



6543 Sample Townhome Report, Bainbridge Island, WA 98110

This report is prepared exclusively for **Nick Savage**

On: 2021-09-22

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Published Report



Overall this house is above average for agent type. This is a townhome type condominium that seems to have had a recent exterior paint job and has a nice metal roofing system. There is a small recommended repair and maintenance list on the interior. The only more significant finding today was the need for some crawl space cleanup work. Please see the full report for specific details.







ICN# 10579AR008

The Scope and Purpose of a Home Inspection

Buying and selling a property involves risk

The purpose of a home inspection is to help reduce the risk associated with the purchase or sale 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.

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.

Your expectations

The overall goal of a home inspection is to help ensure 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 quick look at our <u>"Summary Page"</u> 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, descriptions, 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 (the HTML version), which will allow you to expand your learning about your house. You will notice some words or series of words highlighted in blue and underlined – clicking on these will provide you with a link to additional information. The HTML version of this report also contains streaming videos. Short video clips often contain important information and critical context and sounds that can be difficult to capture in words and still pictures.

For the most reliable viewing experience, I recommend viewing the report on as large a screen as practical, as much detail can be lost on small devices like smart phones. For similar reasons, reports should only be printed in color to retain as much detail as possible and minimize misinterpretation of photographs.

This report can also be printed on paper or to a PDF document.

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 and it may simply say "tested," or "inspected."

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.

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.

Recommended Maintenance: These are repair items that should be considered "routine home ownership items," such as servicing the furnace, cleaning the gutters or changing the air filters in the furnace.

Improve or Upgrade: Observations that are not necessarily defects, but which could be improved for safety, efficiency, or reliability reasons. These are often items which reflect changes in building codes or standards.

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

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.

Recommended Disclosure Items: These are observations for which we recommend that sellers disclose more information to buyers so that buyers can better understand recent servicing, repairs or maintenance or even construction history or building and site design.

Home Owners Association: These items should be brought to the attention of the Home Owner Association for correction or for additional information

Pest Inspection

All items with the bug logo () are part of a structural pest inspection. If your inspector included a structural pest inspection as a part of the scope of your home inspection, you can distinguish pest inspection items by this logo. You can also go to the pest inspection summary page to see a summary of the items that are part of a pest inspection.

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.

Summary

Major Concerns

⚠ **CS3-1 Crawl Space:** Overall, numerous repairs are needed to the crawl space below this house. I have made a series of detailed observations in the base of this report and below in this observations but given the extent of repairs I recommend further evaluation of this crawl space by a licensed general contractor who specializes in crawl space clean-up as additional repairs could be needed that are latent or concealed. Examples of observations noted during inspection include:

- Pipe insulation is incomplete on supply piping
- The plastic vapor barrier is rodent damaged and incomplete in places
- The sub-floor insulation is rodent-damaged and requires repair and replacement
- Wood debris should be cleaned from the floor.

Repairs

G2-1 Garage: The pulldown ladder in the garage does not appear to be a fire rated model. This can be tricky to repair without replacing the pulldown ladder with a fire rated model - see LINK as an example. You can try sheet rocking the ladder cover, but this often compromises proper operation of the ladder, causing the ladder to sag and leaving a gap in the fire wall. You can also try making a fire rated sheetrock separation between the garage and the house in the attic above the garage, but this too can be complicated. Hire a qualified contractor to further evaluate and repair.

G2-2 Garage: The auto-close hinges on the garage occupant-door have been disabled. This safety device is recommended to ensure the door is closed to keep pollutants and even fire from spreading into the house. Repair as needed.

RCG-2 Roof, Chimney and Gutters: The downspout at the southwest corner is not properly secured to the house and is not connected to the storm drain. Repair as needed.

EDFW-1 Electric Distribution and Finish Wiring: Repair the broken exterior electric receptacle cover - backyard. The modern "in-use covers" are recommended to protect this receptacle.

EDFW-2 Electric Distribution and Finish Wiring: I recommend additional inspection of some of the light switches in the entry / stairway area. It is confusing operating the lights and one of the switches by the door seems to shut off the fireplace fan, which is odd. Also, it takes a unique sequence of switches to get the stairwell light to come on. Adjust / repair as needed/desired.

P2-4 Plumbing: The hose bib at the front side of the house is poorly mounted to the

siding. This could cause leaks in the siding around the hose bib and could allow the hose bib to become loose during operation. Hose bibs should be securely mounted to blocks that are lead into the siding and which are properly flashed or caulked.

- **P2-5 Plumbing:** The leaky hose bib at the north side of the house requires repair or replacement it leaked from the faucet handle when the faucet was turned on and under pressure. This often requires tightening the packing around the handle stem.
- **P2-6 Plumbing:** The hose bib at the south side appears to require an anti-siphon attachment the threads available at the end of the hose bib are thin and most hoses will not attach to this. Repair as needed. Please note that anti-siphon protection is recommended to prevent stagnant water in a hose from accidentally being pulled into the house water supply.
- № 1-2 Interior: The energy coating for the window seems to have failed see the cloudy stain between the panes of glass west, 2nd floor bedroom. This typically requires glazing replacement to repair. Hire a qualified glass replacement specialist to further evaluate and repair as needed.
- **PB3-2 Powder Bathroom:** The bullnose material is loose in the powder bathroom cabinet. Repair or update as needed.
- **PB3-3** Powder Bathroom: The mirror in the powder bathroom is missing its reflective surface in places. Update the mirror as desired.
- **GB-2 Upstairs Bathroom:** The handle for the mixing valve to the upstairs bathroom shower is loose. Secure the loose handle as needed to ensure reliable performance.
- **GB-3 Upstairs Bathroom:** The shower head in the downstairs bath is leaking and requires repair. Leaky shower heads are common and not a significant concern. Adjust as needed to prevent leakage at the shower head.
- A-4 Attic: The attic insulation is rodent-damaged not bad, just a few trails in places. 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.

