Inspection report for the property at

1234 Summer road, Someplace, Washington

This report is prepared exclusively for **John & Jane Doe**
Inspected On: **05-25-2023**

Company Information

Wildwood Inspections, LLC
3606038508

jaidentoo@gmail.com

Published Report

Inspected By:

Jeff Hudson, Washington State License #24032951

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.

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 "Summary Page" and quickly get critical information for important decision making. However, we strongly recommend that you take the time to read the full Report, 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:

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: 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.

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

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

Description: *Detailed description of various aspects of the property noted during the inspection.*

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

I-1 Interior:

I-2 Interior:

I-3 Interior:

I-4 Interior:

K-1 Kitchen:

Repairs

G1-1 Grounds: Eliminate wood /soil contact to reduce the chances for rot and pest damage and repair any hidden rot as needed. Generally, a 6-inch clearance between soils and wood is recommended. Repairs should be made to get as much clearance as is possible and all contact with the soils should be eliminated.

- Siding trim is in contact with the soil.
- Less than 6" clearance to soil.

G1-2 Grounds: The grade of the yard is sloping toward the building. Standards recommend a quarter inch / foot slope away from the building or better to prevent water draining toward the house. Over time, negative grading, as this is often called, can lead to moisture and even structural problems with the house. Have this repaired as feasible by a qualified contractor. Often, a swale is used to create a low point away from the house into which water can be diverted away from and around the building.

- The yard is sloping towards the house.

G1-4 Grounds: The rear deck stairs have openings between the treads that are larger than 4-inches. This could be a safety hazard for children. Standards recommend openings in stair treads similar to guardrails - no more than 4 inches. Have this further investigated and repaired by a qualified general contractor.

- Openings between stair treads more than 4".

ESDW-2 Exterior Siding, Doors and Windows: The cedar shingle siding on this home is weathering and requires a new stain job to better protect the shingles and preserve the nice cedar color of the shingles. As cedar has a natural resistance to decay you can let the shingles go and turn a silver color. This will not immediately damage the shingles but this lack of treatment will desiccate the shingles leading to a more rapid deterioration of the wood as dried shingles are more prone to cupping and splitting. I recommend hiring a licensed painter to clean and re-stain the

cedar shingle siding.

- Staining needed.

ESDW-5 Exterior Siding, Doors and Windows: Inadequate clearances were noted between the roof and the siding. A 2 inch air gap is recommended here to keep the siding off the roof and prevent deterioration of the siding. This installation should be accompanied by step flashings that adequately protect the wall and roof juncture from leaks. Hire a licensed general contractor to further evaluate and repair this condition.

- Siding too close to roof.

ESDW-6 Exterior Siding, Doors and Windows: Some of the penetrations in the siding do not have adequate mounting blocks. For penetrations in the building envelope such as hose bibs and holes 1½ inch diameter or larger, such as dryer vents, a block shall be installed around the point of penetration. Blocking should be a minimum 3 in.. radius greater than the radius of the penetration. The main purpose of mounting blocks is to provide a flat surface for securely mounting and properly sealing a termination such as a dryer or fan vent, a hose bib, gas or electrical piping, condensation piping etc. This also allows broken or failing termination covers, or broken or damaged piping, to be replaced without needing to dismantle the exterior envelope of the building. I recommend hiring a qualified general contractor to evaluate all of the penetrations on the house and repair as needed.

- Penetrations in siding greater than 1.5 inches should have a flashed mounting block
- No mounting block.
- Cracked dryer vent termination with no mounting block

ESDW-7 Exterior Siding, Doors and Windows: A bacterial or fungal bloom or mildew was noted on the eaves indicating the eaves need to be cleaned and re-painted for a proper finish. This house is located in a marine environment and surrounded by relatively dense tall trees and heavy vegetation. Heavier moisture laden air in the environment around this house will tend to stagnate and be drawn to collect on surfaces like the eaves creating a conducive environment for bacteria or mildew. When re-painting be sure to use a mildew-resistant paint on the eaves to help control this condition.

- Examples of mildew on eaves.

ESDW-8 Exterior Siding, Doors and Windows: Bird blocking in the eaves requires repair to ensure adequate roof cavity ventilation and adequate bird, rodent and insect proofing. I recommend hiring a licensed general contractor to evaluate and make repairs.

- Examples of repairs needed to bird blocking.

EDFW-2 Electric Distribution and Finish Wiring: There is an open electrical junction box under the house in the crawl space. I recommend hiring a licensed electrical contractor to change the box to a surface mount or exposed type, typically metal, and installing a cover plate.

- Open electrical junction box under house in crawl space.

P-5 Plumbing: The sewer line pipe has not been properly sleeved as it passes through the concrete foundation. Standards recommend a sleeve through the foundation wall and then sealing the pipe with spray foam as needed. Consult with a qualified general contractor to further evaluate and repair.

- Stains around this penetration indicate likely past leakage

K-2 Kitchen: I could not determine if the garbage disposal has a required ground wire. There appears to be only two wires coming from the garbage disposal to the receptacle under the sink. I recommend having a licensed electrician evaluate this wiring.

K-4 Kitchen: An anti-tip device is needed to prevent this range from tipping during operation of the oven door. This is a small clip that secured the back adjustable feet of the range to the floor.

LF-6 Laundry Facilities: Foil or Mylar transition duct was noted in use to connect the dryer to the rigid vent. This product is generally UL listed for use with a dryer, however, most dryer manufacturers do not recommend it as it has proven to be unreliable and a potential fire hazard. A corrugated metal flex duct is recommended. Repair as needed.

FB-2 Family Bathroom: The toilet in the family bath has not been caulked to the floor. Caulking the toilet to the floor is recommended and even required in some jurisdictions, though opinions on this can vary. I prefer caulking the toilet to the floor, but leaving a gap on the back of the toilet that remains un-caulked so if the toilet leaks, water has an escape route. One of the risks of not caulking the toilet to the floor is that the toilet can become loose. Repair as recommended by a licensed plumber.

FB-3 Family Bathroom: Caulking between the bathtub and the floor in the family bathroom needs repair to prevent water from damaging the floor. I recommend removing any existing caulking, thoroughly cleaning and drying the area between the bath tub and the floor, and installing a mildew resistant caulking.

- Caulking between bath tub and floor

FB-4 Family Bathroom: There is an exhaust fan and timer installed in the family bathroom. This serves as a whole house fan for the house and should be set to auto so that it will run periodically throughout the day based on the adjustable timer settings. To turn the exhaust fan on when using the bathroom, the timer has to be manually switched to on, and then later manually switched back to auto. This is not a reliable way to insure the whole house fan is being consistently used as intended. To solve the problem and make the exhaust fan work in both situations I recommend having a licensed electrician install a timer that can be programmed to operate the exhaust fan as a whole house fan periodically throughout the day, and can be temporarily over-ridden to run while the bathroom is being used with the push of a button. After a set amount of time, the over-ride is cancelled, and the exhaust fan continues to run as a whole house fan.
**See note HCFV-6 under Mechanical Ventilation for more information on whole house fans.*

- Whole house fan timer.
- Example of whole house timer with over-ride function.

CS-3 Crawl Space: The crawl space access hatch does not look rodent proof. Rebuilding is recommended to eliminate a rodent entry point. A nice way to seal the opening is to build a frame of pressure treated wood that fits snugly into the opening in the foundation and then cover this with 1/4 wire mesh.

CS-5 Crawl Space: Some of the crawl space vents have been installed at grade. The risk here is water entry into the vents. I recommend correcting the grade so water cannot flow into the vents. Often, digging a small well around the vents can help.

- Crawl vent at grade.

CS-7 Crawl Space: The crawl space vents are currently blocked by insulation in places. This seems intentional and is often done in colder and dryer climate zones in the winter as a means of improving interior comfort. In this climate zone, keeping crawl space vents open all winter is critical for keeping a dry crawl space. Implement repairs as needed to ensure vents are unobstructed. Use cardboard baffles to hold insulation up away from the vents.

- Blocked vent.

**Note: standards for ventilated crawl spaces prescribe 1 square foot of ventilation for every 150 square feet of crawl space or 1/1500 in combination with an approved class 1 vapor retarder material that covers all exposed soils in the crawl space. Vents should be located to provide adequate cross ventilation. Hire a licensed general contractor to further evaluate and repair.*

CS-8 Crawl Space: No positive connections were noted connecting this post to the beam or the post to the footing under the house. Positive connections are recommended for improved seismic protection. Hire a general contractor to further evaluate and improve or repair.

- No positive connections between posts and footings.

CS-10 Crawl Space: The beam above is not properly supported by the wall framing below. There should be framing directly under the end of the beam transferring the load of the beam directly to the foundation wall. This beam could move vertically downward if the wall framing cannot support the load causing damage to the structure above. This was noticed in multiple areas of the crawl space. I recommend having a structural engineer evaluate the beams, and how they are supported, to determine what steps should be taken to insure proper structural support.

- Beams not properly supported.
- Beams not properly supported.

CS-11 Crawl Space: There are a couple nails missing in this bracket. I recommend installing these nails to help limit the possible movement of this bracket during a seismic event.

- Missing nails in bracket.

SB-3 Structure and Basement: The foundation bolts that connect the house sill plate to the foundation have loose nuts in several places. Tighten all loose nuts to ensure reliable connections.

- Loose nuts on foundation bolts.

SB-4 Structure and Basement: The metal form ties used to support the concrete foundation forms during construction of the foundation are protruding from the concrete in places and could pose a safety hazard. I recommend pounding down our grinding these off to eliminate a safety hazard.

- Metal form ties.

Recommended Maintenance Items

DPB-3 Decks, Porches and Balconies: The wood decking on the front of the house needs to be re-stained to preserve the wood and discourage the growth of mildew and fungus that can result in a slippery walking surface. High traffic areas of decks and decks that are exposed to the sun most of the day will require more diligent maintenance than other decks. Keeping a deck clean of debris, especially between the decking boards, along with re-staining as needed, can help extend the life of the decking materials. I recommend hiring a licensed contractor to clean and re-stain the front deck.

- Front deck high traffic area needs cleaned and re-stained.

RCG-3 Roof, Chimney and Gutters: **GUTTER CLEANING NEEDED**
The gutters are clogged with organic debris and require cleaning to ensure proper control of roof runoff. Clean the gutters and ensure they are unobstructed, leak-free and properly sloped to drain. This is routine house maintenance; I would expect the need to clean gutters and downspouts regularly.

- Debris in gutter.

HCFV-2 Heating, Cooling, Fireplaces and Ventilation: The electric wall heaters will require occasional cleaning - some of the heaters are showing signs of dust build-up. Best practices are to turn power off to the heater and use compressed air to clean the dust from the heating elements. The fan blades can be wiped or vacuumed as needed then restore power. Many manufacturers of these heaters recommend cleaning every six months to prevent a fire hazard. They also recommend keeping all electric cords, curtains and furniture at least three feet from the heater.

