Octopus Home Inspections, LLC

Your Property Inspection Report



7716 SW 26th Ave, Portland, OR 97219 Inspection prepared for: Don & Sherri New Real Estate Agent: -

Date of Inspection: 6/8/2016 Time: 0:00 PM Age of Home: 1966 Size: 2638 Weather: Sunny, Dry Order ID: 89

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This re-inspection report is intended for the person or persons listed on the front cover. This report in not meant as a full visual inspection report, but only covers what was noted on the Addendum to Real Estate Agreement for this home sale. Should this report be be given or sold to another party not listed above without the written permission from Octopus Home Inspections, LLC, the inspection company will consider the report invalid and not be held accountable.

We appreciate the opportunity to conduct this inspection for you! Please carefully read your entire Inspection Report. Call us after you have reviewed your report, so we can go over any questions you may have. Remember, when the inspection is completed and the report is delivered, we are still available to you for any questions you may have, throughout the entire closing process. Properties being inspected do not "Pass" or "Fail." - The following report is based on an inspection of the visible portion of the structure; inspection may be limited by vegetation and possessions. Depending upon the age of the property, some items like GFCI outlets may not be installed; this report will focus on safety and function, not current code. This report identifies specific non-code, non-cosmetic concerns that the inspector feels may need further investigation or repair. For your safety and liability purposes, we recommend that licensed contractors evaluate and repair any critical concerns and defects. Note that this report is a snapshot in time. We recommend that you or your representative carry out a final walk-through inspection immediately before closing to check the condition of the property, using this report as a guide.

Summary of Items of Concern

On this page you will find, in **RED**, a brief summary of any **CRITICAL** concerns of the inspection, as they relate to Safety and Function. Examples would be bare electrical wires, or active drain leaks. The complete list of items noted is found throughout the body of the report, including Normal Maintenance items. Be sure to read your entire report!

For your safety and liability, we recommend that you hire only licensed contractors when having any work done. If the living area has been remodeled or part of an addition, we recommend that you verify the permit and certificate of occupancy. This is important because our inspection does not tacitly approve, endorse, or guarantee the integrity of any work that was done without a permit, and latent defects could exist.

Depending upon your needs and those who will be on this property, items listed in the body of the report may also be a concern for you; be sure to read your Inspection Report in its entirety.

Note: If there are no comments in RED below, there were no CRITICAL system or safety concerns with this property at the time of inspection.

Drives, Walks and Grading		
Page 8 Item: 3	Decks and Steps	 UPPER DECK: Rotted deck treads observed. Recommend replacing. Make sure to leave a gap of 3/8 inch between boards to allow water to drip through and deter wood rot. Deck railing not secure. Recommend repair by a licensed contractor. Wood deterioration noted. Have repaired as necessary by a licensed professional. Keep sealed with paint or stain for longevity of use. EXTERIOR STEPS: Broken / missing step(s). Spindle/ baluster spacing exceeds the 4 inch spacing which is considered safe by today's child safety standards.



Wood rot observed on deck surface



Support beam does not appear to be fastened to the pier pad below.



Wood rot at ends of support framing



Step missing at exterior steps



Handrail wobbly and only installed on one side. Safety concern

Page 15 Item: 1

Roof Covering and Flashing Observations

- Significant amounts of organic debris evident. Recommend cleaning roof covering to discourage moss growth and moisture retention.
- One or more roof penetrations have been sealed with tar or mastic instead of conventional metal or plastic Itashings. Leaks may develop over time as the sealant deteriorates. The penetrations will need to be diligently monitored for leaks and periodically re-sealed. Replacement of the flashing is a better alternative and is recommended.



Large amount of organic debris on roof from adjacent trees to the south



Flashing at base of electric mast is cut and sealant has failed



Flashing boots around plumbing vents are broken

Electrical

Page 32 Item: 2

Service Entrance

• Electrical service mast on roof is leaning or bent. The service lines coming to the house from the adjacent pole is taught. The inspector believes there has been a shift of some sort taking any slack in the high voltage line away and the result is the metal mast coming up from the house to receive the wires is now bending in order to hold the wires. Highly recommend having the power company out to review the situation soon.



Electric service mast is bent

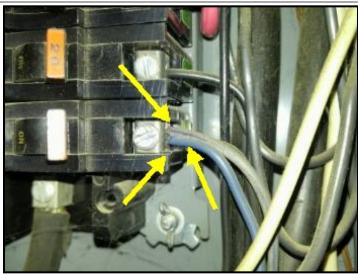


Electric service line has no slack.

