## NOTICE TO BUYER: SELLER-PROCURED INSPECTION REPORT

The following notice is given with respect to the Purchase and Sale Agreement dated $\qquad$ between $\qquad$ ("Buyer")


Seller has given or is giving Buyer the following Inspection Report(s) concerning the Property (check all that apply):

X Whole House Inspection
$\square$ Sewer Inspection
$\square$ Pest Inspection
$\square$ Other: $\qquad$
The Inspection Report(s) are intended to be a part of any Seller Disclosure Statement (NWMLS Form 17) that is provided in this transaction, whether or not the two documents are attached to each other. The Inspection Report(s) were procured by Seller and are provided for informational and disclosure purposes only. The Inspection Report(s) are not intended to constitute a warranty, either express or implied, about the condition of the Property. Buyer is advised to procure their own inspections from professional inspectors chosen by Buyer or hire the inspectors that prepared the Inspection Report(s). Buyer has the opportunity to inspect the Property to Buyer's satisfaction.
Seller DATE
Seller DATE

## Buyer's Acknowledgment of Receipt

The undersigned Buyer acknowledges receipt of the foregoing Notice and the above-referenced Inspection Report(s).
06.07.20

Saul and Courtney Bailey
13209 125 ${ }^{\text {th }}$ Ave NE.
Kirkland, WA. 98034

## Per the seller, as of June 7, 2020 the following items listed on the inspection summary have been corrected or additional comments are noted below:

7.1 M ain Report, General Information- The two heat pumps and their components are not 11 and 20 years old respectively as noted in the report. They were installed brand new in 2016 and 2017. Full receipts can be provided to confirm this. These units work perfectly and have an expected life of 20+ years when properly maintained.
2.1 Roof Water Drain System- The roof drain actually discharges into a drainage pipe under the ground surface and drains out at the street just next to the main storm drain. This is evident at the curb, where you'll see a large round PVC pipe. This work was completed about 3 years ago and a receipt to confirm can be provided.
6.7 Service Ground and Bonding- This has been corrected.
6.10 Wiring- Conduit has been re-attached and made weathertight.
13.9 Smoke Detectors- Both floors of the home are indeed protected with a combination CO2 and smoke detector. The upper floor has 3 units and all are hardwired.
3.3 Soffits and Overhangs- This has been repaired.
3.5 Paint- All undersides of the bottom of the siding will be painted prior to closing.
7.9 Heat Pumps- Both of the heat pumps and all components were recently serviced by Greenwood Heating appx. February of 2020. Invoice has been requested from Greenwood to provide proof of servicing. Systems are serviced on an annual maintenance contract.
10.13 Windows- Bathroom window tile was designed and built (this bathroom updated in 2018) at a slight angle moving water away from the window. Additionally, the area is well caulked and no indication of water intrusion is present.
10.20 Sink- This has been re-attached.

Any remaining items as noted in the inspection report are open to negotiation for repair prior to closing.
Thank you!

June 6, 2020

## Mr. \& Mrs. Saul \& Courtney Bailey 13209 125th Ave. NE <br> Kirkland, WA.

## Re: $\quad 13209$ 125th Ave. NE Kirkland, WA.

Dear Saul \& Courtney;
At your request, a visual inspection of the above referenced property was conducted on 06/05/2020. We have inspected the major structural components, plumbing, heating and electrical systems for signs of significant non-performance, excessive or unusual wear and general state of repair.

Clark Inspections inspectors, inspect all homes and buildings according to the stringent professional standards and code of ethics set forth by the American Society of Home Inspectors (ASHI). The ASHI standards are designed to identify and disclose to the client certain conditions of the major systems as these conditions exist at the time of the inspection. These standards are designed for a visual inspection of the readily accessible areas of the included system. A copy of these standards will be provided upon request or can be obtained by calling the ASHI automatic "Information-On-Demand" phone number at 1-800-743-2744

Home or building inspections performed under these standards should not be construed as a compliance inspection of any governmental or non-governmental codes or regulations. Inspections performed under these standards are essentially visual; are based on the experience and opinion of the inspector; and are not intended to be technically exhaustive. Inspections performed under these standards are not meant to be warranties nor guarantees of adequacy of performance of the structures, systems, or their component parts.

This inspection does not include an inspection for construction or other materials which might be hazardous to your health. It is possible that such materials may be present and not noted in this report.