HCFV-5 Heating, Cooling, Fireplaces and Ventilation: I recommend keeping the ductless heat pump system on a routine service schedule. These systems should be cleaned and serviced annually for efficient operation and to prolong the useful service life of this equipment. The average life of a heat pump is 15-20 years. This system was operating as intended during inspection.

- Ductless heat pump outdoor unit.

WH-3 Water Heaters: Testing of the plumbing system today, the water tested as too hot - 128 degrees F. This is a scald hazard. To prevent scalding, standards recommend indoor hot water temperatures do not exceed 120 degrees. There is some evidence that hot water temperatures should be greater than 130 degrees to prevent Legionnaires' disease from developing in the water

heater. If this is a concern, you can heat the water in the tank to 140 degrees F and have a tempering valve installed at the hot water tank. Have this further evaluated and repaired by a licensed plumber, or simply turn down the temperature as desired to eliminate a scald hazard. Please note that during the inspection, it is difficult to accurately test the water temperature as it can vary between fixtures. Testing is done in multiple locations during the inspection, and a median temperature is taken.

LF-7 Laundry Facilities: The dryer exhaust ductwork is dirty and needs to be cleaned for improved safety. This is important, regular maintenance to eliminate a potential fire hazard.

Improves

ESDW-4 Exterior Siding, Doors and Windows: Storing wood next to the house creates a conducive environment for wood destroying organisms. (Think of it as an appetizer before the main dish for insects that enjoy eating or chewing wood). I recommend finding another location away from the house to store any wood materials.

- Wood pile next to house.

DPB-5 Decks, Porches and Balconies: The openings for the front deck guardrails are larger than modern standard of 4-inches. Caution should be used, especially around small children as they can fit between this railing. Improving to modern standard is recommended.

- The guardrail openings are larger than the 4-inches recommended today. This can pose a safety hazard for small children.

RCG-1 Roof, Chimney and Gutters: This roofing system has a woven valley detail. These can be more vulnerable to leaks over time than metal valleys. Most shingle manufacturers seem to allow this detail, especially with lighter weight shingles. It is usually not possible to identify the shingle manufacturer during a home inspection. Metal valley details are generally preferable, but woven valleys are typically only listed as a defect if signs of excessive ware or failure are noted during this visual inspection. This particular use of a woven valley is one of the least advisable situations. As the water runs towards the valley from the steep pitched side of the roof, there is virtually nothing to divert the water from trying to go under the shingles on the very low pitched side of the roof. Ideally there would be a metal flashing with a raised diverter section installed in the valley between the different sides of the roof. I recommend hiring a roofing contractor to evaluate and add a metal valley flashing.

- Direction of water runoff towards valley.
- Area of roof with woven valley.
- Examples of metal valley flashing and woven valley.

LF-2 Laundry Facilities: MOISTURE ALARM RECOMMENDED
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.

CS-9 Crawl Space: No positive connections were noted connecting the posts to the footings under the house. This is a standard practice in older construction, but makes the home more susceptible to seismic damage. Positive connections are recommended. Hire a general contractor to further evaluate and improve.

- No positive connections between posts and footings.

SB-5 Structure and Basement: In the crawl space there are walls framed to fill the areas between the concrete foundation and the floor framing above. I recommend insulating these walls to help maintain a more consistent temperature in the crawl space especially during the colder winter months.

- Uninsulated wall framing.

Monitors

G1-3 Grounds: Corrugated storm drain pipe appears to be used for sub-surface drainage work to divert roof runoff away from the building. This product is prone to failure as it is susceptible to crushing and clogging. No evidence was found during inspection that these drains are backing up and require repair. Monitor during heavy rains to ensure roof runoff is being reliably carried away from the structure.

- Corrugated drain lines used for roof runoff - these are vulnerable to clogging and crushing.

ESDW-3 Exterior Siding, Doors and Windows: This house is trimmed with a softwood spruce trim. This wood is not especially resistant to wood decay. I would monitor the sun-exposed sides of the house. Try and keep the wood well-caulked and painted. Over time, expect the need for localized rot repair with this wood.

- Spruce trim.

RCG-4 Roof, Chimney and Gutters: One of the gutter downspouts is not connected to a drainage system and is just draining into the yard. This particular downspout is connected to a very short gutter that is capturing water off a very small independent section of the roof. I would not expect much water to be discharged from this downspout. It would be best if this downspout was connected to the same drainage system as the other downspouts. If that is not possible, I would recommend adding a downspout extension to avoid the potential of water pooling near the foundation during a heavy or prolonged rain event.

- Downspout draining into yard.
- Downspout extension.

HCFV-3 Heating, Cooling, Fireplaces and Ventilation: The ductless heat pump indoor unit has a cleanable filter that should be routinely checked and cleaned. Keeping this filter clean will

help the heat pump to run as efficiently as possible and help reduce the costs of heating and cooling.

FB-1 Family Bathroom: The plumbing fixtures in the family bathroom are installed in a non standard way, but do appear to be functional and operating as intended. It is worth noting that typical industry standards for installing plumbing fixtures are established to not only ensure functional operation but to help prevent potential damage to the fixtures and drains during normal usage that could allow water or sewage to leak into the house. Due to the extended exposed piping used, and how the extended piping appears to be supporting the fixtures, I recommend diligent monitoring of the sink plumbing fixtures as well as the extended waste lines under the sinks for any signs of leakage and have any suspected leaks evaluated and repaired by a licensed plumber right away.

Due Diligences

GC-1 General Comments: As this is a newer construction house, the building plans, permits, drainage plans, construction records, a list of sub-contractors and warranty information may be available. I recommend trying to obtain and keep this information for your records and for future re-sale.

Notes

G1-5 Grounds: Storage sheds and other detached structures are excluded from this inspection.

FSD-1 Fuel Storage and Distribution: No fuel sources, fuel storage devices or fuel burning appliances were found on site during our visual inspection.

ES-4 Electric Service: **MODERN AFCI PROTECTION IS A SAFETY IMPROVEMENT**
AFCI (arc fault protection) is now required on all branch circuits supplying outlets or devices installed in residential dwelling unit kitchens, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, laundry areas, and similar rooms and areas. The goal of this protection is to reduce risks of electrical fires. Consult with a licensed electrician about improving circuit protection as desired. I would consider this improvement in the context of other electrical repairs or upgrades. ***Please note that if you add or replace receptacle outlets to the existing system, they should comply with modern AFCI standards.***

HCFV-7 Heating, Cooling, Fireplaces and Ventilation: Thermal images show the ductless heat pump system working in heating and cooling mode.

- Heat pump indoor unit.
- Thermal image showing indoor unit working in heating mode.
- Thermal image showing indoor unit working in cooling mode.

HCFV-8 Heating, Cooling, Fireplaces and Ventilation: Thermal images showing the electric wall heaters working.

📌 **HCFV-10 Heating, Cooling, Fireplaces and Ventilation:** This house has a timer for a whole house fan. Unfortunately, most home owners and renters do not fully understand how these timers are actually supposed to be used. These timers are designed to make a fan come on periodically to exhaust interior air, facilitate air changes and help keep the indoor relative humidity in check. As a general rule, keep relative humidity around 50% in cold weather to reduce chances for condensation. For more information about whole house fans and setting the timer see: this LINK.

- Whole house exhaust fan timer.
- This shows the optimum zone for indoor relative humidity is between 40-60%.

📌 **P-1 Plumbing:** This shows the location of the water meter at the street side of the house.

📌 **K-3 Kitchen:** There is no dishwasher for the kitchen and no space in which to install a dishwasher. If you wish to have a dishwasher here you will need to have one installed including provisions for electricity, drain lines and water supply.

📌 **K-5 Kitchen:** The oven and cooktop were tested during the 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. These thermal images show the heating elements functioning.

- Stove top elements heating.
- Oven elements heating.

📌 **LF-4 Laundry Facilities:** Older style rubber hoses are being used to supply hot and cold water to the washing machine. Over time rubber hoses can deteriorate and leak or rupture. I recommend upgrading to a much more durable braided stainless steel hose.

- Rubber hoses.
- Braided steel hoses.

📌 **LF-8 Laundry Facilities:** The electric receptacle to the dryer is three-prong or three -wire system. This is an older configuration. Modern electric dryers circuits require a four-wire system. These older three-wire circuits are still allowed, but be sure to tell your appliance installer that you have a three prong outlet so the cord can be swapped out and the appliance appropriately bonded.

📌 **A-2 Attic:** 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.

📌 **A-3 Attic:** There was no way to perform a complete visual inspection of attic insulation levels today as parts of the ceiling here are vaulted ceiling. This limited the inspection.

📌 **CS-12 Crawl Space:** Gravel was used below the plastic vapor barrier in the crawl space. This is a nice practice - the gravel acts as a capillary break and can help prevent seasonal water from getting on top of the vapor barrier.

- Gravel installed under vapor barrier.

📌 **SB-2 Structure and Basement:** Small cracks were noted in the foundation - south side. The purpose of the foundation is to connect the weight of the building to well-compacted soils below the house so that the house does not move or settle. Concrete cracking can indicate poorly compacted soils below the house which could require repair, but small cracks such as these can also be a sign of routine concrete shrinkage. ***It is not possible to determine or verify the cause of these cracks during a visual inspection***. The easiest way to prevent ongoing settlement in buildings is by controlling roof runoff and site drainage to promote dry soils around the foundation; wet soils do not bear weight well. This will also help to prevent crawl space moisture problems. In my experience, small cracks like these are common in concrete foundations.

- Small crack.

🔪

- No repair seems needed at this time. These look like typical cracks in foundations of this age.

Descriptions

***GC-3* General Comments:** *The approximate square footage listed here is listed as a courtesy and is based off of public records and disclosure. An evaluation of square footage of the buildings and property lines is beyond the scope of this inspection.*

***ESDW-1* Exterior Siding, Doors and Windows:**

HardiePlank Siding

HardiePlank siding is a fiber-cement type siding that consists of fibrous materials with a cement component and silica sand/fibers that are compressed together with interior resins that have an embossed outside textured or smooth appearance. HardiePlank contains no asbestos, fiberglass or formaldehyde. This material is a relatively newly engineered product. It has no long term track record to match the 30 year warranty that comes with it, but it has received good reviews in the trades regarding it's stability and durability if properly applied and maintained. It has also become a very popular siding alternative to wood siding due to its durability, price and low maintenance characteristics.
There are some specific requirements for installation and protection. HardiePlank can be blind-nailed or face nailed at the builders discretion but is recommended to be face nailed in high wind areas. HardiePlank cannot be blind nailed with 24" oc framing. Nails should be corrosion resistant and caulked, and double nailed if a penetration of the siding skin occurs while nailing. Butt ends of material should be in moderate contact with minimal gapping and are currently not recommended to be caulked. Previously, up until Oct 2008, the butt joints were recommended to be either butted together or gapped a maximum of 1/8" and caulked. Currently the joints should have "joint flashing" behind, which can consist of a number of different materials such as Mylar, felt, metal or strip/gap backing. At this time Hardie does not specify what the joint backing material requirements are. All window, door and trim connections should be caulked as with standard building practice. It can be hand nailed or compressor nailed, but staples should not be used. Full installation instructions are noted with a link below. Penetrations such as hose bibs and holes 1 1/2" or larger, such as dryer vents, furnace vents, electrical and light fixture boxes should have a flashed block of trim around point of penetration. Smaller piping does not require blocking but should be well caulked.