Page 33 Item: 6

Branch Circuit Wiring

• Double tapping (double lugging) can create hot spots on breakers and neutral bars because they are not tightened to the correct torque--especially if two different size conductors are used. Because the hot [black] and neutral [white]wires are both current carrying conductors, the chance is then greater for potential hot spots. If the double tap or lug becomes loose, it begins to arc. As it arcs it builds up carbon. Carbon is then resistance and with more carbon buildup the more difficult it is for the conductor to make contact—thus increasing the current. The end result can be the breaker tripping because of the loose connection [current exceeding the rating of the breaker], or signs of overheating such as discolored wires, melted wires or fire. Recommend having a professional electrician evaluate further.



TRIPLE tapped breaker

Foundation

Page 40 Item: 2

Basement Floor Observations

• A notable crack was observed on the basement floor near the fireplace. The crack had been repaired in the past but has continued to grow. Recommend hiring a structural engineer to evaluate further in order to stop and repair cracking in floor.



Large crack in basement floor appears to be recent. Repair made previously.



Cement slab is separating from chimney bricks

Drives, Walks and Grading

1. Drives and Walks Observations

Materials:

- Block / Brick driveway
- No sidewalk.
- Concrete front entry walk.

Observations:

- Sunken areas on brick driveway.
- Front entry walk is slightly higher in elevation that the surface of the driveway. Recommend highlighting transition to avoid accidental tripping hazard.



Sunken areas on brick driveway. Vegetation growth observed

2. Front Porch and Steps Observations

Materials:

Poured Cement Porch

Observations:

• No concerns for system safety or function concerns noted at time of inspection.

3. Decks and Steps

Materials:

- Non-pressure treated lumber on deck surface.
- Wood rainings

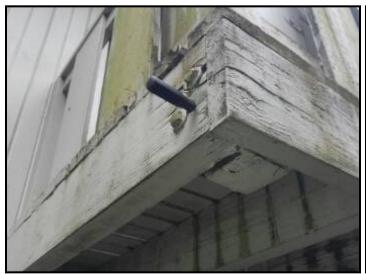
- UPPER DECK:
- Deck support does not appear to be mechanically fastened to the support post at the base where the wood post meets the cement pier pad. Recommend having this detail reviewed when the deck is rebuilt.
- •
- EXTERIOR STEPS:
- The steps to the south of the home are in compliance with a handrail on at least one side of the stairs, but the side that does not have a railing also has a longer drop off. Recommend adding an additional handrail on the south side of the exterior stairs for safety.
- UPPER DECK:
- Rotted deck treads observed. Recommend replacing. Make sure to leave a gap of 3/8 inch between boards to allow water to drip through and deter wood rot.
- Deck railing not secure. Recommend repair by a licensed contractor.
- Wood deterioration noted. Have repaired as necessary by a licensed professional. Keep sealed with paint or stain for longevity of use.
- .
- EXTERIOR STEPS:
- Broken / missing step(s).
- Spindle/ baluster spacing exceeds the 4 inch spacing which is considered safe by today's child safety standards.



Wood rot observed on deck surface



Railing is not secure



Wood rot at ends of support framing



Support beam does not appear to be fastened to the pier pad below.



Step missing at exterior steps



Handrail wobbly and only installed on one side.
Safety concern

4. Grading and Surface Drainage

- Grading around house is uneven. Portions of the land surrounding the home are sloped toward the house channeling water towards the foundation when it rains.
- House is built on a slope. Attention should be kept to assure water is draining around the foundation. A french drain may be a good addition to usher surface drainage around the foundation.





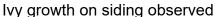
House is built on a slope.

Rear of lot slopes down and away

5. Vegetation Observations

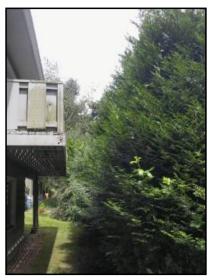
- Blackberry vines noted growing in yard. This is often considered to be an unwelcome and invasive species. Recommend removal of growth and roots.
- Overgrown Ivy noted growing in yard near house. This is often considered to be an unwelcome and invasive species. Recommend monitoring and not allowing to grow on structure itself.
- Tree limbs within 10 feet of roof should be trimmed away to provide air and sunlight to roof, while minimizing debris & dampness. Recommend trimming trees
- Clematis vines growing on structure. These vines are always looking for a strong hold. Make sure your siding and roof are not it. They will grow into the wall cavities and under roof shingles in order to hold on. This could be damaging to the structure.