Recommended Maintenance Items

- HCFV-1 Heating, Cooling, Fireplaces and Ventilation: Annual servicing of the electric forced air furnace is recommended for safe and reliable heat. I could not find recent service records on the furnace, so a servicing is recommended. The furnace was tested during inspection and was operational. Examples of observations noted during inspection include:
- P2-3 Plumbing: The water heater temperature seemed to be set too low at the time of inspection just 107 degrees F. The range of 120-125 degrees F is the generally recommended temperature. This is nearly impossible to measure precisely during a home inspection as water temperature can vary between fixtures. I try and test the water temperature in several

places and take the median reading. Adjust water heater temperature as needed. For best practice, set water temperature at the water heater to 130 degrees F and use a tempering valve to set water temp back to a safe 120 for domestic use. This high tank temperature will reduce risks of Legionella developing in the tank and the tempering valve will ensure a safe water temperature.

☐ Interior: A loose screw was noted on the pocket door to the main bathroom. Repair as needed for smooth operational pocket door

Improve Or Upgrades

ES1-2 Electric Service: The white conductors inside the electric panel at the breakers are not correctly identified as hot or ungrounded conductors - these should be painted in black or red ink for correct identification and improved safety. I would do this in the context of other electrical repairs.

ES1-4 Electric Service: No surge protection was noted at the electrical equipment today. The 2020 edition of the National Electric Code requires type I or type 2 surge protection on new or renovated homes. Though not adopted yet this code change reflects the growing complexity of electric appliances in our houses and the growing risk of damage to electrical equipment due to internal or external electrical surges. This short video explains more about electrical surges and surge protection. I recommend upgrading and adding surge protection for improved protection of the electrical appliances in this building.

ES1-5 Electric Service: The AFCI breakers inside the electric panel are an older Branch Feeder type breaker. These are a first generation technology and many of them had troubles with nuisance tripping and they are not capable of detecting series arcing conditions. Modern AFCIs are called Combination AFCIs and they can detect both series and parallel arcing conditions. Updating these old branch feeder AFCIs with modern combination type AFCI protection is recommended.

K-2 Kitchen: A ductless exhaust fan was noted for the cook-top. Installation of a fan that ducts to the exterior is recommended to remove moist air and odors to the exterior. Please note that if you switch to a gas range or cooktop in the future, a fan that vents to the exterior is still not required, as long as there is some ventilation in the kitchen, but is more strongly recommended. Gas ovens produce carbon monoxide while running and should really have an exhaust vent to the exterior.

★ LF-1 Laundry Facilities: A moisture alarm with water shut-off features is recommended under the washing machine to protect against accidental leaks in the supply hoses. Pans can be effective when there is a drain, but even these will not protect against a burst supply connector. A moisture alarm with automatic shut-off will. Watts is a brand I have seen installed: Link.

Due Diligences

Q LF-2 Laundry Facilities: Inquire with the HOA about who is responsible for <u>cleaning dryer</u> exhaust ducts. This is important regular maintenance that should be performed by the association to ensure everyone's dryer exhaust ducts are clean and operating safely.

Efficiencies

HCFV-3 Heating, Cooling, Fireplaces and Ventilation: This building appears to be ready for a heat pump system - I noted wiring and refrigerant lines run. If you wish to upgrade the heating system in this building, I recommend an Energy Star heat pump as this will better pay for itself in saved heating costs.

A-3 Attic: The attic insulation could be improved to modern standards, which recommend R-49 on the floor and R-21 on walls. R-value is the measure of resistance to heat loss; the higher the R-value the better the insulation. During insulation repairs it is best practices to implement any air seal-up repairs to seal air leakage. Also, be sure you have completed any wiring or other projects that are needed in the attic. Then, hire an insulation contractor to improve thermal barriers.

Recommended Disclosure Items

FSD-1 Fuel Storage and Distribution: There seems to be a fill sensor on the propane tank that can alert the propane provider to the need for refilling. Disclose any additional information about this.

G2-3 Garage: For some reason, a few rags were stuffed into the base of the overhead door. It is not clear that a repair is needed. Disclose any additional information about this.

HCFV-2 Heating, Cooling, Fireplaces and Ventilation: The heating system here is controlled with a Nest thermostat. These are digital and internet-based thermostats. I recommend disclosing any information about access to this thermostat so that controls and user account access can be changed for the new owner. Here are a few links to more information:

How to reset Nest Protect and erase all your personal settings How to restart or reset a Nest Thermostat

P2-1 Plumbing: No main water shut off was found inside the house. There is typically a shut off at the meter in the street, but this can be a time-consuming and difficult shut-off to access in an emergency. Disclose the location of the main water shut for future owners as it may be concealed behind finishes or stored items. If no readily accessible shut off exists, hire a licensed plumber to further evaluate and install.

P2-2 Plumbing: An evaluation of the sewer line below the ground is beyond the scope of this inspection. Due to the age and location of the building, a sewer scope is recommended to further evaluate the sewer line and the below ground connections between the house and the municipal sewer line. Sewer scopes are done using video cameras and can reveal the

materials, condition and reliability of the sewer line. If that has been done recently, I recommend disclosing available information. If this has not been done recently, this would be valuable information to disclose to a buyer.

© EXECUTE Crawl Space: The crawl space was dry at the time of inspection but I noted indications of prior water in the crawl space. This is difficult to understand during a one-time inspection. It could have been repaired or it could have been from construction or it could be a seasonal on-going issue. In this case, I did see signs of drainage work at the exterior. This may have been done by the HOA? Disclose any additional information.

Home Owners Associations

RCG-1 Roof, Chimney and Gutters: The roofing material on this home appears to be a recently installed standing seem metal roof. These are often rated as 35-year roofing systems. In practice, service life depends a great deal on the quality of the roofing materiel, the quality of the installation, the steepness of the roof, roof roof design and the amount of exposure. The installation appears neat and professional. Inquire with the HOA regarding any installer or warranty information for this roof. Many professional roofing companies will offer limited workmanship warranties. In general, the weak points on metal roofs are flashings around penetrations where often sealant is used. Over time this can break down and fail and require tune up. Visual inspection could not find a need for repairs at this time.

RPWDO-1 Rodents, Pests and Wood Destroying Organisms: A bee or wasp nest was noted in the in the metal ridge venting. No activity was noted so it could be old or it could be seasonally inactive? Treatment and removal may be needed. This may be an HOA item.