HardiePlank and HardiePanel need to be kept painted. This is a fiber cement material that is porous and will absorb moisture if not kept sealed, which can cause flaking, mold and deterioration. Any caulking, primer or paint used is required to be 100% latex acrylic material. HardiePlank should not be stained. There have been numerous difficulties with different types of applied products that are engineered, such as Louisiana-Pacific siding, Masonite Omni-Board, pressboard panel type siding as opposed to natural materials such as cedar siding. HardiePlank siding, having limited long term history, is difficult to comment on in regard to its expected life span and aging characteristics, but has been faring very well in comparison.
HardiePlank siding does have a "30-Year Limited Transferable Warranty", but "transferable", as stated in the fine print of this materials contract, includes transference only from the original material buyer, meaning the builder, to the first purchaser and then to the second purchaser. Subsequent buyers/owners are not covered by this warranty. Calling this a 30-year transferable warranty seems optimistic since upon sale of the structure to a third buyer and beyond, there is no warranty protection. Few structures are owned for 30 years by just two individuals.
Further information:
James Hardie Building Products *at 1-800-426-4051 - www.jameshardie.com*
HardiePlank installation instructions *http://www.jameshardie.com/d2w/installation/hardieplank-hz10-us-en.pdf*
Hardie Best Practices *https://www.jameshardiepros.com/Install-and-Tech-Docs/BrowseTechDocs?doctype=Best%20Practice%20Guide*

DPB-1 Decks, Porches and Balconies: *To see a prescriptive guide for residential wood deck construction click this link:*

DPB-2 Decks, Porches and Balconies: *This house has cedar softwood decking installed. The recommended maintenance of this type of decking is annual cleaning and staining with transparent or semi-transparent deck stain. It is common to use decking paints when the decking is older and in the last phase of its useful life, however, painting is not recommended as this can trap moisture in the wood, facilitate wood decay and lead to higher maintenance costs when prepping peeling paint. Annual cleaning and sealing is important to prevent the deck from becoming slippery and unsafe, especially as pollen organic growth accumulate on the decking.*

RCG-2 Roof, Chimney and Gutters: *Please note that when inspecting composition roof installations, I try and look under shingles to see how the shingles have been fastened. Proper fastening is critical for successful roof performance. Often the shingles are bonding so well, they cannot be lifted to inspect the fastening. In this case, I was unable to lift the shingles and see the fastening pattern - they are bonded well and I do not use a flat bar to pry them apart as part of a visual inspection unless there is a reason to start chasing visible leaks. While this limits my visual inspection, this is a good sign, as loose, un-bonded shingles can lead to wind damage and would be written up as a defect.*

ES-2 Electric Service: *The tested voltage at the electric panel today was 247 volts. Most residential construction is listed as 120/240 volts. Slight fluctuation is normal.*

ES-5 Electric Service: *AFCI Temperature Note*

ES-6 Electric Service:

- *Modern homes (2008 and newer) generally use UFER grounds (foundation rebar) and no longer need*

ground rods.

- *Older houses (1963 and earlier) used metal water pipes for grounding instead of ground rods and these older ground conductors may be disabled if the old metal pipes have been updated with plastic pipes.*
- *In between, (very roughly 1963-1990) ground rods have been used for grounding. Typically two ground rods are required (to try and achieve the recommended 25 ohms or less) unless there is also an older metal water piping system that can be grounded, then often 1 ground rod will suffice.*

***ES-7* Electric Service:** *A UFER ground connection was noted for the electrical grounding system. These are required and standard on newer construction houses. These grounds connect the electrical system to Rebar in the house foundation and make a reliable path to the earth for "earthing" or grounding the electrical system.*

- *UFER ground under house.*

***EDFW-1* Electric Distribution and Finish Wiring:** *A representative number of receptacles and switches were tested during inspection. Any defects found during inspection are noted in this report. Only visible and accessible receptacles and switches were tested during inspection and personal items and furnishings are not moved to access any receptacles or fixtures. Inspection/testing of the electrical system can be challenging. It should be anticipated that not all defects will be discovered and that some issues found may actually not be defects at all. Tools used to verify proper wiring and function can vary wildly in reliability/consistency. The kinds of tools that could be used to confidently analyze the system and its function cannot typically be done in the context of a Standard Home Inspection. I look for indications of issues, based on the age of the home, types of wiring systems used etc, as well as personal experience and by testing with a variety of common tools. Issues identified, will be further discussed with recommendations in the electrical section below.*

***EDFW-4* Electric Distribution and Finish Wiring:** *During the home inspection, I try and test a representative sample of the smoke alarms by using the test button on the alarms. This is NOT an accurate test of the sensor, just a test to see if the unit is powered. For reliability, fire marshals recommended updating smoke alarms every ten years and changing batteries bi-annually. The latest data indicate that we should be using photoelectric technology in our smoke alarms for improved fire detection and reducing problems with false alarms, which can lead to disabling of this critical safety system. Unfortunately, the alarms must be removed to determine if they are photo-electric or ionization types. It is surprisingly complex to accurately test a smoke alarm system and determine the reliability, age, and type of sensor technology used, especially as many homes can have half a dozen or more alarms throughout the house. A complete evaluation of smoke alarms is beyond the scope of this inspection. For optimal fire safety, I recommend taking control of these critical safety devices and learning about how to service and maintain your smoke alarm system to keep the building occupants safe. For more information, please read this link. For more information, please read this link.*

HCFV-1* Heating, Cooling, Fireplaces and Ventilation:** *This building has electric wall heaters.* ***These can get very hot during operation. Be sure to keep all drapes, curtains, furniture, electric cords and other flammable items away from these heaters when they are on*. Also be careful with small children as electric heaters can present a burn hazard if left accessible. If you are concerned about the safety or efficiency of these heaters, consider upgrading the system.*

- *Ceramic electric heaters are a bit safer and run at lower temperatures - see one made by Convect Air*

***HCFV-4* Heating, Cooling, Fireplaces and Ventilation:** *The following list is a minimum set of requirements to be expected of heat pump or air conditioning servicing. I provide these as a courtesy to show they types of check-ups that should be expected from a professional servicing.*

- *Check compressor efficiency*
- *Check refrigerant level*
- *Clean the condenser coil*
- *Change or clean air filters*
- *Inspect contactors and wiring*
- *Inspect drive-sheaves, pulleys and belts*
- *Check and adjust for proper air flow*
- *Clean the blower motor as needed*
- *Lubricate all motors and shaft bearings*
- *Check, calibrate and program the thermostats and be sure the thermostat has adequate batteries as needed*
- *Check unit smoke detector, clean filter if applicable*
- *Check safety disconnect, laser-temp -- check across contacts*

***HCFV-6* Heating, Cooling, Fireplaces and Ventilation:** *This shows the data plate for the heat pump.*

***HCFV-9* Heating, Cooling, Fireplaces and Ventilation:** *Determining proper ventilation to the exterior from kitchen, bath, and laundry fans can be tricky as exhaust fan ductwork is often concealed behind finishes and fan terminations can be all over the house from the roof to the foundation, presenting difficulties for systematically checking every fan termination. During inspection, every effort is made to verify proper terminations of fan vents to the exterior, but it is possible to miss something here that is latent or concealed.*

***P-2* Plumbing:** *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.*

***P-3* Plumbing:** *This shows the location of the main water shut off located beside the water heater.*

- *Main water shut off.*

***P-4* Plumbing:** *This building has PEX tubing used for supply piping. Crimp ring connections on PEX pipe have very specific installation guidelines and most of these connections will not be visible at the time of inspection (just like any other type of pipe fitting). It is beyond the scope of this inspection to evaluate a significant number of these connections.. Any leaking noted at fittings should result in more careful inspection of all of the plumbing system by a licensed plumber that is experienced in the installation of these types of connections*

***P-6* Plumbing:** *This shows the location of the sewer cleanouts found during inspection:*

- *Crawl space*

- *East side of building*

***P-7* Plumbing:** *This shows the location of the sewer cleanout found during inspection - south side of building.*

- *Clean out in side yard.*

***WH-1* Water Heaters:** *This shows the data plate for this water heater.*

***WH-2* Water Heaters:** *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.

***LF-3* Laundry Facilities:** *During inspection, I try and run the clothes washing machine. This is mostly so that I can push water down the drain to test the waste piping system. Running the clothes washer during an inspection is not a reliable test of the appliance. I am not actually doing a load of laundry, so please note the limitations of this test.*

***LF-5* Laundry Facilities:** *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.*

***A-4* Attic:** *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 over-simplifications 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

***A-5* Attic:** *Cobra Ridge Vent Install Guide - GAF*

***CS-1* Crawl Space:** *This shows the location of the crawl space access for below the building. EXTERIOR*

- *Crawl space access at back of house.*

***CS-2* Crawl Space:** *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.*

***CS-6* Crawl Space:** *IRC 2018 - Vented and Unvented Crawl Space*

***SB-1* Structure and Basement:** *Signs of seismic protection were noted during the inspection. This inspection is not a cohesive analysis of seismic engineering, but I do look for signs of seismic protection.*

No Modifier S

GC-2 General Comments: This home was occupied at the time of the inspection. Inspection of occupied homes presents some challenges as occupant belongings can obstruct visual inspection of and access to parts of the building. We do our best during inspection to work around belongings to discover as much as possible about the house without moving or damaging personal property, however, the presence of personal items does limit the inspection.

ES-1 Electric Service: These images show electric permits found during inspection.

ES-3 Electric Service: This shows the main electrical panel location in the front bedroom.

- Main electrical panel in front bedroom.
- main electrical panel in front bedroom.

EDFW-3 Electric Distribution and Finish Wiring: The ceiling fans were tested and operating during the inspection.

P-8 Plumbing:

- Hose bib front of house.
- Hose bib rear of house.

LF-1 Laundry Facilities:

A-1 Attic: Attic access hatch above back deck.

- Attic access hatch above back deck.

CS-4 Crawl Space:

- Plastic vapor barrier in crawl space.

WMF-1 Wind Mitigation Form:

Roof Deck Attachment (#RDA)

The Complete Inspection Report

General Comments

Building Characteristics, Conditions and Limitations

Style of Home: Bungalow
Type of Building : Single Family (2-story)
Approximate Square Footage: 1100

> ***(GC-3) Description:*** *The approximate square footage listed here is listed as a courtesy and is based off of public records and disclosure. An evaluation of square footage of the buildings and property lines is beyond the scope of this inspection.*

Approximate Year of Original Construction: 2017
Attending the Inspection: Vacant (inspector only)
Occupancy: Occupied

> **(GC-2) (no modifier):** This home was occupied at the time of the inspection. Inspection of occupied homes presents some challenges as occupant belongings can obstruct visual inspection of and access to parts of the building. We do our best during inspection to work around belongings to discover as much as possible about the house without moving or damaging personal property, however, the presence of personal items does limit the inspection.