Blackberries growing in yard



Rear tree growth is very close to house and wood deck.



Clematis growing on house and into gutters

Exterior

1. Siding Observations

Materials:

- Board and batten siding over wood frame construction.
- Lap wood siding, wood frame construction.
- T-111 wood sheeting siding over wood frame construction.
- Tongue and groove wood siding over wood frame construction.

Observations:

- Warped siding present in some areas; recommend repair or replacement as necessary.
- Rot or potential rot observed on exterior siding. Recommend having affected areas removed and replaced, caulked and painted to match the rest of the siding.
 NOTE: Peeling paint is often caused by poor preparation of the surface prior to painting. Cracking
- NOTE: Peeling paint is often caused by poor preparation of the surface prior to painting. Cracking
 may be caused by old age, and the expansion and contraction of the wood. Blistering could be
 caused by moisture.

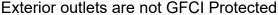


Siding paint peeling above window and door frames

2. Exterior Electrical and Lighting

- GFCI trip test failed.
- Exterior lights operate using either a motion or ambient light trigger and could not be tested at time of inspection. Ask seller to demonstrate operation at final walkthrough.
- Service mast is bent. Contact the local electrical provider for repair or replacement.







Some exterior lighting is on a sensor and could not be verified for operation

3. Exterior Door Operation

Materials:

- Solid wood front door.
- Aluminum framed rear sliding door. The metal framing material for this door is highly conductive and creates an area of energy loss. Recommend upgrading.
- Solid wood garage entry door.
- · Hollow core wood exterior basement door. This is an interior door and should be replaced for security and energy efficiency purposes.

 • Aluminum framed screen door
- · Aluminum framed storm door

- Sliding Screen door torn. Recommend having it repaired.
- Basement doors are interior Hollow core doors. Recommend having them upgraded to steel doors with a foam core for security and energy efficiency.
- All exterior doors operated correctly at time of inspection.



Sliding door screen is broken

4. Window/Door Frames and Trim

Observations:

• Exterior window and door frames and trim components appeared in satisfactory condition at time of inspection.

5. Exterior Hose Bibs and Spigots

Type:

Standard gate valve hose bibs

- Numerous exterior faucets were turned off at interior shut-offs. Inspector did not operate interior shut off valve in case the valve was closed for a leaking pipe, joint or faucet. Ask seller to demonstrate at final walk through.
- Exterior hose bibs were winterized at time of inspection. Inspector did not operate.



Exterior house bibs are shut off from interior at rear of house

Roof

1. Roof Covering and Flashing Observations

Materials:

- Gable roof. They have two slopes and the ridge extends the length of the home. The lower, level edges of the roof are called the "eaves," and the sloped edges are called the "gables" or "rakes." (We use both terms).
- Architectural composition shingles (30 year life expectancy from time of installation)

- Walked roof for inspection.
- Moss on roof. This can lead to the premature failure of the roof and subsequent leaks. Recommend treating moss during its growing season (wet months) with a moss killer.
- Worn shingles observed. This needs to be further reviewed by a licensed roofer.
- Flashings are rusted. Recommend replacement
- Significant amounts of organic debris evident. Recommend cleaning roof covering to discourage moss growth and moisture retention.
- One or more roof penetrations have been sealed with tar or mastic instead of conventional metal or plastic flashings. Leaks may develop over time as the sealant deteriorates. The penetrations will need to be diligently monitored for leaks and periodically re-sealed. Replacement of the flashing is a better alternative and is recommended.



Heavy moss growth on roof



Large amount of organic debris on roof from adjacent trees to the south



Flashing around plumbing vents is rusted



Flashing at base of electric mast is cut and sealant has failed



Flashing boots around plumbing vents are broken

2. Roof Drainage Observations

Materials:

Aluminum Gutters

- Down spouts appear to be attached to underground piping. Termination of these pipes is unknown.
- · Leaf guard installed on gutters.
- At least one downspout discharge above grade. Splash blocks or extentions should be installed to help move the roof's watershed away from the foundation.



Downspout terminates at base of foundation



Most downspouts are attached to underground piping.