The Full Report

General Comments

Building Characteristics, Conditions and Limitations

Approximate Square Footage: 1395

Approximate Year of Original Construction: 2003

Attending the Inspection: Listing Agent

Occupancy: Unoccupied Animals Present: No

Weather during the inspection: Partly cloudy

Approximate temperature during the inspection: Below 65[F]

Ground/Soil surface conditions: Dry

For the Purposes of This Report, the Front Door Faces: North

 $\cancel{\mathcal{C}}$ (GC-3) Inspection Notes: The report has been procured by the seller and is provided for informational and disclosure purposes only. It is not intended to constituent a warranty, either expressed or implied about the condition of the property.

This house was vacant / unoccupied at the time of inspection. Vacant and unoccupied houses present unique challenges for home inspection, especially the piping and wiring systems which have not be subject to regular use prior to the inspection. While these systems can be tested during inspection, this one-time test is different than regular use and it is difficult to know how these systems will respond to regular use after the inspection. For example, septic systems may initially function and then fail under regular daily use. Plumbing traps may operate with no signs of leaks and then let go when being actively used for a few days. Shower pans may only leak when someone is standing in the shower and taking a shower. Seals for plumbing fixtures can dry up and leak when not is use. Sewer lines with roots may allow water flow, but then fail when waste and tissue are flushed; it can take a few days for that to backup. Please understand we are trying our best to look for clues of past or existing problems to paint a realistic best-guess as to the reliability of these systems during inspection.

Grounds

Drainage and Site

Clearance to Grade: Standard

Downspout Discharge: Below grade

Site Description: Flat

Driveways/Walkways/Flatwork

Driveway: Concrete **Walkways:** Concrete **Patios:** Concrete

Window and Stairwells

None Noted

Grounds, Trees and Vegetation

Trees/Vegetation too near building: No

Retaining Walls

Retaining Wall Material: None Noted

Exterior Stairs

Exterior Stairs: Standard

Fences

Exterior Fencing: None noted

Outbuildings, Trellises, Storage Sheds, Barns

None noted

Exterior Siding, Doors and Windows

Exterior Elevations







Siding and Trim

Trim Material: Wood

Siding Material: Beveled cedar, Plywood

This house has a beveled cedar siding system, often sold as, "tight knot," cedar. This is a quality wood siding product. Where exposed to direct sunlight, such as on south and west faces, this siding can dry out and suffer from cupping and splitting. Regular staining on the sun-exposed sides of the building can slow this process. It is typical to need to do more maintenance such as staining and caulking at sun-exposed faces of the building. Refrain from nailing cupping siding down as this can split the siding.

Eaves

Open rafters

Exterior Doors

Solid core

Exterior Window Frames

Vinyl

Fuel Storage and Distribution

Oil Storage

None noted

Propane Storage

Present

Storage Type: Above ground tank **Propane Tank Size:** 120 gallons

Propane Tank Location: South side of house

Propane Shutoff Location: At tank

This shows the propane shutoff at the propane tank.



(FSD-1) Recommended Disclosure Items: There seems to be a fill sensor on the propane tank that can alert the propane provider to the need for refilling. Disclose any additional information about this.





Gas Meter

None noted

Gas, Propane and Oil Piping

Gas Piping Materials Noted: Copper

Garage

Garage General

Garage Type: Attached

(G2-1) Repair: The pulldown ladder in the garage does not appear to be a fire rated model. This can be tricky to repair without replacing the pulldown ladder with a fire rated model - see LINK as an example. You can try sheet rocking the ladder cover, but this often compromises proper operation of the ladder, causing the ladder to sag and leaving a gap in the fire wall. You can also try making a fire rated sheetrock separation between the garage and the house in the attic above the garage, but this too can be complicated. Hire a qualified contractor to further evaluate and repair.



A nice storage area has been built up here





Garage Doors and Automatic Openers

Overhead Garage Door Type: Metal Automatic Garage Opener: Present Garage Occupant Door: Solid Wood

(G2-2) Repair: The auto-close hinges on the garage occupant-door have been disabled. This safety device is recommended to ensure the door is closed to keep pollutants and even fire from spreading into the house. Repair as needed.



(G2-3) Recommended Disclosure Items: For some reason, a few rags were stuffed into the base of the overhead door. It is not clear that a repair is needed. Disclose any additional information about this.





Garage Floor

Garage Slab: Concrete

Roof, Chimney and Gutters

Roof Materials

Method of Roof Inspection: Walked on roof

Roof Style: Gable, Shed

Flashings: Present and Visually Standard

Roof flashings are used to keep a roofing system waterproof where the roofing material starts, stops, changes direction or is penetrated. During inspection, we look for standard flashing techniques that could be considered normal or standard in our region. Damaged, incomplete or non-standard flashings can be a sign of an older or less reliable roofing system and may require repair. Any non-standard flashings noted during inspection will be reported on below if found.

Roof Covering Materials: Metal standing seam

Metal roofing: The life expectancy of metal roofing materials can vary from 20–50 years, depending on the method of manufacture, thickness, of the roofing material, the quality of the installation, and the roof design and exposure. Maintenance for metal roofs is often dictated by the manufacturer and recommended maintenance procedures can vary depending on whether the roof material is painted, has zinc all the way through, or whether it is thinner sheet metal with painted-on weather protection. Some roofs only require debris to be cleaned off to prevent water damming. Others have proprietary cleaning methods to prevent damage to coatings and may require touch-up of corrosion to prevent corrosion from causing leaks.

Approximate Age of Roof Covering: 16-18 Years

Overlay Roof: No

(RCG-1) Home Owners Association: The roofing material on this home appears to be a recently installed standing seem metal roof. These are often rated as 35-year roofing systems. In practice, service life depends a great deal on the quality of the roofing material, the quality of the installation, the steepness of the roof, roof roof design and the amount of exposure. The installation appears neat and professional. Inquire with the HOA regarding any installer or warranty information for this roof. Many professional roofing companies will offer limited workmanship warranties. In general, the weak points on metal roofs are flashings around penetrations where often sealant is used. Over time this can break down and fail and require tune up. Visual inspection could not find a need for repairs at this time.





