and Railings

Non-standard

% (I-2) **Improve:** The ends of the hand rail should return into the wall to prevent clothing or accessories from catching on the end of the railing and creating a trip hazard.



Interior Doors

Solid Core

Windows

Window Glazing Double pane Interior Window Frame Wood Window Styles Casement, Fixed pane (I-3) Major Concern: Multiple lost seals were noted in the glazing. This has resulted in fogging between the panes of glass that cannot be cleaned without glazing repair or replacement. Hire a glass replacement company to further evaluate and replace all windows with lost seals. I list as a major concern as this can be expensive to correct.







(I-4) Repair: Some window screens were noted in the basement. Inquire with the seller if these go to the windows that do not have screens.



Mechanical Ventilation

Bath Fan Ducting Ductwork not visible, Ducted to exterior Kitchen Fan Ducting Ducted to exterior

Roof/Attic

House Roof Materials

Method of Roof Inspection Walked on roof, Viewed at top of ladder Roof Style Gable, Shed, Low slope Roof Materials Architectural grade composition shingle, Metal, Torch-down Approximate Age of Roof 10 years

Garage Roof Materials (1)

Method of Roof Inspection Viewed at top of ladder Roof Style Gable Roof Materials Architectural grade composition shingle Approximate Age of Roof 23 years

(RA-1) Major Concern: The garage roof covering is close to the end of its reliable service life. The average life of these roofs is 18-22 years and that is how old this roof looks. Hire a licensed roofing contractor to further evaluate and replace this roof soon to insure reliable roofing performance. During roof replacement, I always recommend doing a complete tear off, evaluating the roof decking for damaged or soft boards, evaluating roof venting and indoor fan terminations and replacing all flashings. I could not find leaks at the time of inspection, indicating that the roof has performed well to date.



Shingles are curing at the edges indicting the shingles are old and starting to dry out.







Incorrect nailing location where I spot checked: nails should be below the tar strip.

(RA-2) Note: The roof for the garage and the house was not fully visible for inspection today due to snow and ice cover. I recommend having the roof inspected at a later time when the snow has cleared off. logical time would be when updating the garage roof.



Skylights

Insulated curb style

Gutters and Downspouts

Seamless Aluminum

Attic Access

Viewed at access

(RA-3) Repair: The weather strip for the attic access hatches is not seated properly and the hatch is leaking air. This should be better air sealed to prevent heat migration into the attic.





Roof Framing and Sheathing

Rafters 2x6, 2x4 **Sheathing** Plywood

Attic Insulation

Insulation Type Fiberglass Approximate Insulation R-Value on Attic Floor 38 Approximate Insulation R-Value on Attic Walls 19

(RA-4) Repair: The attic insulation in the garage is rodent-damaged and incomplete. Remove all contaminated insulation and complete repairs to fans, wiring, ventilation.... Once repairs are complete re-insulate to modern standard or to best possible levels. Be sure to seal up all air leakage points during repairs and prior to insulating to modern standard be sure all rodent issues have been resolved and all projects like wiring and bath fans have been completed.



Attic and Roof Cavity Ventilation

Attic Ventilation Method Soffit vents, Ridge vents, Gable vents

(RA-5) Monitor: The attic and roof cavity ventilation look to be non-standard. Proper attic ventilation is important for the roofing materials to perform as intended and to reduce chances for condensation problems and heat build-up in the attic. The problem here is the use of ridge vents and gable vents. Most ridge vent manufacturers recommend ridge and soffit vents only to get convective ventilation across the roof decking; the gable wall vents can disrupt this convective air flow. No evidence of problems from this configuration was noted to date and depending on occupant behavior this may not ever cause a problem. I would leave as is, especially as the rooffline has been remodeled. It seems to be performing well to date. Monitor.



Here you can see the ridge and the gable vent



The wood in the attic that is accessible has a nice bright color.



Exterior/Garage

Siding and Trim

Trim Material Wood

Siding Material Cedar shingles, Fiber-cement, Plywood (at Garage)

(EG-1) Major Concern (WDO): Visual inspection of the fiber cement siding installation showed the need for repairs as well as some installation details that are not consistent with modern manufacturers installation requirements. This is typical for this age of construction, however, red flags at the exterior of the east porch indicate possible concealed water damage. Additional inspection is needed by a qualified contractor to further investigate the siding and determine the scope and extent of the needed repair. Examples of observations noted during inspection include:

- Blistering paint on fiber cement siding indicates likely saturated siding.
- High moisture meter readings where paint was bubbling
- Water stains indicate possible water behind siding
- Fungus growing at inside corner
- Siding run right to the horizontal flashing and sealed. This is not recommended but difficult to fix at this point.
- Missing back flashings at butt joints this can be retrofit on exposed sides of the building with metal flashing tabs or maintained with caulking.
- Signs of concealed water damage at inside corner below deck
- These stains are typical and should be distinguished from the red flags at the east side. These stains can be cleaned and siding re-painted if needed.









High moisture meter readings where paint was bubbling



Water stains indicate possible water behind siding



Fungus growing at inside corner



Siding run right to the horizontal flashing and sealed. This is not recommended but difficult to fix at this point.



Missing back flashings at butt joints - this can be retrofit on Signs of concealed water damage at inside corner below exposed sides of the building with metal flashing tabs or deck maintained with caulking.