Animals Present: No
Weather during the inspection: Clear
Approximate temperature during the inspection: Over 65[F]
Ground/Soil surface conditions: Dry
For the Purposes of This Report, the Front Door Faces: East

> **(GC-1) Due Diligence:** As this is a newer construction house, the building plans, permits, drainage plans, construction records, a list of sub-contractors and warranty information may be available. I recommend trying to obtain and keep this information for your records and for future re-sale.

Grounds

Drainage and Site

Clearance to Grade: Standard, Siding Too Close to Soils - Repair

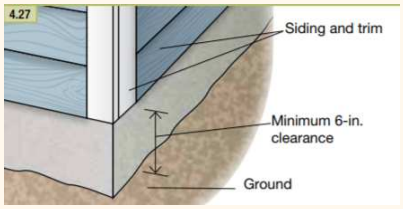
Downspout Discharge: Below grade, Corrugated Storm Drains, Perforated Pipe Used for Sub-Surface Drain

Site Description: Moderate slope, Moderate slope, Grade Toward Building

(G1-1) Repair: Eliminate wood /soil contact to reduce the chances for rot and pest damage and repair any hidden rot as needed. Generally, a 6-inch clearance between soils and wood is recommended. Repairs should be made to get as much clearance as is possible and all contact with the soils should be eliminated.

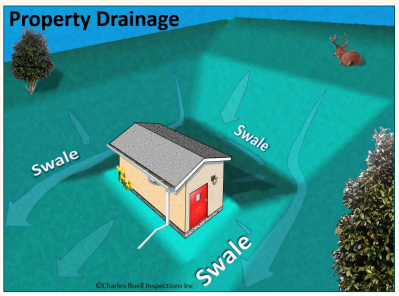
- Siding trim is in contact with the soil.
- Less than 6" clearance to soil.

Less than 6" clearance to soil.



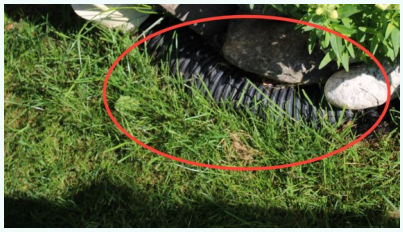
(G1-2) Repair:
The grade of the yard is sloping toward the building. Standards recommend a quarter inch / foot slope away from the building or better to prevent water draining toward the house. Over time, negative grading, as this is often called, can lead to moisture and even structural problems with the house. Have this repaired as feasible by a qualified contractor. Often, a swale is used to create a low point away from the house into which water can be diverted away from and around the building.

- The yard is sloping towards the house.



(G1-3) Monitor:
Corrugated storm drain pipe appears to be used for sub-surface drainage work to divert roof runoff away from the building. This product is prone to failure as it is susceptible to crushing and clogging. No evidence was found during inspection that these drains are backing up and require repair. Monitor during heavy rains to ensure roof runoff is being reliably carried away from the structure.

- Corrugated drain lines used for roof runoff - these are vulnerable to clogging and crushing.



Corrugated drain lines used for roof runoff - these are vulnerable to clogging and crushing.

Driveways/Walkways/Flatwork

Driveway: Gravel

Walkways: Concrete

Grounds, Trees and Vegetation

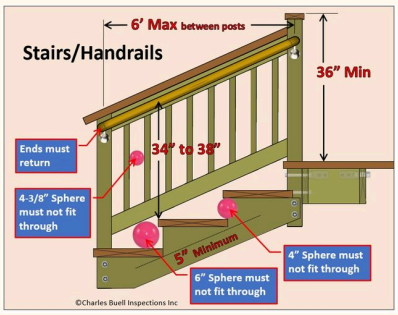
Trees/Vegetation too near building: No

Exterior Stairs

Exterior Stairs: Non-standard

(G1-4) Repair: The rear deck stairs have openings between the treads that are larger than 4-inches. This could be a safety hazard for children. Standards recommend openings in stair treads similar to guardrails - no more than 4 inches. Have this further investigated and repaired by a qualified general contractor.

- Openings between stair treads more than 4".



Openings between stair treads more than 4".

Outbuildings, Trellises, Storage Sheds, Barns

Storage shed, Not inspected

📌 **(G1-5) Note:** Storage sheds and other detached structures are excluded from this inspection.

Exterior Siding, Doors and Windows

Siding and Trim

Trim Material: Fiber cement, Wood (Spruce Trim Note), Metal
Siding Material: Cedar shingles, Board and batten, HardiePlank, Metal

(ESDW-1) Description: HardiePlank Siding
HardiePlank siding is a fiber-cement type siding that consists of fibrous materials with a cement component and silica sand/fibers that are compressed together with interior resins that have an embossed outside textured or smooth appearance. HardiePlank contains no asbestos, fiberglass or formaldehyde. This material is a relatively newly engineered product. It has no long term track record to match the 30 year warranty that comes with it, but it has received good reviews in the trades regarding it's stability and durability if properly applied and maintained. It has also become a very popular siding alternative to wood siding due to its durability, price and low maintenance characteristics.
There are some specific requirements for installation and protection. HardiePlank can be blind-nailed or face nailed at the builders discretion but is recommended to be face nailed in high wind areas. HardiePlank cannot be blind nailed with 24" oc framing. Nails should be corrosion resistant and caulked, and double nailed if a penetration of the siding skin occurs while nailing. Butt ends of material should be in moderate contact with minimal gapping and are currently not recommended to be caulked. Previously, up until Oct 2008, the butt joints were recommended to be either butted together or gapped a maximum of 1/8" and caulked. Currently the joints should have "joint flashing" behind, which can consist of a number of different materials such as Mylar, felt, metal or strip/gap backing. At this time Hardie does not specify what the joint backing material requirements are. All window, door and trim connections should be caulked as with standard building practice. It can be hand nailed or compressor nailed, but staples should not be used. Full installation instructions are noted with a link below.
Penetrations such as hose bibs and holes 1 1⁄2" or larger, such as dryer vents, furnace vents, electrical and light fixture boxes should have a flashed block of trim around point of penetration. Smaller piping does not require blocking but should be well caulked.
HardiePlank and HardiePanel need to be kept painted. This is a fiber cement material that is porous and will absorb moisture if not kept sealed, which can cause flaking, mold and deterioration. Any caulking, primer or paint used is required to be 100% latex acrylic material. HardiePlank should not be stained.
There have been numerous difficulties with different types of applied products that are engineered, such as Louisiana-Pacific siding, Masonite Omni-Board, pressboard panel type siding as opposed

to natural materials such as cedar siding. HardiePlank siding, having limited long term history, is difficult to comment on in regard to its expected life span and aging characteristics, but has been faring very well in comparison.
HardiePlank siding does have a "30-Year Limited Transferable Warranty", but "transferable", as stated in the fine print of this materials contract, includes transference only from the original material buyer, meaning the builder, to the first purchaser and then to the second purchaser. Subsequent buyers/owners are not covered by this warranty. Calling this a 30-year transferable warranty seems optimistic since upon sale of the structure to a third buyer and beyond, there is no warranty protection. Few structures are owned for 30 years by just two individuals.
Further information:
James Hardie Building Products *at 1-800-426-4051 - www.jameshardie.com*
HardiePlank installation instructions *http://www.jameshardie.com/d2w/installation/hardieplank-hz10-us-en.pdf*
Hardie Best Practices *https://www.jameshardiepros.com/Install-and-Tech-Docs/BrowseTechDocs?doctype=Best%20Practice%20Guide*

(ESDW-2) Repair:

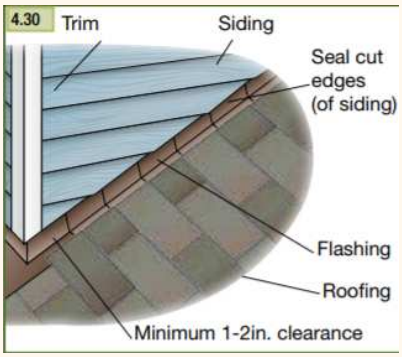
The cedar shingle siding on this home is weathering and requires a new stain job to better protect the shingles and preserve the nice cedar color of the shingles. As cedar has a natural resistance to decay you can let the shingles go and turn a silver color. This will not immediately damage the shingles but this lack of treatment will desiccate the shingles leading to a more rapid deterioration of the wood as dried shingles are more prone to cupping and splitting. I recommend hiring a licensed painter to clean and re-stain the cedar shingle siding.

- Staining needed.

(ESDW-5) Repair:

Inadequate clearances were noted between the roof and the siding. A 2 inch air gap is recommended here to keep the siding off the roof and prevent deterioration of the siding. This installation should be accompanied by step flashings that adequately protect the wall and roof juncture from leaks. Hire a licensed general contractor to further evaluate and repair this condition.

- Siding too close to roof.



(ESDW-4) Improve:
Storing wood next to the house creates a conducive environment for wood destroying organisms. (Think of it as an appetizer before the main dish for insects that enjoy eating or chewing wood). I recommend finding another location away from the house to store any wood materials.

- Wood pile next to house.

Wood pile next to house.

(ESDW-3) Monitor:
This house is trimmed with a softwood spruce trim. This wood is not especially resistant to wood decay. I would monitor the sun-exposed sides of the house. Try and keep the wood well-caulked and painted. Over time, expect the need for localized rot repair with this wood.

- Spruce trim.

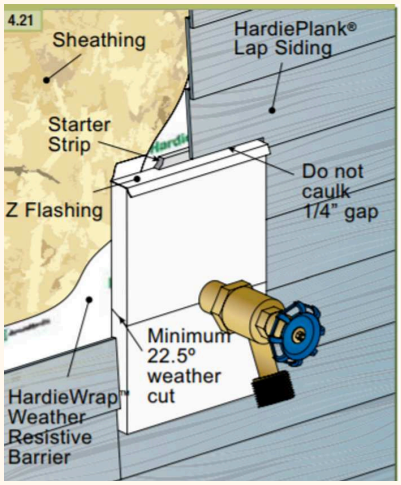
Spruce trim.

Exterior Vent and Exhaust Terminations

Exterior Siding and Vent Terminations: Present

(ESDW-6) Repair: Some of the penetrations in the siding do not have adequate mounting blocks. For penetrations in the building envelope such as hose bibs and holes 1½ inch diameter or larger, such as dryer vents, a block shall be installed around the point of penetration. Blocking should be a minimum 3 in.. radius greater than the radius of the penetration. The main purpose of mounting blocks is to provide a flat surface for securely mounting and properly sealing a termination such as a dryer or fan vent, a hose bib, gas or electrical piping, condensation piping etc. This also allows broken or failing termination covers, or broken or damaged piping, to be replaced without needing to dismantle the exterior envelope of the building. I recommend hiring a qualified general contractor to evaluate all of the penetrations on the house and repair as needed.