Chimneys

None noted

Gutters and Downspouts

Gutter and Downspout Materials: Seamless Aluminum

(RCG-2) Repair: The downspout at the southwest corner is not properly secured to the house and is not connected to the storm drain. Repair as needed.





The downspout at the southwest corner is not properly secured to the house and is not connected to the storm drain. Repair as needed.

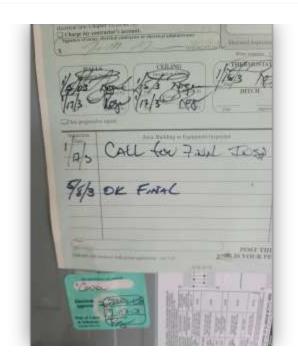
Electric Service

Electric Service Permits Found

These images show electric permits found during inspection.



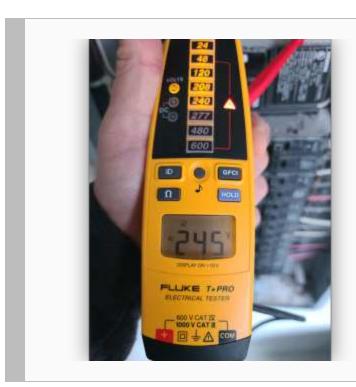




Electric Service Voltage Tested

Service Voltage: 120/240 - With Testing Note

I tested the voltage at the electric panel today. It tested in a normal range of 235-245 volts. Most residential construction is listed as 120/240 volts. Slight fluctuation is normal.



Electric Service

Service Entrance: Above Ground **Meter Base Amperage:** 200

Electric Service Equipment

Service Entrance (SE) conductor Size: Aluminum, 4/0, 200 amps

Main Panel Amperage: 200 amps Electric Service Amperage: 200 amps Main Electric Panel Location: Garage

Panel Manufacturer: Siemens

(ES1-2) Improve or Upgrade: The white conductors inside the electric panel at the breakers are not correctly identified as hot or ungrounded conductors - these should be painted in black or red ink for correct identification and improved safety. I would do this in the context of other electrical repairs.

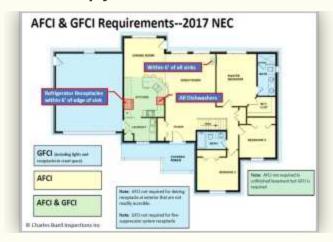




(ES1-4) Improve or Upgrade: No surge protection was noted at the electrical equipment today. The 2020 edition of the National Electric Code requires type I or type 2 surge protection on new or renovated homes. Though not adopted yet this code change reflects the growing complexity of electric appliances in our houses and the growing risk of damage to electrical equipment due to internal or external electrical surges. This short video explains more about electrical surges and surge protection. I recommend upgrading and adding surge protection for improved protection of the electrical appliances in this building.

(ES1-5) Improve or Upgrade: The AFCI breakers inside the electric panel are an older Branch Feeder type breaker. These are a first generation technology and many of them had troubles with nuisance tripping and they are not capable of detecting series arcing conditions. Modern AFCIs are called Combination AFCIs and they can detect both series and parallel arcing conditions. Updating these old branch feeder AFCIs with modern combination type AFCI protection is recommended.







Appliance Disconnects

Disconnects Noted: Heat Pump

Electrical Grounding System

Present - Could Not Confirm

During a home or property inspection, every effort is made to inspect the visible components of the electrical system grounding. The grounding system is critical for safely discharging electrical surges, especially in the case of lightning strikes. There is no way in the context of a home inspection to verify the "effectiveness" of the grounding system as much of the system is not visible and there are not practical tests one can perform in the way we can test a furnace or a plumbing fixture. However, there are many things that can lead me to recommend further evaluation of the grounding system by a licensed electrical contractor and they will be documented in the observations below if discovered.

Electrical Bonding System

Present - Could Not Confirm

During the inspection, I attempt to visually document electrical system bonding. There is no way in the context of a home inspection to verify the "effectiveness" of system bonding. All metallic systems in the building are required to be "bonded" (connected) to the the building's electrical grounding system. Bonding creates a pathway to shunt static charges (that would otherwise build up on the system) to earth, and to provide a pathway to trip a breaker in the event that these bonded metallic components became energized. There are many things that can lead me to recommend further evaluation of this system by a licensed electrical contractor and they will be documented as repair items in the observations below if discovered.

Electric Distribution and Finish Wiring

Branch Wiring

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

Receptacles and Fixtures

Inspection Method: Tested All Accessible

During inspection I make an effort to test and inspect all accessible electric receptacles and switches. In general, the scope of testing is directly related to access; where personal belonging and furniture obstruct access to receptacles and fixtures, fewer of them can be reasonably tested during inspection. All defects found during inspection today will be listed in this report.

Electric Receptacles: Three wire receptacles

(EDFW-1) Repair: Repair the broken exterior electric receptacle cover - backyard. The modern "in-use covers" are recommended to protect this receptacle.



(EDFW-2) Repair: I recommend additional inspection of some of the light switches in the entry / stairway area. It is confusing operating the lights and one of the switches by the door seems to shut off the fireplace fan, which is odd. Also, it takes a unique sequence of switches to get the stairwell light to come on. Adjust / repair as needed/desired.









Smoke and Carbon Monoxide Alarm Systems

CO Alarms Noted: ✓ Outside all Sleeping Areas ✓ On Main Floor ✓ On 2nd Floor

CO Alarms: Present

The installation of <u>carbon monoxide</u> alarms 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 (<u>WAC 51-51-0315</u>) now requires UL 2034 approved carbon monoxide alarms in **ALL** homes and condominiums being sold in Washington State. The location should be: **at least one alarm outside of all sleeping areas and one on each floor of the house**. Best practices are

to have these alarms hardwired with a battery back-up - though requirements are for the installation to meet manufacturer's specifications. Carbon monoxide is a colorless, odorless gas that can cause sickness, nausea and even death. Alarms have a useful service life of roughly 6 years, so changing them more frequently than smoke alarms is recommended.