These stains are typical and should be distinguished from the red flags at the east side. These stains can be cleaned and siding re-painted if needed.

(EG-2) Repair: The tannin stains at the west / back door appear to be from pressure washing. No elevated moisture meter readings were found at the tie of inspection. Clean stains, repaint if

needed and monitor.



Eaves

Open rafters, Tongue and groove

(EG-3) Repair: Birds appear to have been roosting at the exterior - see bird feces on the side of the building in places. I did not see any nests in the attic though some of the eave areas were not visible to inspection. Implement exclusion work and / or anti-roosting provisions as needed.



G C EG-4) Repair (WDO): Install diverter shingles or flashings above the exposed fascia, next to the gutters to protect this wood from rot and decay.



(EG-5) Repair: Several areas of soffit vent screen were noted to be loose, missing and in need to repair to prevent bird and rodent entry - see SW corner of garage.



Exterior Doors

Solid core

G U (EG-6) Repair (WDO): The wooden door trim is rotting near the deck - north garage mandoor. Repair / replace damaged wood as needed.



Exterior Window Frames

Wood

Decks and Balconies

Present Deck Structure Ground contact treated lumber Deck Ledger Board Standard, Non-standard Guardrail Standard Decking Material Plastic/synthetic material

(EG-7) Note: Snow cover limited inspection of the decks - the decking condition was not visible.



(EG-8) Repair: Hire a qualified contractor to make some tune-up repairs to the decks. A few sections of decking are missing bolts to secure the ledger board to the house. I also noted missing hangers for the joists at the ramp that leads between the garage and the house.



(EG-9) Note: To see a prescriptive guide for residential wood deck construction see this link: <u>https://getscribeware.com/blog/wp-content/uploads/2017/11/AWC-DCA62012-DeckGuide-1405.pdf</u>

Porches

Present

Chimneys

Present Chimney Material Masonry Chimney Flue Liners Present

(EG-10) Repair: A rain cap and spark arrestor is recommended for the chimney flue to prevent water damage inside the flue.

(EG-11) Repair: Hairline cracks were noted in the east face of the masonry brick chimney. These were small and minor at the time of inspection. Monitor - no repair appears needed at this time. I did note some minor mortar failure as well. Have this further investigated by a qualified mason during the next chimney sweep and repair as recommended.



(EG-12) Repair: A level II cleaning and inspection is recommended for the chimney flues. Regular cleaning and inspection is recommended for safe and reliable operation of the chimney. Chimney flues are not visible and are beyond the scope of a home inspection. Hire a licensed chimney sweep to clean and further evaluate the flues; if this has been recently done, please disclose for buyers.



Garage

Detached Automatic Garage Opener Present Garage Door Type Wood

Geta (EG-13) Repair (WDO): Mold-like substances were noted on the back side of the garage door. For improved indoor air quality in the garage I recommend priming and sealing these stains with an appropriate sealer and finish paint. Please note this can be a red flag indicating excessive moisture in the garage slab or just related to parking wet cars in the garage. This is difficult to verify during a one-time inspection. Additional repair options include installing a fan to better ventilate the garage and / or sealing the concrete with a sealer to help reduce moisture evaporation into the garage.



(EG-14) Repair: The overhead garage door does not reverse under resistance to closing - north side. Adjustment of the sensitivity is recommended for improved safety. This typically involves adjusting a small plastic screw on the opener.

Grounds

Drainage and Lot Location

Clearance to Grade Standard Downspout Discharge Below grade Lot Description Moderate slope

Driveways/Walkways/Flatwork

Driveway Gravel Walkways Pavers, Flagstone Patios None noted

Window and Stairwells

None Noted

Grounds, Trees and Vegetation

Trees/Vegetation too near building No

G-1) Due Diligence: An arborist should be hired to further evaluate the large trees on the property and prune or remove as recommended. Whenever large trees are located near a house a higher level of maintenance should be expected to keep trees safe and healthy and to eliminate the risks of damage to the home or building materials and to eliminate rodent entry points.



Some trees nearby have inspect damage and looks as though they should be removed.

G-2) Note: Rodent bait stations were noted at the exterior of the building: Sunrise Pest Control @360-373-9109. Inquire with this company regarding the extent of rodent control work done in the past.



Retaining Walls

None noted

Exterior Stairs

Non-standard

(G-3) Improve: The exterior back stairs are missing a graspable handrail for safety. This should be a round railing 1 and 1/4 inches - 2 inches in diameter. If the railing is not round it must have a finger groove that is 3/4 of an inch down from the tallest point of the rail. The graspable handrail should also be 1.5 inches from the wall. 2x material is not considered a graspable handrail. Have a qualified contractor build suitable railings to reduce the potential for falls.





Fences

None noted

Carport, Outbuildings and Other

None noted, Not inspected

Receipt -- Single Family Inspection

Report #: 180225D Inspection Date: 2018-02-25

Property Inspected For Custom House Slightly Complex Ave Neat Custom Home, USA

	\$705.00
Inspection with digital report	\$705.00

Thank you for your business!

Orca Inspection Services LLC

C/O Dylan Chalk

5761 NE Tolo Rd

Bainbridge Island, WA, WA 98110

(206) 713-5715





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Inspected by Dylan Chalk

WA State Pest License #: 65540

WA State Home Inspector #: 365

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