- Penetrations in siding greater than 1.5 inches should have a flashed mounting block
- No mounting block.
- Cracked dryer vent termination with no mounting block



Penetrations in siding greater than 1.5 inches should have a flashed mounting block

Cracked dryer vent termination with no mounting block.

No mounting block.

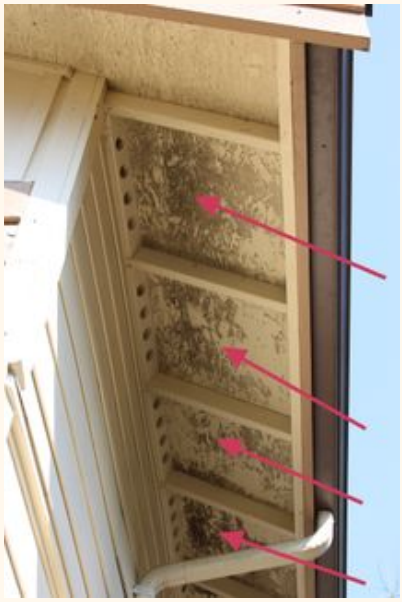
Eaves

Open rafters, Osb

(ESDW-7) Repair:

A bacterial or fungal bloom or mildew was noted on the eaves indicating the eaves need to be cleaned and re-painted for a proper finish. This house is located in a marine environment and surrounded by relatively dense tall trees and heavy vegetation. Heavier moisture laden air in the environment around this house will tend to stagnate and be drawn to collect on surfaces like the eaves creating a conducive environment for bacteria or mildew. When re-painting be sure to use a mildew-resistant paint on the eaves to help control this condition.

- Examples of mildew on eaves.



Examples of mildew on eaves.

(ESDW-8) Repair:
Bird blocking in the eaves requires repair to ensure adequate roof cavity ventilation and adequate bird, rodent and insect proofing. I recommend hiring a licensed general contractor to evaluate and make repairs.

- Examples of repairs needed to bird blocking.

Examples of repairs needed to bird blocking.

Exterior Doors

Exterior Door Styles: Glass panel doors

Exterior Window Frames

Window Frames: Vinyl

Decks, Porches and Balconies

Wood Decks Porches and Balconies

Present

(DPB-1) Description: *To see a prescriptive guide for residential wood deck construction click this link:*

Structure: Observations Noted, Ground contact treated lumber
Ledger Board: Standard
Guardrail: Non-standard, Large Openings, No Posts Just Balusters
Decking Material: Softwood (Staining Needed)

(DPB-2) Description: *This house has cedar softwood decking installed. The recommended maintenance of this type of decking is annual cleaning and staining with transparent or semi-transparent deck stain. It is common to use decking paints when the decking is older and in the last phase of its useful life, however, painting is not recommended as this can trap moisture in the wood, facilitate wood decay and lead to higher maintenance costs when prepping peeling paint. Annual cleaning and sealing is important to prevent the deck from becoming slippery and unsafe, especially as pollen organic growth accumulate on the decking.*

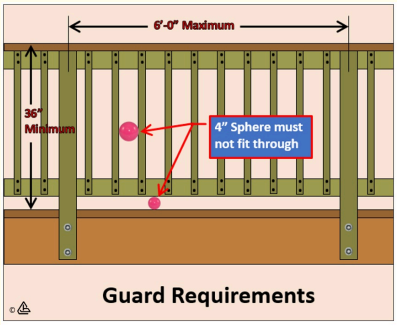
Posts, Beams and Footings: Inspected, Not Visible, Front deck not inspected underneath

(DPB-3) Recommended Maintenance: The wood decking on the front of the house needs to be re-stained to preserve the wood and discourage the growth of mildew and fungus that can result in a slippery walking surface. High traffic areas of decks and decks that are exposed to the sun most of the day will require more diligent maintenance than other decks. Keeping a deck clean of debris, especially between the decking boards, along with re-staining as needed, can help extend the life of the decking materials. I recommend hiring a licensed contractor to clean and re-stain the front deck.

- Front deck high traffic area needs cleaned and re-stained.

(DPB-5) Improve:
The openings for the front deck guardrails are larger than modern standard of 4-inches. Caution should be used, especially around small children as they can fit between this railing. Improving to modern standard is recommended.

- The guardrail openings are larger than the 4-inches recommended today. This can pose a safety hazard for small children.



Please note that the front deck framing inspection was limited - structural components were not visible to inspection because the deck is too close to grade and surrounded by trellis material.

Garage

Garage General

Garage Type: None Noted

Roof, Chimney and Gutters

Roof Materials

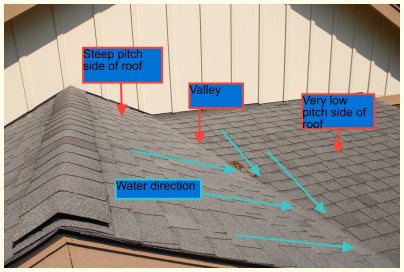
Method of Roof Inspection: Walked on roof
Roof Style: Gable
Flashings, Valleys and Penetrations: Woven Valleys Noted

Roof Covering Materials: Architectural grade composition shingle
Approximate Age of Roof Covering: 5-10 Years
Overlay Roof: No
Shingle Fastening Accessible For Inspection : No

> ***(RCG-2) Description:*** *Please note that when inspecting composition roof installations, I try and look under shingles to see how the shingles have been fastened. Proper fastening is critical for successful roof performance. Often the shingles are bonding so well, they cannot be lifted to inspect the fastening. In this case, I was unable to lift the shingles and see the fastening pattern - they are bonded well and I do not use a flat bar to pry them apart as part of a visual inspection unless there is a reason to start chasing visible leaks. While this limits my visual inspection, this is a good sign, as loose, un-bonded shingles can lead to wind damage and would be written up as a defect.*

(RCG-1) Improve: This roofing system has a woven valley detail. These can be more vulnerable to leaks over time than metal valleys. Most shingle manufacturers seem to allow this detail, especially with lighter weight shingles. It is usually not possible to identify the shingle manufacturer during a home inspection. Metal valley details are generally preferable, but woven valleys are typically only listed as a defect if signs of excessive ware or failure are noted during this visual inspection. This particular use of a woven valley is one of the least advisable situations. As the water runs towards the valley from the steep pitched side of the roof, there is virtually nothing to divert the water from trying to go under the shingles on the very low pitched side of the roof. Ideally there would be a metal flashing with a raised diverter section installed in the valley between the different sides of the roof. I recommend hiring a roofing contractor to evaluate and add a metal valley flashing.

- Direction of water runoff towards valley.
- Area of roof with woven valley.
- Examples of metal valley flashing and woven valley.



Direction of water runoff towards valley.

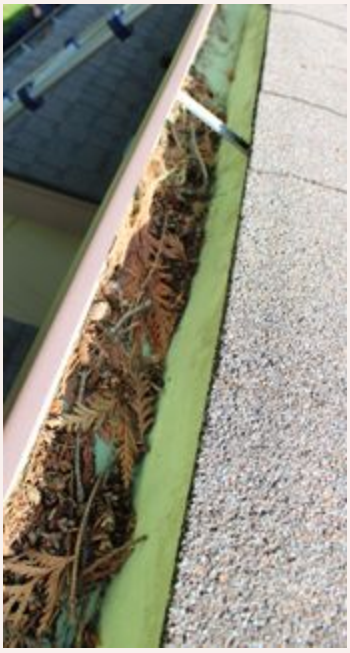
Examples of metal valley flashing and woven valley.

Gutters and Downspouts

Gutter and Downspout Materials: Aluminum

(RCG-3) Recommended Maintenance:
GUTTER CLEANING NEEDED
The gutters are clogged with organic debris and require cleaning to ensure proper control of roof runoff. Clean the gutters and ensure they are unobstructed, leak-free and properly sloped to drain. This is routine house maintenance; I would expect the need to clean gutters and downspouts regularly.

- Debris in gutter.

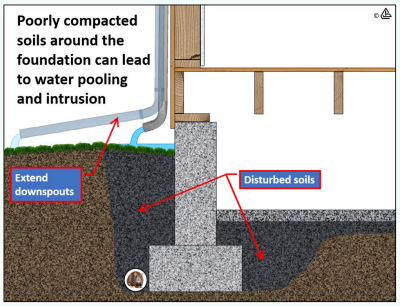


Debris in gutter.

(RCG-4) Monitor: One of the gutter downspouts is not connected to a drainage system and is just draining into the yard. This particular downspout is connected to a very short gutter that is capturing water off a very small independent section of the roof. I would not expect much water to be discharged from this downspout. It would be best if this downspout was connected to the same drainage system as the other downspouts. If that is not possible, I would recommend adding a downspout extension to avoid the potential of water pooling near the foundation during a heavy or prolonged rain event.

- Downspout draining into yard.
- Downspout extension.

Downspout draining into yard.



Downspout extension.

Fuel Storage and Distribution

General Comments

📌 **(FSD-1) Note:** No fuel sources, fuel storage devices or fuel burning appliances were found on site during our visual inspection.

Electric Service

Electric Service Permits Found

(ES-1) (no modifier): These images show electric permits found during inspection.

Electrical permit

Electric Service Voltage Tested

Service Voltage: 120/240, 120/240 - With Testing Note

(ES-2) Description:
The tested voltage at the electric panel today was 247 volts. Most residential construction is listed as 120/240 volts. Slight fluctuation is normal.

Electric Service

Service Entrance: Below Ground
Meter Base Amperage: 200

Electric Service Equipment

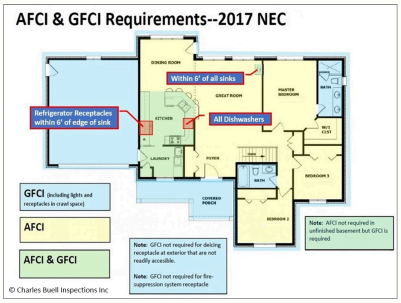
Service Entrance (SE) conductor Size: Copper, 2/0, 200 amps
Main Panel Amperage: 200 amps
Electric Service Amperage: 200 amps

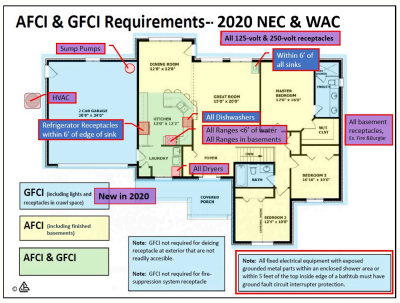
Main Electric Panel Location: Bedroom

Panel Manufacturer: Square D

📌 (ES-4) Note: MODERN AFCI PROTECTION IS A SAFETY IMPROVEMENT

AFCI (arc fault protection) is now required on all branch circuits supplying outlets or devices installed in residential dwelling unit kitchens, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, laundry areas, and similar rooms and areas. The goal of this protection is to reduce risks of electrical fires. Consult with a licensed electrician about improving circuit protection as desired. I would consider this improvement in the context of other electrical repairs or upgrades. ***Please note that if you add or replace receptacle outlets to the existing system, they should comply with modern AFCI standards.***





I list both of these illustrations to provide a sense of how electrical safety standards change through the years.