Heating, Cooling, Fireplaces and Ventilation

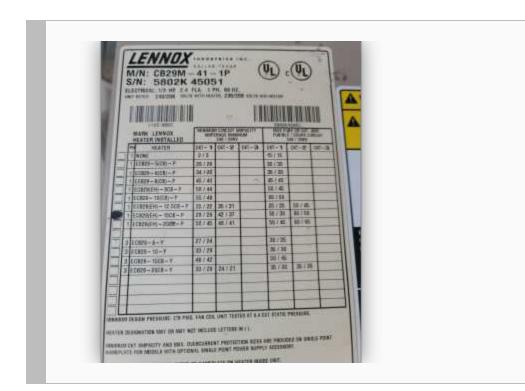
Heating System

Energy Source: Electricity

Heating Method: Electric forced air furnace, Heat pump

Manufacturer: Lennox **Data Plate:** Shown Here

This shows the data plate from the furnace.



Age: 2003

Last Service Record: Recent Service Records Noted

This photo shows the most recent service records found on the heating equipment during inspection.



(HCFV-1) Recommended Maintenance: Annual servicing of the electric forced air furnace is recommended for safe and reliable heat. I could not find recent service records on the furnace, so a servicing is recommended. The furnace was tested during inspection and was operational. Examples of observations noted during inspection include:



The furnace is dirty inside at the air handler evaporator coil - note this coil is not in use currently as a heat pump was never installed.

(HCFV-2) Recommended Disclosure Items: The heating system here is controlled with a Nest thermostat. These are digital and internet-based thermostats. I recommend disclosing any information about access to this thermostat so that controls and user account access can be changed for the new owner. Here are a few links to more information:

How to reset Nest Protect and erase all your personal settings

How to restart or reset a Nest Thermostat



Air Filters

Filtration Systems: Disposable

The heating and cooling system has disposable air filters installed. These should be changed quarterly or more to ensure proper air flow at the furnace. Be sure to install the filters with the arrows pointing in the same direction as the air flow in the furnace.



Cooling Systems and Heat Pumps

Air Conditioning / Heat Pump: None Noted

(HCFV-3) Efficiency: This building appears to be ready for a heat pump system - I noted wiring and refrigerant lines run. If you wish to upgrade the heating system in this building, I recommend an Energy Star heat pump as this will better pay for itself in saved heating costs.



This shows an evaporator coil that was likely never used

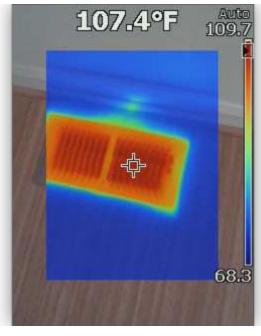


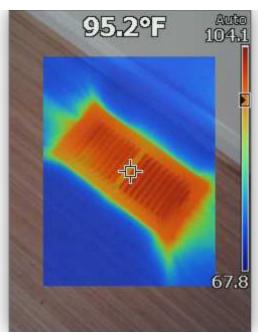
This appears to be an electrical disconnect that may have been designed for a heat pump

Heating and Cooling Distribution Systems

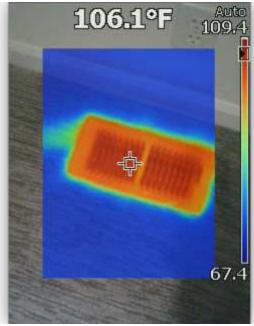
Heat Source in Each Room: Present **Distribution Method:** Forced Air / Ducts

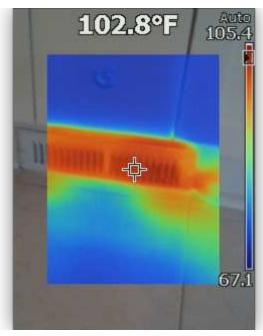
Thermal images show approximate temperatures at heating registers. I use these images just to show the system was generally functioning during inspection. These are representative photos.

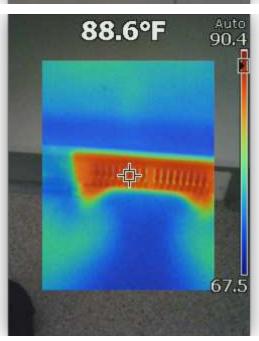


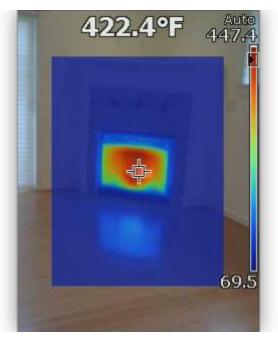


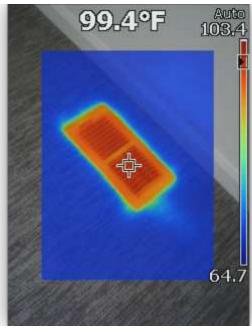


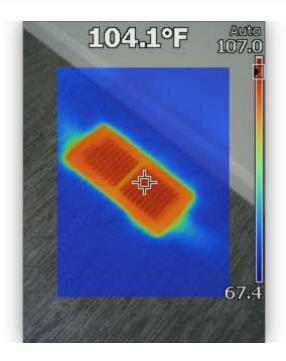


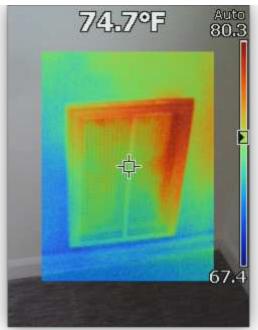










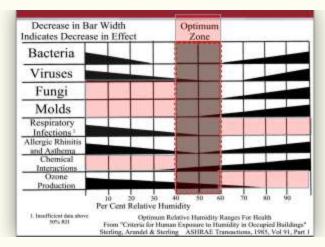


This shows the cold air return

Mechanical Ventilation Systems

Whole House Fans, Ventilation and HRVs: Duro Dyne (Noted)

☆ (HCFV-5) Inspection Notes: The HVAC system has a fresh air fan installed. 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 around 50%.