3. Chimney Observtions

Descriptions:

- Masonry -- for wood burning fireplace
 Masonry -- used for gas appliance exhaust purposes. No chimney liner installed. Recommend installing chimney liner to elongate life of bricks and mortar.

- · No Spark Arrestor installed on chimney. This is a potential fire hazard. Recommend having a spark arrestor installed on chimney
- Cement chimney cap cracked or broken. Recommend repair or replacement to prevent premature weathering.
- Moss growth observed on chimney. Recommend clearing to avoid further moisture damage to brick and mortar.
- Step cracking observed through mortar around bricks. recommend having a specialist inspect further for potential repairs.
- Chimney Mortar shows sign of deterioration. Recommend having repaired as necessary.
- Bricks showing signs of wear. Appear to be spalling due to freeze and thaw cycles in the colder months. Recommend further inspection and repair by a licensed professional.



Spark arrestors missing



Mortar is cracked and broken around bricks.



Bricks have spalling damage from freeze thaw cycles



Chimney cap cracked and worn away at edges

4. Attic Ventilation Observations

Materials:

• Upper attic ventilation installed

Observations:

• Attic ventilation is low with reference to the square footage of the attic space below. Recommend increasing attic ventilation on both the upper and lower portions of the roof.



Upper attic ventilation installed

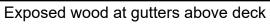
5. Fascia, Soffit and Eves

Materials:

Wood Fascia



Don & Sherri New





Roof decking is soft at edges under overhang

Kitchen

1. Surface Observations

Materials:

- Veneer over wood countertop
- Tiled backsplash

Observations:

• No concerns for function noted at time of inspection.

2. Cabinetry Observations

Materials:

Stained wood cabinets

Observations:

• No concerns for system safety or function noted at time of inspection.

3. Kitchen Electrical

Observations:

• GFCI outlets not installed near kitchen sink. Although this configuration is correct for the era of house, it is recommended that GFCI outlets(s) be installed within 6 feet of a water source. Recommend contacting an electrician to install.

4. Kitchen Plumbing

Observations:

- · Kitchen has a Stainless steel surface mounted sink
- Operated normally at time of inspection.

5. Appliance Operations

Materials:

- Dishwasher Installed
- Exhaust fan installed over range
- Garbage disposal installed under sink
- Refrigerator present
- Range (Electric) & Oven (Electric) installed

- Range hood operational at time of inspection.
- Refrigerator and freezer power and cooling verified during time of inspection.
- Disposal was operational at time of inspection.
- Oven and range were fully operational at time of inspection.
- No concerns for system safety or function noted at time of inspection.

Bathrooms

1. Master Bath

Observations:

- No GFCI outlets visible, which is common for a home of this age. Consider having protective outlets installed.
- Sink drains slowly. Recommend clearing drain.
- Cracked tile(s) noted in shower. Could be a sign of moisture intrusion and swelling.
- Sink drain pipe is made of chrome dipped brass. It showing signs of corrosion and should be replaced soon. Recommend installing a longer lasting product such as black ABS or white PVQ.





Tiles detached in mater shower. Tile are loose to Corroded drain under master sink. Replace soon the touch

2. Bathroom (Hall)

- No GFCI outlets visible, which is common for a home of this age. Consider having protective outlets installed.
- Tub/Shower drains slowly. Recommend clearing drain.
- Tub/shower area needs caulk / grout.
- Tub floor junction needs caulk / grout.



Outlets above sinks are not GFCI protected



Black staining and breaks observed in bathtub caulking



Caulking broken at tub/floor connection

3. Bathroom (Guest)

Observations:
• Tub/shower area needs caulk / grout.



Crack in grout or caulking in basement shower.

Laundry Room

1. Appliance Operation

Materials:

- Washing Machine Present
- Electric clothes dryer present

Observations:

- Washing machine operated as designed using normal controls
- Clothes dryer operated as designed using normal controls
- Dryer vent pipe is clogged with lint. Recommend cleaning out for proper dryer function and energy savings.
- Dryer vent has a blocked exterior cover. Recommend clearing ivy vines for better exhaust and quicker drying time.



Ivy is blocking laundry vent. Entire vent pipe and termination cover is clogged with lint

2. Surfaces, Sinks and Plumbing Operation

Materials:

Utility Sink Installed

Observations:

No concerns for system safety or function noted at time of inspection.

Windows and Doors

1. Interior Doors

Descriptions:

- Hollow core wood doors
- Hollow core wood sliding closet doors.

Observations:

• All interior doors appeared functional at time of inspection.