This inspection does not include the testing or inspection of security systems, intercoms, communication systems, video, or sprinkler systems. These items are highly specialized and individualistic. Clark Inspections recommends that you have the seller and/or real estate agent/broker demonstrate the operation and serviceability of these systems to you prior to the closing of the sale.

Mechanical equipment is inspected for operability only and may contain undisclosed defects which may significantly impair it's usefulness.

Defects are examined and a determination is made on how a particular defect will affect interrelated building parts and whether immediate repairs are required.

Since all buildings have defects, it is important to know and understand what they are and how they affect the house and property. Some of the defects mentioned in this report may be quite typical, and found in other homes of comparable age and price. Some however, may not. We make our best attempt to distinguish this for you in both verbal and written reports.

## REPORT SUMMARY

The comments in this report are categorized. General information is given on the type of materials and construction methods. Specific information is given pertaining to the condition of a component and applicable repair and maintenance work that may be required.

Statements, representations, or conclusions offered by the inspector are the considered opinion of the inspector, but these statements, representations, or conclusions do not constitute an expressed or implied warranty of any kind. Neither the inspector nor Clark Inspections Inc. shall be liable for any direct, special, incidental, or consequential damages under an circumstances whatsoever, whether arising in tort, negligence, or contract, nor for any loss, claim, expense, or damage caused by or arising out of his or its inspection of a structure, nor will the inspector or Clark Inspections Inc. indemnify or hold others harmless for any loss, claim, expense, or damage arising out of his or its inspection of a structure.

## ACTION ITEMS, SIGNIFICANT DEFECTS AND/OR HEALTH AND SAFETY ISSUES

Non-operational (Action) items, safety or health issues, areas with limited viewing for proper inspection and components that do not serve their intended function (Significant Defects) are listed here. These items will likely require further evaluation and repair by licensed tradespeople.

## Please Read entire report

## ELECTRICAL SYSTEM

### 6.7 SERVICE GROUNDING AND BONDING

The service grounding electrode conductor is detached from the grounding rod. The service grounding electrode conductor should be reattached using a suitable clamp.


### 6.10 WIRING

The exterior conduit is not properly connected. This could damage the wires or cause a ground fault. The conduit connection should be made weathertight in accordance with industry standards.


### 6.12 RECEPTACLES

There are several loose receptacles throughout the home. This is a potential shock and a fire hazard. All loose receptacles should be repaired as necessary.

The cover plate is missing from a receptacle in the garden tool shed. This is a shock and fire hazard. The installation of a cover plate is recommended.


### 6.13 GFCI RECEPTACLES

One of the receptacles in the kitchen is unprotected. The installation of GFCI protection for all of the kitchen receptacles is recommended.

## KITCHEN

9.8 AIR GAP

The dishwasher drain lacks an air gap. The dishwasher will function without one, but there is a risk of contamination of the inside of the dishwasher by waste water. The installation of an air gap is recommended.


## INTERIOR

13.3 STAIRS

The run of the stairs is too short. This creates a potential trip hazard. Stair run (width of tread) should not be less than $9 "$ with 11 " being the ideal width. Consideration should be given to modifying the stairs. If this proves to be too impractical or expensive, then you should exercise extreme caution when using these stairs.


### 13.4 GUARD RAILINGS

There is no guardrail at the stairs. This is a safety hazard. The installation of a guardrail that conforms to present industry standards is recommended.

### 13.9 SMOKE DETECTORS

Smoke detectors are examined for location only. They are not tested. Smoke detector batteries should be replaced when you move in and every year thereafter. Once batteries have been replaced, the smoke detectors should be tested for proper operation.

FOR MAXIMUM PROTECTION: Use both Ionization and Photoelectric smoke alarms in every bedroom/hallway on every level of your home.

At least one carbon monoxide monitor should be installed for each floor. The best place to install the monitor is in an open area near the gas appliance.

## MAINTENANCE ITEMS AND/OR COMPONENTS NEARING THE END OF THEIR SERVICE LIFE

Any item that in the opinion of the inspector is nearing the end of its normal service life and/or conditions that need repair, maintenance and/or upgrades, but have not affected basic functions are listed herein.