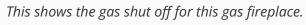


Gas Fireplaces

Fireplace Types: Direct vent gas log fireplace

Fan Present: Yes

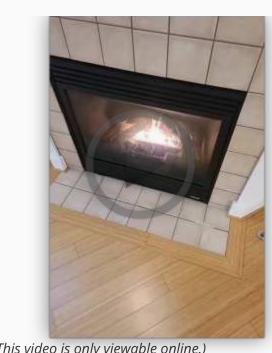
Gas Shut off Noted: Yes





System Responded to Testing: Yes

This shows the fireplace working during inspection.



(This video is only viewable online.)

Plumbing

Water Service Supply

Pipe Material: Plastic

Water Supply: Public water

Water Pressure: Water Pressure Tested, 50 PSI

This shows the water pressure tested during inspection. Generally, "normal water pressure," should be between 30-80 PSI, though pressures near or below 30 can result in poor functional flow to fixtures. Water pressures in excess of 80 PSI risk damaging supply piping components and should be controlled with a pressure reducing valve.



Pressure Reducing Valve: None noted

Main Water Shut-off Location: Not Found - House

(P2-1) Recommended Disclosure Items: No main water shut off was found inside the house. There is typically a shut off at the meter in the street, but this can be a time-consuming and difficult shut-off to access in an emergency. Disclose the location of the main water shut for future owners as it may be concealed behind finishes or stored items. If no readily accessible shut off exists, hire a licensed plumber to further evaluate and install.

Distribution Pipe

Pipe Insulation: Present

The visible portions of the supply piping appear to be insulated. However, prior to freezing weather it is always a good idea to check pipes and hose bibs for adequate insulation and freeze protection to protect pipes from cold weather and freezing conditions. Hose bibs can often be winterized prior to cold weather.

Supply Pipe Materials: Copper

Copper water supply pipes were installed. Copper pipes installed prior to the late 1980's may be joined with solder that contains lead, which is a known health hazard especially for children. Laws were passed in 1985 prohibiting the use of lead in solder, but prior to that solder normally contained approximately 50% lead. Note that testing for toxic materials such as lead, is beyond the scope of this inspection. Consider having a

qualified lab test for lead, and if necessary take steps to reduce or remove lead from the water supply. Various solutions include:

- Flush water taps or faucets. Do not drink water that has been sitting in the plumbing lines for more than 6 hours
- Install appropriate filters at points of use
- Use only cold water for cooking and drinking, as hot water dissolves lead more quickly than cold water
- Treat well water to make it less corrosive
- Have a qualified plumber replace supply pipes and/or plumbing components as necessary

Functional Flow: Average

Circulation Pump: None Noted

Waste Pipe and Discharge

Discharge Type: Public Sewer - Seller

Waste and Vent Pipe Materials: ABS plastic

(P2-2) Recommended Disclosure Items: An evaluation of the sewer line below the ground is beyond the scope of this inspection. Due to the age and location of the building, a sewer scope is recommended to further evaluate the sewer line and the below ground connections between the house and the municipal sewer line. Sewer scopes are done using video cameras and can reveal the materials, condition and reliability of the sewer line. If that has been done recently, I recommend disclosing available information. If this has not been done recently, this would be valuable information to disclose to a buyer.



Water Heater

Manufacturer: A.O.Smith Data Plate: Shown Here

This shows the data plate for this water heater.



System Type: Tank

Size: 50 gal **Age:** 2020

Energy Source: Electricity

Straps: Present **Pad**: Present

Drain Pan: Not Needed **Expansion Tank:** Present

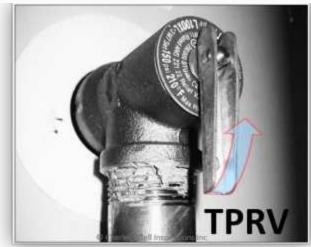
Temperature Pressure Relief Value: Present - Not Tested

A temperature and pressure relief valve (TPRV) is required on all water heaters to discharge any excessive pressure within the tank. A discharge pipe should be attached to the valve and directed to a safe location away from body contact. Newer installations must be directed to the building exterior or to an approved indoor drain receptor. Most manufacturers suggest that homeowners test these valves at least once a year by lifting the lever to ensure the valve discharges properly and also recommend inspection of these safety devices every three years. The picture here shows a typical TPRV. They may also be found on the side of the heater on some models. I do not test these valves due to the possibility that they may leak after testing. A leaking or inoperative TPRV should be replaced immediately by a licensed plumber.

Due to inconsistencies between both UPC and IPC Plumbing codes, and water heater manufacturer's instructions, and TPRV manufacturer instructions, it is not actually possible to install the drain from the

Water Heater TPRV "properly." There are conflicts with distance of termination to the floor/ground, types of pipes approved, and diameters of pipes approved. Additional confusion is added when jurisdictional inspectors approve installations/materials specifically not allowed by both codes and manufacturers. My recommendations will vary depending on the installation and will be included in the applicable narratives below.

Most codes defer to manufacturer instructions and I favor those recommendations. The yellow tag on the valve states clearly the termination should be 6" above the floor which is more consistent with the UPC code requirements.



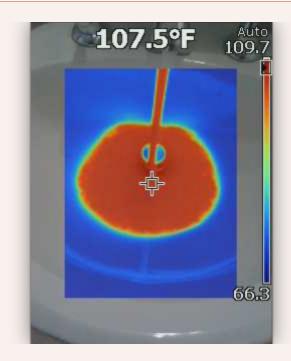
The arrow shows how a TPRV can be tested

Water Temperature

Water Temperature Measured During Inspection: 109 Degrees F

(P2-3) Recommended Maintenance: The water heater temperature seemed to be set too low at the time of inspection - just 107 degrees F. The range of 120-125 degrees F is the generally recommended temperature. This is nearly impossible to measure precisely during a home inspection as water temperature can vary between fixtures. I try and test the water temperature in several places and take the median reading. Adjust water heater temperature as needed. For best practice, set water temperature at the water heater to 130 degrees F and use a tempering valve to set water temp back to a safe 120 for domestic use. This high tank temperature will reduce risks of Legionella developing in the tank and the tempering valve will ensure a safe water temperature.







Exterior Hose Bibs

Operating, Poorly Mounted, Leaking (At Handle When Turned On)

(P2-4) Repair: The hose bib at the front side of the house is poorly mounted to the siding. This could cause leaks in the siding around the hose bib and could allow the hose bib to become loose during operation. Hose bibs should be securely mounted to blocks that are lead into the siding and which are properly flashed or caulked.