2. Window Operation

- Not all windows checked for operation. Personal items blocked inspector from access.
- Exterior storm windows not operated.
- No concerns for window safety or function of windows that were operated noted at time of inspection.

Surfaces and Stairs

1. Ceilings

Materials:

Drywall

Observations:

- Unfinished drywall ceiling in basement.
- General condition of ceilings appeared satisfactory.



Drywall not finished in basement room

2. Walls

Materials:

Drywall

Observations:

· General condition of walls appeared satisfactory.

3. Floors

Materials:

- Carpeted floors
- Vinyl flooring

- Carpet worn. Recommend replacing.
- Carpet torn. Recommend replacement.
- Linoleum floor cracking in bathroom





Crack in linoleum floor in bathroom.

Carpet torn at front entrance.

4. Stairways

- Spindles at stairwell exceeds 4 inch spacing, which is considered safe by today's standards.
 Loose railing at top of stairs. Repair as needed.



Railing may not be secure enough.

Interior Electrical

1. Interior Electric

- GFCI outlets not installed near water receptacles. Although this configuration is area specific for the time when the house was constructed, todays standards recommend installing these type of outlets within 6 feet of a water fixture.
- Switch damaged in hall bathroom. Recommend replacement
- Junction Box Cover(s) missing. This is a potential shock or electrocution hazard. Recommend having a professional electrician make repairs
- Outlet cover(s) missing. Replacement necessary to avoid accidental contact with live wiring.
- Romex wiring should all be enclosed in conduit for protection from nicks or cuts which could be a source of shocks or even electrocution.
- Light fixture broken. Recommend replacement



GFCI outlets not installed near water fixtures



Light switch in hall bath is very loose.



from accidental contact.



Out cover missing and romex wire not protected Junction box cover missing. Light fixture hanging by wires.

Fireplaces and Stoves

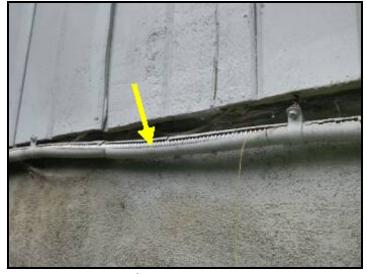
1. Fireplace and Stove Observations

Descriptions:

- Masonry wood burning fireplace with no flue liner
- Basemént
- •
- Prefabricated Direct Vent fireplace
- Family room

Observations:

• Natural gas line to upper gas fireplace insert has been degraded by the sun and the outer jacket has torn. This product was not rated for exterior use and should be evaluated by a licensed professional. Recommend either running new line on the interior or using black steel pipe on the exterior.



Gas line to fireplace is not rated for outdoor use. Protective coating has broken.

Health and Safety

1. Pest Damage

Observations:

• Evidence of insect activity and/or insect traps in house. Recommend evaluation by licensed pest control specialist/exterminator.



Potential pest tunnels at base of foundation. Soil is very hollow



Ants observed in various locations

Heating

1. Location

Located in basement



Oil furnace installed in basement

2. Manufacture Date

1965

3. Fuel Type

• Oil

4. Air Ducting Observations

Materials:

• Forced Air/ Blower

Observations:

• Rigid metal ducting used. Appears in serviceable condition.

5. Main Shutoff

• Near by Switch. Adjacent to heating unit on wall.

6. Thermostat

• Type: Analog

7. Vents/ Flues

• Single wall flue pipe with proper clearance from combustibles. Six inches from combustible materials is required due to heat radiation with this single wall exhaust material.

8. Filter Specifics

• Reusable filter. Standard one (1) inch.

Water Heater

1. Location

Located in basement



50 gallon electric water heater installed in basement in 2014

2. Size

- Reliance
- 50 +/- gallons

3. Age

• 2014

4. Condition

- Tank appears to be in satisfactory condition -- no concerns.
- Cover removed from water heater temperature control area. This cover protects the electrical connections inside and should be reattached immediately. It is located on top of the unit (see picture)

5. Fuel

• Electric water heater (Shutoff at panel box)

6. Supply Lines

Copper supply lines

7. Temperature Pressure Relief Valve

• **IPR valve** Inspected, but not operated. This valve should NOT be opened by hand, only in emergency situations by the unit itself.

8. Seismic Strapping

Seismic strapping installed around water heater

9. Water Shutoff Location

• Water supply to water heater shut off control handle located above water heater.