## BUILDING SITE

### 2.1 ROOF WATER DRAIN SYSTEM

The downspout at the northeast corner of the building discharges on the ground adjacent to the foundation. Roof water discharging on the ground adjacent to the foundation wall and exterior wood door frames is one of the most common causes of water or moisture problems at ground floor occupancies. Clogged downspouts and scuppers also frequently cause or exacerbate moisture or water entry problems. Consideration should be given to diverting water away from the exterior walls, doors and foundation system. Consult with a drain systems specialist for additional information and cost estimates.

## BUILDING EXTERIOR

### 3.3 SOFFITS AND OVERHANGS

There is a damaged vent screen on the back of the house. The vent screen should be repaired to prevent insect, bird and rodent entry.


### 3.5 PAINT

The bottom edge of the lower sections of siding on the exterior are unprotected. Paint protects the siding from moisture absorption and its propensity to hold paint. Painting of the exposed edges is recommended.

## ATTIC

### 5.2 VENTILATION

Wind baffles are compromised in some areas of the attic and insulation has bypassed at several locations. Clearing away the insulation from the vent block openings and the proper placement of wind baffles in front of all soffit vents is recommended.


### 5.3 MECHANICAL VENTILATION SYSTEMS

Flexible plastic duct is used to direct air from the vent fan to the exterior. This type of material is unreliable. Replacing the plastic duct with 4 " smooth-wall sheet metal duct is recommended.


## AIR CONDITIONER/ HEAT PUMP

### 7.9 GENERAL COMMENTS

The heat pump split system responded to the thermostats call for cooling/heating and all major components were functional. This type of heat pump system should be serviced annually. Having the split system serviced before the start of the next cooling season is recommended.

## WATER HEATER

8.6 EXPANSION TANK

The expansion tank is not adequately secured to the wall. This could result in damage to the water pipe and leakage during an earth quake. A seismic restraint should be installed to secure the expansion tank.


## BATHROOMS

HALLWAY BATHROOM
10.10 COUNTERTOP

The backsplash is not caulked. Cracking of the grout allows water to enter the gap between the back splash and counter and is difficult to clean. Caulking should be installed at this location.

### 10.13 WINDOWS

The window in the bathtub wall surround is vulnerable to water intrusion. It is essential the window sill be kept sealed. The installation of a shower curtain over the window will also help reduce water intrusion problems.

UPPER FLOOR HALLWAY BATHROOM
10.20 SINK

The left sink drain stop is not operational. It should be repaired or replaced.

## LAUNDRY ROOM

11.1 APPLIANCES

Upgrading the washer connections to high pressure (steel braided) lines is recommended.


## PLUMBING SYSTEM

12.5 WATER PRESSURE

The water pressure at 100 PSI is excessive. The normal range is $30-80$ PSI. High water pressure can result in leaking valves, detached supply tubes, water hammer and is hard on solenoid valves. Consideration should be given to the installation of a pressure reduction valve.

## INTERIOR

13.6 DOORS

Some of the doors are missing their door stops. This condition will lead to damage of the wall surfaces. Door stops should be installed where necessary.

Several of these items will likely require further evaluation and repair by licensed tradespeople. Other minor items are also noted in the report and could be mentioned but none of them affect the habitability of the house.

Thank you for selecting our firm to do your home inspection. If you have any questions regarding the inspection report or the home, please feel free to call us.

Sincerely,

Terry Clark
206-660-9200
Clark Inspections Inc.

# Confidential Inspection Report 

## 13209 125th Ave. NE <br> Kirkland, WA 98034

June 5, 2020

## Prepared for: Saul \& Courtney Bailey

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

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6/6/2020

## Mr. \& Mrs. Saul \& Courtney Bailey 13209 125th Ave. NE Kirkland,WA

Dear Saul \& Courtney,

Thank you for inviting to inspect for you. We appreciate having the opportunity to perform this home inspection and are happy to help with all of your inspection needs. Enclosed is our report for the property located at;

## 13209 125th Ave. NE

We have inspected the major structural components, plumbing, heating, and electrical systems for signs of significant non-performance, excessive or unusual wear and general state of repair.

This inspection report is designed to be easy to understand. Please take time to review it carefully. If you have any questions regarding this inspection, or receive information from another building inspection professional, contractor, or tradesperson, that is in conflict with this report, or any major defect in your home or building that was not described in your verbal or written reports, please call our office immediately. We are happy to answer any questions you may have.