(P2-5) Repair: The leaky hose bib at the north side of the house requires repair or replacement - it leaked from the faucet handle when the faucet was turned on and under pressure. This often requires tightening the packing around the handle stem.



(P2-6) Repair: The hose bib at the south side appears to require an anti-siphon attachment - the threads available at the end of the hose bib are thin and most hoses will not attach to this. Repair as needed. Please note that anti-siphon protection is recommended to prevent stagnant water in a hose from accidentally being pulled into the house water supply.



The anti-siphon device is missing for the backyard hose bib.





This shows the anti-siphon present at the garage side hose bib

Additional Plumbing

Sump Pumps and Drains

Floor Drain: None noted **Sump Pumps:** None noted

Interior

Floors and Floor Materials

Floor Materials: Carpet, Wood Laminate, Plastic laminate, Bamboo

Floor Settlement: None noted

Walls, Ceilings, Trim, Hallways and Closets

Wall and Ceiling Materials: Drywall

Wall Insulation and Air Bypass

Wall Insulation: Not Visible

Stairs and Railings

Standard

Interior Doors

Interior Doors: Hollow Core

(I-1) Recommended Maintenance: A loose screw was noted on the pocket door to the main bathroom. Repair as needed for smooth operational pocket door



A loose screw was noted on the pocket door to the main bathroom. Repair as needed for smooth operational pocket door

Windows

Window Glazing: Double pane Interior Window Frame: Vinyl

Window Styles: Single hung, Sliding

(I-2) Repair: The energy coating for the window seems to have failed - see the cloudy stain between the panes of glass - west, 2nd floor bedroom. This typically requires glazing replacement to repair. Hire a qualified glass replacement specialist to further evaluate and repair as needed.



A failed energy cutting noted at the second floor window on the west side.

Kitchen

General Kitchen Photos



Sinks and Faucets

Tested

Cabinets and Countertops

Countertop Material: Plastic laminate **Cabinet Material:** Wood, Wood laminate

Disposers

Disposer: Operated

Dishwasher

Dishwasher: Operated

Dishwasher Air Gap: Present

Ventilation Method

Ductless Fan - Electric

(K-2) Improve or Upgrade: A ductless exhaust fan was noted for the cook-top. Installation of a fan that ducts to the exterior is recommended to remove moist air and odors to the exterior. Please note that if you switch to a gas range or cooktop in the future, a fan that vents to the exterior is still not required, as long as there is some ventilation in the kitchen, but is more strongly recommended. Gas ovens produce carbon monoxide while running and should really have an exhaust vent to the exterior.

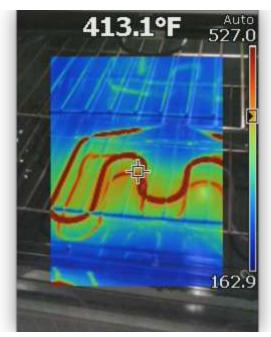


Ranges, Ovens and Cooktops

Range/ Oven /Cook-tops: Gas and electric

The oven and cooktop were tested during inspection and were operable. Ovens are tested in bake mode only. Appliances are generally beyond the scope of a home inspection, but are tested for basic function as a courtesy. This does not include testing to see if the thermostat is accurate for example.





Refrigerators

Refrigerator: Operating

General Kitchen Condition

Standard

Laundry Facilities

Washer

Tested



A moisture alarm with water shut-off features is recommended under the washing machine to protect against accidental leaks in the supply hoses. Pans can be effective when there is a drain, but even these will not protect against a burst supply connector. A moisture alarm with automatic shut-off will. Watts is a brand I have seen installed: Link.



Dryer

Tested

Proper dryer exhaust venting is critical for safe and reliable performance from the dryer. Here are some basic rules of thumb for dryer exhaust duct installation: Unless a vent-free appliance is being used, the dryer exhaust vent must terminate outdoors. It should be no more than 25 feet long and for every 90 degree turn subtract 5 feet and for every 45 degree bend subtract 2.5 feet. Use only smooth-wall metal vent pipe @ 4 inch pipe diameter. Do not use plastic pipe and plastic flex pipe. If a flexible connector is needed behind the dryer use a short amount of corrugated metal pipe. If the exhaust duct is getting pinched behind dryer, consider use of a dryer vent box, pictured here. Flex and corrugated pipes should never be used in concealed spaces such as through walls or in attic or crawl spaces. Insulate dryer exhaust duct where it passes through unconditioned spaces to prevent condensation that could hasten lint build-up inside the pipe. Do not use screws to connect pipe as these can trap lint. Secure duct with foil tape as needed. Be sure duct is sleeved properly so that it will not trap lint and clean the vent regularly, especially if it is a long exhaust run.



This shows an example of a dryer vent box

Power Source: Electric

Exhaust Duct: Ducted to Exterior, Cleaning - Inquire With HOA

Q (LF-2) Due Diligence: Inquire with the HOA about who is responsible for <u>cleaning dryer</u> <u>exhaust ducts</u>. This is important regular maintenance that should be performed by the association to ensure everyone's dryer exhaust ducts are clean and operating safely.

Laundry Ventilation

Type: Laundry fan

Powder Bathroom

General Bathroom Photos





Sinks and Cabinets

Tested

(PB3-2) Repair: The bullnose material is loose in the powder bathroom cabinet. Repair or update as needed.



Toilet

Tested

Bathtub / Shower

None noted

Bathroom Ventilation

Type: Bath fan

General Bath Condition

Standard

(PB3-3) Repair: The mirror in the powder bathroom is missing its reflective surface in places. Update the mirror as desired.



Main Bathroom

General Bathroom Photos





Sinks and Cabinets

Tested

Toilet

Tested

Bathtub / Shower

Tested

Bathroom Ventilation

Type: Fan and window

General Bath Condition

Standard

Upstairs Bathroom

General Bathroom Photos





Sinks and Cabinets

Tested

Toilet

Tested

Bathtub / Shower

Tested

(GB-2) Repair: The handle for the mixing valve to the upstairs bathroom shower is loose. Secure the loose handle as needed to ensure reliable performance.