Electrical

1. Electrical Panel Location

· Main panel box located in garage



200 Amp Federal Pacific electric panel installed in garage

2. Service Entrance

- Overhead Service
- Electrical service mast on roof is leaning or bent. The service lines coming to the house from the adjacent pole is taught. The inspector believes there has been a shift of some sort taking any slack in the high voltage line away and the result is the metal mast coming up from the house to receive the wires is now bending in order to hold the wires. Highly recommend having the power company out to review the situation soon.



Electric service mast is bent



Electric service line has no slack.

3. Electrical Panel Manufacturer

- Federal Pacific Stab-Lok Panel. The problem with this brand is primarily with their Stab-Lok® range of panels and breakers. These featured stamped sheet metal or copper bus bars and breakers with thin copper tabs that were designed to lock into the bus. These have the unfortunate habit of falling out when the dead front is removed. Federal Pacific panels were subject to warnings issued by consumer protection groups, which include: 1. loose breakers;
- 2. non-tripping breakers; 3. arcing problems between the breaker and its bus. Recommend full evaluation of FPE panels by a licensed electrical contractor.

4. Electrical Panel Capacity

• 200 Amp Service

5. Main Disconnect Location

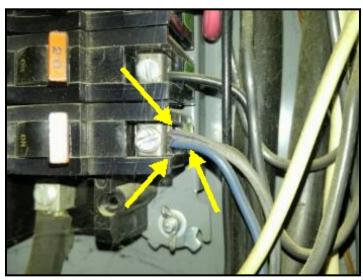
• Use top six(6) breakers to shut down electrical system to the entire house.



top 6 breakers shut down power to house

6. Branch Circuit Wiring

- Branch Circuit wiring: Aluminum
- Double tapping (double lugging) can create hot spots on breakers and neutral bars because they are not tightened to the correct torque--especially if two different size conductors are used. Because the hot [black] and neutral [white]wires are both current carrying conductors, the chance is then greater for potential hot spots. If the double tap or lug becomes loose, it begins to arc. As it arcs it builds up carbon. Carbon is then resistance and with more carbon buildup the more difficult it is for the conductor to make contact—thus increasing the current. The end result can be the breaker tripping because of the loose connection [current exceeding the rating of the breaker], or signs of overheating such as discolored wires, melted wires or fire. Recommend having a professional electrician evaluate further.



TRIPLE tapped breaker

Plumbing

1. Water Supply Source

Public municipal water supply

2. Main Water Shut Off Location

Located at curb

3. Main Water Piping Supply Into House

• Main water supply piping into house is copper

4. Supply Branch Piping

Copper

• Cold water pressure decreases significantly when more than one water fixture is used on the south side of the house. The inspector believes the water lines are ok, but he doesn't think the 1/2 inch copper pipe size is allowing for enough water to flow to more than one cold water fixture at a time. All plumbing branches and connections are hidden behind finished walls. Recommend having a plumber investigate further.

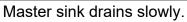


Noticable pressure loss when more than one cold water fixture is in use

5. Drains and Traps

- Slow, less than functional drainage observed in bathrooms. Repair as needed.
- A slow draining sink in a bathroom is normally due to a clogged trap. Disassembly and cleaning of the trap is the most effective correction. Plumber recommended.







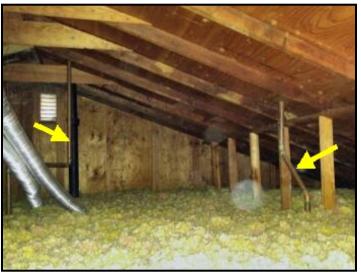
Bathtub drain cannot keep up with water supply

6. Drainage, Wastewater and Vent Piping

- Copper
- No leaks observed at the time of the inspection.



Waste plumbing is made of copper tubing.



Copper venting pipes for plumbing system

7. Waste System

• Public sewage disposal system

Unconditioned Areas

1. Attached Garage

Floor Materials:

Concrete

Observations:

- Personal items in garage block complete inspection of all floor, wall and ceiling areas.
- Minor crack(s) on garage floor. This is often a common occurrence, but should be monitored for expansion.
- The garage had moderate storage and personal items at the time of inspection.
- The attached garage does not have any GFCI outlets. Recommend hiring an electrician to upgrade.