Thank you for the opportunity to be of service.
Sincerely,

## Terry Clark

## GENERAL INFORMATION

CLIENT \& SITE INFORMATION:

### 1.1 DATE OF INSPECTION:

6/5/2020.

### 1.2 INSPECTOR'S NAME:

Terry Clark.

### 1.3 CLIENT NAME:

Mr. \& Mrs. Saul \& Courtney Bailey.

### 1.4 MAILING ADDRESS:

13209 125th Ave. NE
Kirkland WA.

### 1.5 CLIENT E-MAIL ADDRESS

saulbailey22@gmail.com.

### 1.6 ADDRESS OF PROPERTY INSPECTED

13209 125th Ave. NE
Kirkland WA.


CLIMATIC CONDITIONS:
1.7 WEATHER:

Overcast.

### 1.8 APPROXIMATE OUTSIDE TEMPERATURE: <br> 59 degrees. <br> BUILDING CHARACTERISTICS:

### 1.9 MAIN ENTRY FACES:

East.

### 1.10 ESTIMATED AGE OF BUILDING:

The building is approximately 50 years old.

### 1.11 BUILDING TYPE:

Single family residence.

### 1.12 SPACE BELOW GRADE:

Crawlspace.
SCOPE, PURPOSE AND LIMITATIONS

### 1.13 RESIDENTIAL

The purpose of this inspection was to discover and evaluate major defects, deficiencies and deferred maintenance found in the main components of the house and in the building site immediately around the building inspected. A major defect or deficiency is a system or component that in the judgment of the inspector, would cost in excess of $\$ 500.00$ to repair or replace, is not performing it's intended function, or adversely affects the habitability of the dwelling or building. Defects are examined and a determination is made on how a particular defect will affect interrelated building parts and whether immediate repairs are required.

The major components in this report are categorized. General information is given on the type of materials and construction methods. Specific information is given pertaining to the condition of a component and applicable repair and maintenance work that may be required.

Since all buildings have defects, it is important to know and understand what they are and how they affect the house and property. Some of the defects mentioned in this report may be quite typical, and found in other homes of comparable age and price. Some, however, may not. We make our best attempt to distinguish this for you in both the verbal and written reports.

Clark Inspections inspectors inspect all homes and buildings according to the stringent professional standards and code of ethics set forth by the American Society of Home Inspectors (ASHI). The ASHI standards are designed to identify and disclose to the client certain conditions of the major systems as these conditions exist at the time of the inspection. These standards are designed for a visual inspection of the readily accessible areas of the included system. A copy of these standards will be provided upon request or can be obtained by calling the ASHI automatic "Information-On-Demand" phone number at 1-800-743-2744.

Home or building inspections performed under these standards should not be construed as a compliance inspection of any governmental or non-governmental codes or regulations. Inspections performed under these standards are essentially visual; are based on the experience and opinion of the inspector; and are not intended to be technically exhaustive. Inspections performed under these standards are not meant to be warranties nor guarantees of adequacy of performance of the structures, systems, or their component parts.

This inspection does not include an inspection for construction or other materials which might be hazardous to your health. It is possible that such materials may be present and not noted in this report.

This inspection does not include the testing or inspection of security systems, intercoms, communication systems, video, or sprinkler systems. These items are highly specialized and individualistic. Clark Inspections recommends that you have the seller and/or real estate agent/broker demonstrate the operation and serviceability of these systems to you prior to the closing of the sale.

Mechanical equipment is inspected for operability only and may contain undisclosed defects which may significantly impair it's usefulness.

Statements, representations, or conclusions offered by the inspector and/or by Clark Inspections are based solely upon a visual examination of the exposed areas of the structure inspected. Areas of the structure which are not exposed to the naked eye cannot be inspected, and no conclusions, representations, or statements offered by the inspector are intended to relate to areas not exposed to view. Hidden defects could have a significant impact on the visually based conclusions, statements, and representations made by the inspector.

Statements, representations, or conclusions offered by the inspector are the considered opinion of the inspector, but these statements, representations, or conclusions do not constitute an expressed or implied warranty of any kind. Neither the inspector nor Clark Inspections shall be liable for any direct, special, incidental, or consequential damages under any circumstances whatsoever, whether arising in tort, negligence, or contract, nor for any loss, claim, expense, or damage caused by or arising out of his or its inspection of a structure, nor will the inspector or Clark Inspections indemnify or hold others harmless for any loss, claim, expense, or damage arising out of his or its inspection of a structure.