(ES-5) Description: *AFCI Temperature Note*

(ES-3) (no modifier):
This shows the main electrical panel location in the front bedroom.

- Main electrical panel in front bedroom.
- main electrical panel in front bedroom.

main electrical panel in front bedroom.

Sub Panel

Sub Panel: None Noted

Generator Equipment

None noted

Electrical Grounding System

UFER Ground Noted

(ES-7) Description:
A UFER ground connection was noted for the electrical grounding system. These are required and standard on newer construction houses. These grounds connect the electrical system to Rebar in the house foundation and make a reliable path to the earth for "earthing" or grounding the electrical system.

- *UFER ground under house.*

UFER ground under house.

(ES-6) Description: *Modern homes (2008 and newer) generally use UFER grounds (foundation rebar) and no*

longer need ground rods.

- *Older houses (1963 and earlier) used metal water pipes for grounding instead of ground rods and these older ground conductors may be disabled if the old metal pipes have been updated with plastic pipes.*
- *In between, (very roughly 1963-1990) ground rods have been used for grounding. Typically two ground rods are required (to try and achieve the recommended 25 ohms or less) unless there is also an older metal water piping system that can be grounded, then often 1 ground rod will suffice.*

Electric Distribution and Finish Wiring

Branch Wiring

Wire Material: Copper
Wiring Method: Non-metallic sheathed cable

Receptacles and Fixtures

Inspection Method: Representative Testing

(EDFW-1) Description: *A representative number of receptacles and switches were tested during inspection. Any defects found during inspection are noted in this report. Only visible and accessible receptacles and switches were tested during inspection and personal items and furnishings are not moved to access any receptacles or fixtures. Inspection/testing of the electrical system can be challenging. It should be anticipated that not all defects will be discovered and that some issues found may actually not be defects at all. Tools used to verify proper wiring and function can vary wildly in reliability/consistency. The kinds of tools that could be used to confidently analyze the system and its function cannot typically be done in the context of a Standard Home Inspection. I look for indications of issues, based on the age of the home, types of wiring systems used etc, as well as personal experience and by testing with a variety of common tools. Issues identified, will be further discussed with recommendations in the electrical section below.*

(EDFW-2) Repair:
There is an open electrical junction box under the house in the crawl space. I recommend hiring a licensed electrical contractor to change the box to a surface mount or exposed type, typically metal, and installing a cover plate.

- Open electrical junction box under house in crawl space.

Open electrical junction box under house in crawl space.

Ceiling Fans

Ceiling Fans: Present and Tested

(EDFW-3) (no modifier): The ceiling fans were tested and operating during the inspection.

Smoke and Carbon Monoxide Alarm Systems

Smoke Alarms Noted: ☑ In All Bedrooms

Smoke Alarms: Present

(EDFW-4) Description: *During the home inspection, I try and test a representative sample of the smoke alarms by using the test button on the alarms. This is NOT an accurate test of the sensor, just a test to see if the unit is powered. For reliability, fire marshals recommended updating smoke alarms every ten years and changing batteries bi-annually. The latest data indicate that we should be using photoelectric technology in our smoke alarms for improved fire detection and reducing problems with false alarms, which can lead to disabling of this critical safety system. Unfortunately, the alarms must be removed to determine if they are photo-electric or ionization types. It is surprisingly complex to accurately test a smoke alarm system and determine the reliability, age, and type of sensor technology used, especially as many homes can have half a dozen or more alarms throughout the house. A complete evaluation of smoke alarms is beyond the scope of this inspection. For optimal fire safety, I recommend taking control of these critical safety devices and learning about how to service and maintain your smoke alarm system to keep the building occupants safe. For more information, please read this link. For more information, please read this link.*

Heating, Cooling, Fireplaces and Ventilation

Heating Systems

Energy Source: Electricity
Heating Method: Electric wall heaters

> ***(HCFV-1) Description:*** *This building has electric wall heaters.* ***These can get very hot during operation. Be sure to keep all drapes, curtains, furniture, electric cords and other flammable items away from these heaters when they are on****. Also be careful with small children as electric heaters can present a burn hazard if left accessible. If you are concerned about the safety or efficiency of these heaters, consider upgrading the system.*
>
> - *Ceramic electric heaters are a bit safer and run at lower temperatures - see one made by Convect Air*

General Capacity of Electric Heaters: 750 watts / electric wall heater
Age: 2017
Last Service Record: None

> **(HCFV-2) Recommended Maintenance:**
> The electric wall heaters will require occasional cleaning - some of the heaters are showing signs of dust build-up. Best practices are to turn power off to the heater and use compressed air to clean the dust from the heating elements. The fan blades can be wiped or vacuumed as needed then restore power. Many manufacturers of these heaters recommend cleaning every six months to prevent a fire hazard. They also recommend keeping all electric cords, curtains and furniture at least three feet from the heater.

Typical dust in electric wall heater.

Vents and Flues

None noted

Air Filters

Filtration Systems: Re-usable - Ductless - Dirty

> **(HCFV-3) Monitor:**

The ductless heat pump indoor unit has a cleanable filter that should be routinely checked and cleaned. Keeping this filter clean will help the heat pump to run as efficiently as possible and help reduce the costs of heating and cooling.

Cooling Systems and Heat Pumps

Heat Pump Present

(HCFV-4) Description: *The following list is a minimum set of requirements to be expected of heat pump or air conditioning servicing. I provide these as a courtesy to show they types of check-ups that should be expected from a professional servicing.*

- *Check compressor efficiency*
- *Check refrigerant level*
- *Clean the condenser coil*
- *Change or clean air filters*
- *Inspect contactors and wiring*
- *Inspect drive-sheaves, pulleys and belts*
- *Check and adjust for proper air flow*
- *Clean the blower motor as needed*
- *Lubricate all motors and shaft bearings*
- *Check, calibrate and program the thermostats and be sure the thermostat has adequate batteries as needed*
- *Check unit smoke detector, clean filter if applicable*
- *Check safety disconnect, laser-temp -- check across contacts*

Manufacturer: Daikin
Data Plate:

(HCFV-6) Description:
This shows the data plate for the heat pump.

System Type: Air Source
Listed Nominal Capacity: 1 Ton
Energy Source: Electric
Age: 2017

(HCFV-5) Recommended Maintenance:
I recommend keeping the ductless heat pump system on a routine service schedule. These systems should be cleaned and serviced annually for efficient operation and to prolong the useful service life of this equipment. The average life of a heat pump is 15-20 years. This system was operating as intended during inspection.

- Ductless heat pump outdoor unit.

Ductless heat pump outdoor unit.

Heating and Cooling Distribution Systems

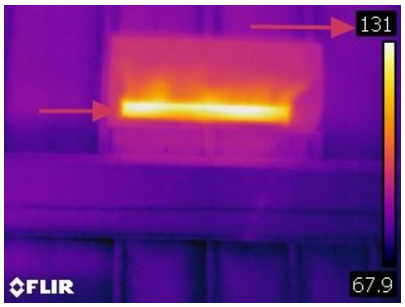
Heat Source in Each Room: Present

Distribution Method: Wall Mounted Forced Air Electric Heaters

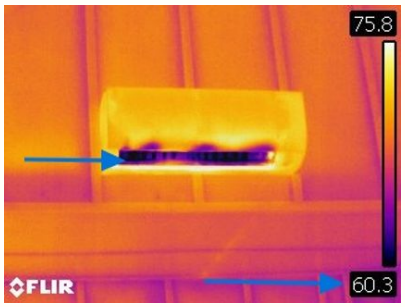
(HCFV-7) Note: Thermal images show the ductless heat pump system working in heating and cooling mode.

- Heat pump indoor unit.
- Thermal image showing indoor unit working in heating mode.
- Thermal image showing indoor unit working in cooling mode.

Heat pump indoor unit.



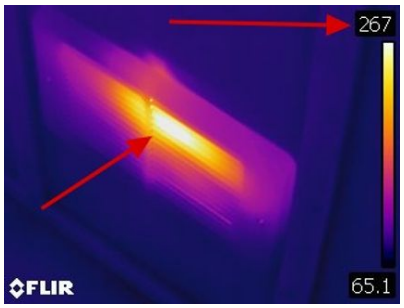
Thermal image showing indoor unit working in heating mode.



Thermal image showing indoor unit working in cooling mode.

(HCFV-8) Note: Thermal images showing the electric wall heaters working.

Electric wall heater.



Thermal image showing electric wall heater working.

Mechanical Ventilation Systems

Whole House Fans, Ventilation and HRVs: Laundry / House Fan Timer

Bath Fan Ducting: Ductwork not visible

(HCFV-9) Description:

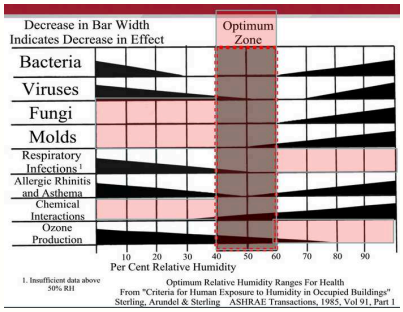
Determining proper ventilation to the exterior from kitchen, bath, and laundry fans can be tricky as exhaust fan ductwork is often concealed behind finishes and fan terminations can be all over the house from the roof to the foundation, presenting difficulties for systematically checking every fan termination. During inspection, every effort is made to verify proper terminations of fan vents to the exterior, but it is possible to miss something here that is latent or concealed.

Kitchen Fan Ducting: Ducted to exterior

📌 **(HCFV-10) Note:** This house has a timer for a whole house fan. Unfortunately, most home owners and renters do not fully understand how these timers are actually supposed to be used. These timers are designed to make a fan come on periodically to exhaust interior air, facilitate air changes and help keep the indoor relative humidity in check. As a general rule, keep relative humidity around 50% in cold weather to reduce chances for condensation. For more information about whole house fans and setting the timer see: this LINK.

- Whole house exhaust fan timer.
- This shows the optimum zone for indoor relative humidity is between 40-60%.

Whole house exhaust fan timer.



This shows the optimum zone for indoor relative humidity is between 40-60%.

Plumbing

Water Meter

Location of Water Meter Note

📌 **(P-1) Note:**
This shows the location of the water meter at the street side of the house.