Refrigerator not operating correctly in garage

2. Attic

- Attic partially traversed due to high insulation levels.
- Fiberglass Insulation
- Roof ventilation appears inadequate. Consult a roofing contractor for further evaluation.
- Exhaust fan duct appears to terminate in attic. Have duct routed to exterior to minimize moisture an possible development of mold.
- Stick framed roof construction. This construction style is built on site and utilizes a ridgeboard at the peak for the rafters to connect to.
- Plywood/OSB sheathing roof construction



Long shot of attic. Dry at time of inspection



Upper bathroom vents vent toward a roof vent. A postive connection would be preferable.

Foundation

1. Foundation Observations

- Poured Concrete
- Cracks or Holes 1/4" or less present in: foundation. Recommend sealing them to prevent water infiltration. Generally speaking, cracks that are less than 1/4" are not commonly regarded as being structurally significant.
- Efflorescence visible on concrete, suggesting moisture penetration. Recommend hiring a licensed water mitigation specialist to inspect further.
- Visible portions of foundation wall were dry at the time of the inspection.





Foundation cracks observed

Foundation crack repair



Horizontal crack in foundation was resupported. Repair appears to be done correctly

2. Basement Floor Observations

Materials:

Concrete slab

Observations:

• A notable crack was observed on the basement floor near the fireplace. The crack had been repaired in the past but has continued to grow. Recommend hiring a structural engineer to evaluate further in order to stop and repair cracking in floor.



Large crack in basement floor appears to be recent. Repair made previously.



Cement slab is separating from chimney bricks

Energy Efficiency

1. Attic Insulation Observations

Insulation Materials:

Fiberglass Insulation

Observations:

• Insulation averages about 6-8 inches in depth



Loose fill blown in fiberglass. Ventilation baffles not installed

2. Wall Insulation Observations

Materials:

• This house was constructed prior to 1978 when Oregon mandated wall insulation in all newly constructed homes.

Observations:

• Insulation found in exterior basement walls. Insulation is believed to have been installed in the rest of the home considering the age of the insulation observed in the basement.

3. Window Observations

Materials:

- Single pane wood windows
- Storm windows installed.

Observations:

All windows satisfactorily operational at time of inspection

4. Heating/ Cooling Ductwork Observations

Materials:

Rigid metal ductwork installed

Observations:

• All ductwork is within the boundary of the home. No insulation or leakage measures will need to be taken

Glossary

Term	Definition
ABS	Acronym for acrylonitrile butadiene styrene; rigid black plastic pipe used only for drain lines.
Double Tap	A double tap occurs when two conductors are connected under one screw inside a panelboard. Most circuit breakers do not support double tapping, although some manufacturers, such as like Cutler Hammer, make hardware specially designed for this purpose.
	Double tapping is a defect when it is used on incompatible devices. If the conductors come loose, they cause overheating and electrical arcing, and the risk of fire is also present. A double tap can be accommodated by installing a new circuit board compatible with double tapping. It is also possible to add another circuit breaker or install a tandem breaker to the existing breaker box.
Flashing	Components used to weatherproof or seal roof system edges at perimeters, penetrations, walls, expansion joints, valleys, drains and other places where the roof covering is interrupted or terminated.
GFCI	A special device that is intended for the protection of personnel by de-energizing a circuit, capable of opening the circuit when even a small amount of current is flowing through the grounding system.
PVC	Polyvinyl chloride, which is used in the manufacture of white plastic pipe typically used for water supply lines.
Spalling	To split or chip; break off into bits. With reference to cement, it would refer to water freezing and expanding when setting in between cracks in cement causing the cement to chip.
TPR Valve	The thermostat in a water heater shuts off the heating source when the set temperature is reached. If the thermostat fails, the water heater could have a continuous rise in temperature and pressure (from expansion of the water). The temperature and pressure could continue to rise until the pressure exceeds the pressure capacity of the tank (300 psi). If this should happen, the super-heated water would boil and expand with explosive force, and the tank would burst. The super-heated water turns to steam and turns the water heater into an unguided missile. To prevent these catastrophic failures, water heaters are required to be protected for both excess temperature and pressure. Usually, the means of protection is a combination temperature- and pressure-relief valve (variously abbreviated as T&P, TPV, TPR, etc.). Most of these devices are set to operate at a water temperature above 200° F and/or a pressure above 150 psi. Do not attempt to test the TPR valve yourself! Most water heating systems should be serviced once a year as a part of an annual preventive maintenance inspection by a professional heating and cooling contractor. From Plumbing: Water Heater TPR Valves