(This video is only viewable online.)

(GB-3) Repair: The shower head in the downstairs bath is leaking and requires repair. Leaky shower heads are common and not a significant concern. Adjust as needed to prevent leakage at the shower head.



Bathroom Ventilation

Type: Fan and window

General Bath Condition

Standard

Attic

Attic Access

Viewed at access

 \nearrow (A-1) Inspection Notes: I did not crawl the crawl space for the attic where there was no ramp or safe way to access the space. Crawling in the V of trusses or on top of framing risks damaging thermal barriers and ceiling finishes and is not a safe way to access an attic. This limited inspection of this space.

Roof Framing and Sheathing

Rafters: Truss Sheathing: OSB

 \nearrow (A-2) Inspection Notes: I inspected the attic space today and no red flags were noted regarding prior moisture build-up or relative humidity. Venting appeared unrestricted where visible. Wood has a nice bright color indicating no prior moisture problems with relative humidity or heat migration into the attic.











Attic Insulation

Insulation Type: Fiberglass

Approximate Insulation R-Value on Attic Floor: 38, Improve to Modern Standard, Rodent

Damaged

(A-4) Repair: The attic insulation is rodent-damaged - not bad, just a few trails in places. 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.



(A-3) Efficiency: The attic insulation could be improved to modern standards, which recommend R-49 on the floor and R-21 on walls. R-value is the measure of resistance to heat loss; the higher the R-value the better the insulation. During insulation repairs it is best practices to implement any air seal-up repairs to seal air leakage. Also, be sure you have completed any wiring or other projects that are needed in the attic. Then, hire an insulation contractor to improve thermal barriers.

Attic and Roof Cavity Ventilation

Attic Ventilation Method: Soffit vents, Ridge vents

Attic and roof cavity ventilation is a frequently misunderstood element of residential construction. All roof cavities are required to have ventilation. The general default standard is 1 to 150 of the attic area and ideally, this comes from at least 60% lower roof cavity ventilation and 40% upper, but this is a wild oversimplifications of the subject. As a good guiding principle the most important elements for healthy attic spaces, which are traditionally insulated and ventilated are:

- 1. Make sure the ceiling between the living space and the attic is airtight
- 2. Ventilate consistently across the whole lower part of the roof cavity with low, intake soffit venting
- 3. Upper roof cavity venting is less important and if over-installed can exacerbate air migration into the attic from the living space.
- 4. Avoid power ventilators which can depressurize the attic and exacerbate air migration from the house into the attic.

For more information, please see: Link

Crawl Space

General Crawl Space

⚠ **ᡠ** (CS3-1) Major Concern: Overall, numerous repairs are needed to the crawl space below this house. I have made a series of detailed observations in the base of this report and below in this observations but given the extent of repairs I recommend further evaluation of this crawl space by a licensed general contractor who specializes in crawl space clean-up as additional repairs could be needed that are latent or concealed. Examples of observations noted during inspection include:

- · Pipe insulation is incomplete on supply piping
- The plastic vapor barrier is rodent damaged and incomplete in places
- The sub-floor insulation is rodent-damaged and requires repair and replacement
- Wood debris should be cleaned from the floor.































Crawl Space Access

Method of Inspection: Crawled

During inspection of the crawl space, every effort is made to inspect the entire space. Visual inspection of crawl spaces is difficult and limited as access is often restricted by pipes, ducts and sub-floor insulation as well as limited clearances.

Vapor Barrier

Vapor Barrier Material: Plastic on earth

Crawl Space Ventilation

Ventilation Method: Exterior wall vents

Posts and Footings

Standard

Insulation

Insulation Type: Fiberglass

Approximate R-Value: Inconsistent

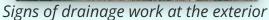
Moisture Conditions

Signs of prior drainage problems noted

(CS3-2) Recommended Disclosure Items: The crawl space was dry at the time of inspection but I noted indications of prior water in the crawl space. This is difficult to understand during a one-time inspection. It could have been repaired or it could have been from construction or it could be a seasonal on-going issue. In this case, I did see signs of drainage work at the exterior. This may have been done by the HOA? Disclose any additional information.









Structure and Basement

Foundation

% of Foundation Not Visible: 30%

Evidence of Seismic Protection: Present

Signs of seismic protection noted during inspection. This inspection is not a cohesive analysis of seismic engineering, but I do look for signs of seismic protection.



Building Configuration: Slab on grade (garage slab)

Foundation Description: Poured concrete

Floor, Wall and Ceiling Framing

Wall Framing: Not visible Wall Sheathing: Not visible

Floor Framing: Not visible, Wood I-Joists **Sub-Floor Material:** Partly visible, OSB

Ceiling Framing: Not visible

Basement

None

Rodents, Pests and Wood Destroying Organisms

Rodents

Some signs

Other Pests

Wasps / Bee's (In Crawl Space - Active)

(RPWDO-1) Home Owners Association: A bee or wasp nest was noted in the in the metal ridge venting. No activity was noted so it could be old or it could be seasonally inactive? Treatment and removal may be needed. This may be an HOA item.



This was at the south side ridge

Wood Destroying Organisms

Visible Evidence of Active Wood Destroying Insects: None noted Visible Evidence of Inactive Wood Destroying Insects: None noted

Visible Evidence of Damage from Wood Destroying Insects: None noted

Visible Evidence of Active Wood Decay and Fungi: None noted

Visible Evidence of Conditions Conducive to Wood Destroying Organisms: Present, See WDO

observations in this report

Checking Out Procedure

Check Out List

Oven: Off

Lights: ✓ Off

Heating and Cooling: Restored to Pre-inspection temperatures

Appliances: ✓ Off / finishing cycle

Invoice -- The Full Report

Report # 210922D

Inspection Date: 2021-09-22

Property inspected for:

Nick Savage 6543 Sample Townhome Report Bainbridge Island, WA 98110

Inspection Fee	\$745.00
Discount	\$-50.00

\$695.00 DUE

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

Orca Inspection Services, LLC (206) 713-5715 orcainspect@gmail.comwww.orcainspect.com

Inspected by Dylan Chalk WA State Pest License #: 65540 WA State Inspector License #: 365







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