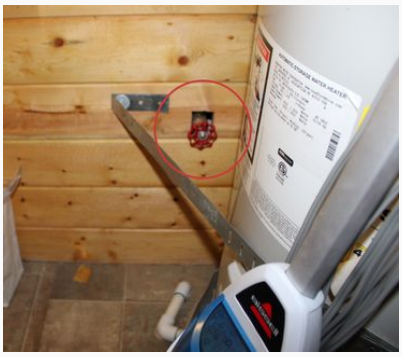
Water Service Supply

Pipe Material: Plastic
Water Supply: Public water
Water Pressure: Water Pressure Tested, 60 PSI

(P-2) Description:
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: Water Shut Off Location Noted, Below stairs, Beside the water heater

(P-3) Description:
This shows the location of the main water shut off located beside the water heater.
- *Main water shut off.*


Main water shut off.

Distribution Pipe

Pipe Insulation: Not visible
Supply Pipe Materials: PEX

(P-4) Description: *This building has PEX tubing used for supply piping. Crimp ring connections on PEX pipe have very specific installation guidelines and most of these connections will not be visible at the time of inspection (just like any other type of pipe fitting). It is beyond the scope of this inspection to evaluate a significant number of these connections.. Any leaking noted at fittings should result in more careful inspection of all of the plumbing system by a licensed plumber that is*

experienced in the installation of these types of connections

Waste Pipe and Discharge

Discharge Type: Public Sewer - Buyer
Waste and Vent Pipe Materials: ABS plastic, Not Sleeved Through Foundation
Location of Sewer Cleanout: Crawl Space, Side Yard

(P-6) Description:
This shows the location of the sewer cleanouts found during inspection:

- *Crawl space*
- *East side of building*

Sewer clean out under house.

(P-7) Description:
This shows the location of the sewer cleanout found during inspection - south side of building.

- *Clean out in side yard.*


Clean out in side yard.

(P-5) Repair:
The sewer line pipe has not been properly sleeved as it passes through the concrete foundation. Standards recommend a sleeve through the foundation wall and then sealing the pipe with spray foam as needed. Consult with a qualified general contractor to further evaluate and repair.

- Stains around this penetration indicate likely past leakage

Sewer line not sleeved through foundation.

Exterior Hose Bibs

Operating

(P-8) (no modifier): Hose bib front of house.

- Hose bib rear of house.

Hose bib front of house.

Hose bib rear of house.

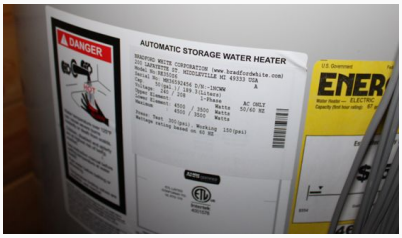
Water Heaters

Water Heater

System Type: Tank

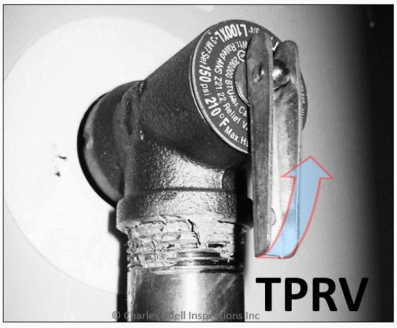
Manufacturer: Bradford-White
Data Plate: Shown Here

(WH-1) Description:
This shows the data plate for this water heater.



Size: 50 gal
Age: Bradford White (M = 2015)
Energy Source: Electricity
Straps : Present
Drain Pan: Present with drain
Expansion Tank: Present
Relief Valve: Present - Not Tested

(WH-2) Description:
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.



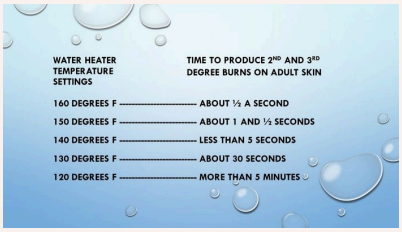
The arrow shows how a TPRV can be tested

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.

Water Temperature

Water Temperature Measured During Inspection: 128 Degrees F

(WH-3) Recommended Maintenance:
Testing of the plumbing system today, the water tested as too hot - 128 degrees F. This is a scald hazard. To prevent scalding, standards recommend indoor hot water temperatures do not exceed 120 degrees. There is some evidence that hot water temperatures should be greater than 130 degrees to prevent Legionnaires' disease from developing in the water heater. If this is a concern, you can heat the water in the tank to 140 degrees F and have a tempering valve installed at the hot water tank. Have this further evaluated and repaired by a licensed plumber, or simply turn down the temperature as desired to eliminate a scald hazard. Please note that during the inspection, it is difficult to accurately test the water temperature as it can vary between fixtures. Testing is done in multiple locations during the inspection, and a median temperature is taken.



Interior

Floors and Floor Materials

Floor Materials: Plastic laminate
Floor Settlement: None noted

Walls, Ceilings, Trim, Hallways and Closets

Wall and Ceiling Materials: Wood paneling, Wood

Wall Insulation and Air Bypass

Wall Insulation: Not Visible

Stairs and Railings

Standard

Interior Doors

Interior Doors: Hollow Core, Glass in Doors

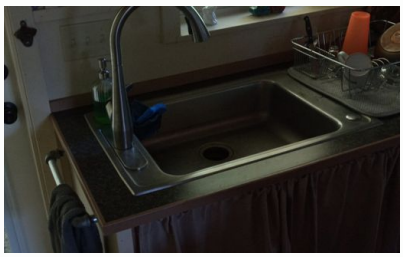
Windows

Window Glazing: Double pane
Interior Window Frame: Vinyl
Window Styles: Single hung, Sliding

Kitchen

Sinks and Faucets

Tested



Cabinets and Countertops

Countertop Material: Plastic laminate
Cabinet Material: Wood

Disposers

Disposer: Operated

(K-2) Repair:
I could not determine if the garbage disposal has a required ground wire. There appears to be only two wires coming from the garbage disposal to the receptacle under the sink. I recommend having a licensed electrician evaluate this wiring.

Garbage disposal under kitchen sink.

Dishwasher

Dishwasher: None Noted - No Plumbing and No Location for One

(K-3) Note:

There is no dishwasher for the kitchen and no space in which to install a dishwasher. If you wish to have a dishwasher here you will need to have one installed including provisions for electricity, drain lines and water supply.

Ventilation Method

Fan Ducted to Exterior

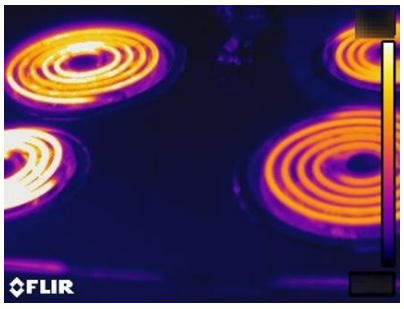
Ranges, Ovens and Cooktops

Range/ Oven /Cook-tops: Electric, No Anti-Tip

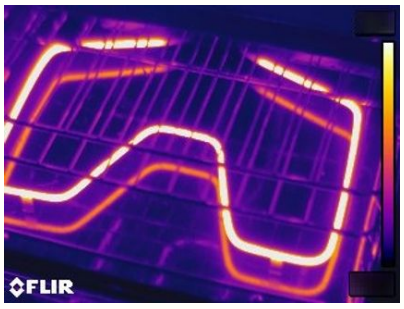
(K-4) Repair:
An anti-tip device is needed to prevent this range from tipping during operation of the oven door. This is a small clip that secured the back adjustable feet of the range to the floor.

(K-5) Note: The oven and cooktop were tested during the 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. These thermal images show the heating elements functioning.

- Stove top elements heating.
- Oven elements heating.



Stove top elements heating.



Oven elements heating.

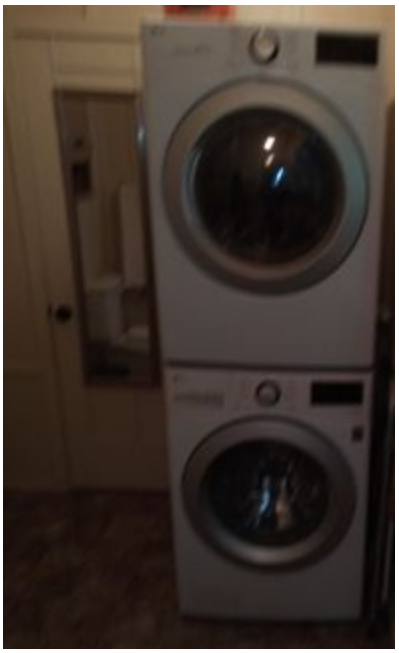
Refrigerators

Refrigerator: Operating

Laundry Facilities

Laundry Photos

(LF-1) (no modifier):



Washer

Tested

(LF-3) Description: *During inspection, I try and run the clothes washing machine. This is mostly so that I can push water down the drain to test the waste piping system. Running the clothes washer during an inspection is not a reliable test of the appliance. I am not actually doing a load of laundry, so please note the limitations of this test.*

(LF-2) Improve:

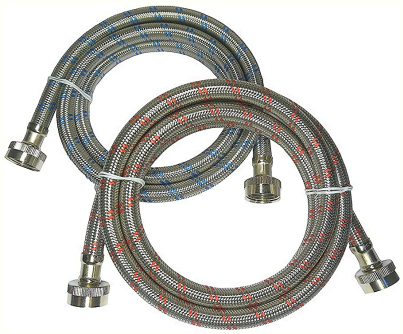
MOISTURE ALARM RECOMMENDED

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.

(LF-4) Note: Older style rubber hoses are being used to supply hot and cold water to the washing machine. Over time rubber hoses can deteriorate and leak or rupture. I recommend upgrading to a much more durable braided stainless steel hose.

- Rubber hoses.
- Braided steel hoses.

I would consider updating these rubber hoses to braided steel.



Braided steel hoses.

Dryer

Tested

(LF-5) Description: *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.

Power Source: Electric
Exhaust Duct: Ducted to Exterior, Behind Dryer (Foil / Mylar Transition Duct)

(LF-6) Repair: Foil or Mylar transition duct was noted in use to connect the dryer to the rigid vent. This product is generally UL listed for use with a dryer, however, most dryer manufacturers do not recommend it as it has proven to be unreliable and a potential fire hazard. A corrugated metal flex duct is recommended. Repair as needed.

(LF-7) Recommended Maintenance:
The dryer exhaust ductwork is dirty and needs to be cleaned for improved safety. This is important, regular maintenance to eliminate a potential fire hazard.

(LF-8) Note: The electric receptacle to the dryer is three-prong or three -wire system. This is an older configuration. Modern electric dryers circuits require a four-wire system. These older three-wire circuits are still allowed, but be sure to tell your appliance installer that you have a three prong outlet so the cord can be swapped out and the appliance appropriately bonded.

Laundry Ventilation

Type: Laundry fan

Family Bathroom

Sinks and Cabinets

Tested

(FB-1) Monitor: The plumbing fixtures in the family bathroom are installed in a non standard way, but do appear to be functional and operating as intended. It is worth noting that typical

industry standards for installing plumbing fixtures are established to not only ensure functional operation but to help prevent potential damage to the fixtures and drains during normal usage that could allow water or sewage to leak into the house. Due to the extended exposed piping used, and how the extended piping appears to be supporting the fixtures, I recommend diligent monitoring of the sink plumbing fixtures as well as the extended waste lines under the sinks for any signs of leakage and have any suspected leaks evaluated and repaired by a licensed plumber right away.

Waste line for bathroom sink.

Bathroom sink

Toilet

Tested

(FB-2) Repair: The toilet in the family bath has not been caulked to the floor. Caulking the toilet to the floor is recommended and even required in some jurisdictions, though opinions on this can vary. I prefer caulking the toilet to the floor, but leaving a gap on the back of the toilet that remains un-caulked so if the toilet leaks, water has an escape route. One of the risks of not caulking the toilet to the floor is that the toilet can become loose. Repair as recommended by a licensed plumber.

Bathtub / Shower

Tested

(FB-3) Repair:
Caulking between the bathtub and the floor in the family bathroom needs repair to prevent water from damaging the floor. I recommend removing any existing caulking, thoroughly cleaning and drying the area between the bath tub and the floor, and installing a mildew resistant caulking.

- Caulking between bath tub and floor

Caulking between bath tub and floor

Bathroom Ventilation

Type: Fan and window

(FB-4) Repair: There is an exhaust fan and timer installed in the family bathroom. This serves as a whole house fan for the house and should be set to auto so that it will run periodically throughout the day based on the adjustable timer settings. To turn the exhaust fan on when using the bathroom, the timer has to be manually switched to on, and then later manually switched back to auto. This is not a reliable way to insure the whole house fan is being consistently used as intended. To solve the problem and make the exhaust fan work in both situations I recommend having a licensed electrician install a timer that can be programmed to operate the exhaust fan as a whole house fan periodically throughout the day, and can be temporarily over-ridden to run while the bathroom is being used with the push of a button. After a set amount of time, the over-ride is cancelled, and the exhaust fan continues to run as a whole house fan.
**See note HCFV-6 under Mechanical Ventilation for more information on whole house fans.*

- Whole house fan timer.
- Example of whole house timer with over-ride function.

Whole house fan timer.

Example of whole house timer with over-ride function.

General Bath Condition

Standard

Attic

Attic Access

Viewed at access, Vaulted Ceiling

📌 **(A-2) Note:** 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.

(A-1) (no modifier):
Attic access hatch above back deck.

- Attic access hatch above back deck.

Attic access hatch above back deck.

Roof Framing and Sheathing

Rafters: Truss
Sheathing: OSB

Attic Insulation

Insulation Type: Fiberglass, No access - vaulted ceiling
Approximate Insulation R-Value on Attic Floor: 49

(A-3) Note: There was no way to perform a complete visual inspection of attic insulation levels today as parts of the ceiling here are vaulted ceiling. This limited the inspection.

Attic and Roof Cavity Ventilation

Attic Ventilation Method: Ridge vents, Soffit vents, Roof jack vents

(A-4) Description: *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 over-simplifications 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

(A-5) Description: *Cobra Ridge Vent Install Guide - GAF*

Crawl Space

General Crawl Space

Crawl Space:

(CS-1) Description:
This shows the location of the crawl space access for below the building. EXTERIOR

- *Crawl space access at back of house.*

Crawl space access at back of house.

Crawl Space Access

Method of Inspection: Crawled

(CS-2) Description: *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.*

Crawl Space Access Hatch Location: Exterior access hatch

(CS-3) Repair: The crawl space access hatch does not look rodent proof. Rebuilding is recommended to eliminate a rodent entry point. A nice way to seal the opening is to build a frame of pressure treated wood that fits snugly into the opening in the foundation and then cover this with 1/4 wire mesh.

Vapor Barrier

Vapor Barrier Material: Plastic on earth

(CS-4) (no modifier):

- Plastic vapor barrier in crawl space.

Plastic vapor barrier in crawl space.

Crawl Space Ventilation

Ventilation Method: Exterior wall vents, Vents At Grade

(CS-5) Repair:

Some of the crawl space vents have been installed at grade. The risk here is water entry into the vents. I recommend correcting the grade so water cannot flow into the vents. Often, digging a small well around the vents can help.

- Crawl vent at grade.

Crawl vent at grade.

(CS-7) Repair:

The crawl space vents are currently blocked by insulation in places. This seems intentional and is often done in colder and dryer climate zones in the winter as a means of improving interior comfort. In this climate zone, keeping crawl space vents open all winter is critical for keeping a dry crawl space. Implement repairs as needed to ensure vents are unobstructed. Use cardboard baffles to hold insulation up away from the vents.

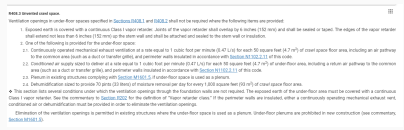
- Blocked vent.

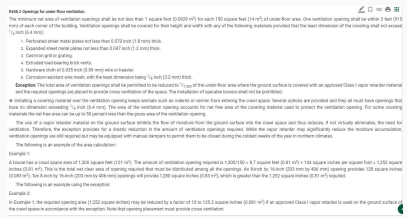
**Note: standards for ventilated crawl spaces prescribe 1 square foot of ventilation for every 150 square feet of crawl space or 1/1500 in*

Blocked vent.

combination with an approved class 1 vapor retarder material that covers all exposed soils in the crawl space. Vents should be located to provide adequate cross ventilation. Hire a licensed general contractor to further evaluate and repair.

(CS-6) Description: *IRC 2018 - Vented and Unvented Crawl Space*



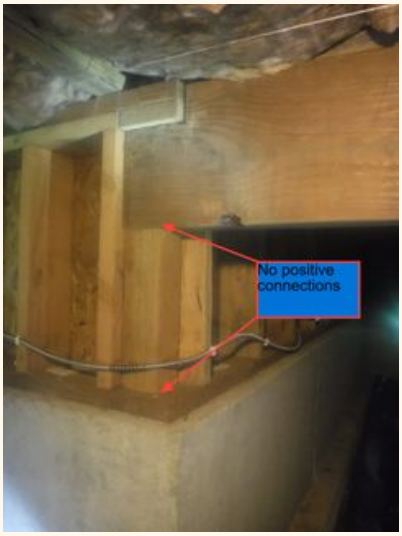


Posts and Footings

Standard

(CS-8) Repair:
No positive connections were noted connecting this post to the beam or the post to the footing under the house. Positive connections are recommended for improved seismic protection. Hire a general contractor to further evaluate and improve or repair.

- No positive connections between posts and footings.



No positive connections between posts and footings.

(CS-10) Repair: The beam above is not properly supported by the wall framing below. There should be framing directly under the end of the beam transferring the load of the beam directly to the foundation wall. This beam could move vertically downward if the wall framing cannot support the load causing damage to the structure above. This was noticed in multiple areas of the crawl space. I recommend having a structural engineer evaluate the beams, and how they are supported, to determine what steps should be taken to insure proper structural support.

- Beams not properly supported.
- Beams not properly supported.

Beams not properly supported.

Beams not properly supported.

(CS-11) Repair:

There are a couple nails missing in this bracket. I recommend installing these nails to help limit the possible movement of this bracket during a seismic event.

- Missing nails in bracket.

Missing nails in bracket.

(CS-9) Improve:

No positive connections were noted connecting the posts to the footings under the house. This is a standard practice in older construction, but makes the home more susceptible to seismic damage. Positive connections are recommended. Hire a general contractor to further evaluate and improve.

- No positive connections between posts and footings.

No positive connections between posts and footings.

Insulation

Insulation Type: Fiberglass
Approximate R-Value: R-30

Moisture Conditions

No water was visible or present at the time of inspection

📌 **(CS-12) Note:**
Gravel was used below the plastic vapor barrier in the crawl space. This is a nice practice - the gravel acts as a capillary break and can help prevent seasonal water from getting on top of the vapor barrier.

- Gravel installed under vapor barrier.

Gravel installed under vapor barrier.

Structure and Basement

Foundation

% of Foundation Not Visible: 0%
Evidence of Seismic Protection: Present

> 📄 ***(SB-1) Description:*** *Signs of seismic protection were noted during the inspection. This inspection is not a cohesive analysis of seismic engineering, but I do look for signs of seismic protection.*

Building Configuration: Crawl space
Foundation Description: Poured concrete

(SB-3) Repair:
The foundation bolts that connect the house sill plate to the foundation have loose nuts in several places. Tighten all loose nuts to ensure reliable connections.

- Loose nuts on foundation bolts.


Loose nuts on foundation bolts.

(SB-4) Repair:
The metal form ties used to support the concrete foundation forms during construction of the foundation are protruding from the concrete in places and could pose a safety hazard. I recommend pounding down our grinding these off to eliminate a safety hazard.

- Metal form ties.


Metal form ties.

(SB-5) Improve: In the crawl space there are walls framed to fill the areas between the concrete foundation and the floor framing above. I recommend insulating these walls to help maintain a more consistent temperature in the crawl space especially during the colder winter months.

- Uninsulated wall framing.


Uninsulated wall framing.


Uninsulated wall framing.


Uninsulated wall framing.

📌 **(SB-2) Note:**
Small cracks were noted in the foundation - south side. The purpose of the foundation is to connect the weight of the building to well-compacted soils below the house so that the house does not move or settle. Concrete cracking can indicate poorly compacted soils below the house which could require repair, but small cracks such as these can also be a sign of routine concrete shrinkage. ***It is not possible to determine or verify the cause of these cracks during a visual inspection***. The easiest way to prevent ongoing settlement in buildings is by controlling roof runoff and site drainage to promote dry soils around the foundation; wet soils do not bear weight well. This will also help to prevent crawl space moisture problems. In my experience, small cracks like these are common in concrete foundations.

- Small crack.

🔪

- No repair seems needed at this time. These look like typical cracks in foundations of this age.

Small crack.

Floor, Wall and Ceiling Framing

Wall Framing: Not visible
Wall Sheathing: OSB
Floor Framing: Wood I-Joists
Sub-Floor Material: OSB, Glimpsed through insulation
Ceiling Framing: Bottom cord of truss

Checking Out Procedure

Check Out List

Oven: ☑ Off
Lights: ☑ Off
Heating and Cooling: ☑ Restored to Pre-inspection temperatures
Appliances: ☑ Off / finishing cycle

Wind Mitigation Form

Wind Mitigation Photos

(WMF-1) (no modifier):

Roof Deck Attachment (#RDA)

Receipt -- The Complete Inspection Report

Report # 250127A
Inspection Date: 2023-05-25

Property inspected for:
John & Jane Doe
1234 Summer road
Someplace, Washington

Inspection Fee	$450.00
	$450.00
	PAID

Thank you for your business!

Wildwood Inspections, LLC
3669 h street rd
Blaine, Wa 98230
3606038508

Wildwood Inspections, LLC
3606038508

jaidentoo@gmail.com

Inspected by:
Jeff Hudson
Washington State Inspector License No. 24032951