If you receive information from another building inspection professional, contractor or trades person that is in conflict with ours, or if you discover a major defect in your home or building that was not described in your verbal or written reports, please call us immediately.
GENERAL COMMENTS

### 1.14 RECOMMENDATIONS

Certain building designs and/or building site topography may not qualify for earthquake insurance. Each company has its own underwriting policies. You should check with your insurance agent to determine whether or not your insurance company will write an earthquake policy on this property.

There may be information pertinent to this property which is a matter of public record. A search of public records is not within the scope of this inspection. We recommend you review all applicable public records that pertain to this property.

We make no representations as to the extent of presence of code violations, nor do we warrant the legal use of this building. This information can be obtained from the local building and/or zoning department.

### 1.15 BUILDING CODES

A code is a system of rules and procedures, the purpose of which is to provide minimum standards to safeguard life, health, and property by regulating certain aspects of building design, construction, use and maintenance. Local codes are usually based on model codes. A community may amend or adopt only parts of a model code. These local codes may not always be the latest version of the model code. Code enforcement is nearly always a local government responsibility and is handled in several ways depending on the type of code and community involved. All model codes and most local codes, grant the code compliance inspector or building official the right to interpret the code to suit special situations. This makes the building official the final authority, not the code book.

Answering the question "Does this meet code?" depends on the building's age, when remodels and upgrades were performed and which codes if any are enforced. This information may not be readily available to the home inspector. Private inspectors usually can determine if an item complies with applicable national model codes, if they know when the work was done and what code was applicable at that time. Local municipalities adopt and enforce national model codes at their discretion. Private building inspectors are typically not permitted to perform code compliance inspections. Code compliance inspections are typically performed by the local code enforcement official. Private building inspectors check to determine whether or not an item performs its intended function or is in need of repair.

Code enforcement usually is a local question and subject to the interpretation by the building code enforcement official. Most communities do not require an existing building to meet "code" prior to sale.

Specific code questions can be referred to the local building official. however, you must realize that if city inspectors check a building, they have the authority to require corrections of any violation. Private building inspectors act solely in an advisory capacity. Their objective reports are a tremendous benefit to anyone purchasing or selling real estate.

## BUILDING SITE

The evaluation of the building site and grounds includes grading, roof water and surface drainage systems, fencing, gates, walkways, curbs, driveways, patios, and retaining walls connected to or directly adjacent the structure. These items are visually examined for proper function, excessive or unusual wear and general state of repair. Components or portions of components may not be visible because of soil, vegetation, storage of personal effects and/or the nature of construction. In such cases these items are considered inaccessible and are not inspected. Lawn irrigation systems, fountains, and low voltage decorative garden lights are not included in this inspection.
The following components were inspected:

### 2.1 ROOF WATER DRAIN SYSTEM

The downspout at the northeast corner of the building discharges on the ground adjacent to the foundation. Roof water discharging on the ground adjacent to the foundation wall and exterior wood door frames is one of the most common causes of water or moisture problems at ground floor occupancies. Clogged downspouts and scuppers also frequently cause or exacerbate moisture or water entry problems. Consideration should be given to diverting water away from the exterior walls, doors and foundation system. Consult with a drain systems specialist for additional information and cost estimates.

A below grade roof water drain line is used to divert rain water discharged from the southeast downspout away from the foundation wall. Below grade drain system designs vary and it is virtually impossible to evaluate the integrity of the system definitively, due to the fact that it is entirely underground. There is a high incidence of defects in these systems, due to the fact that historically, very few municipalities inspected or enforced design or quality standards.

Defects in these drain systems are one of the most common causes of water or moisture problems in ground floor occupancies, basements and crawlspaces. Overflowing gutters and clogged downspouts and scuppers also frequently cause or exacerbate moisture or water entry problems in and around the building.

Occasionally, (once a year) flushing out the drain lines with a garden hose will reduce the build-up of debris and sludge which could impede drainage. This type of maintenance is most effective if the end of the drain line terminates in open air or in a storm sewer. If the drain line terminates in a dry well or leach field, then the washing of debris down the line is not advisable. The debris may eventually clog the perforations in the line which allow the water to escape. This could render the drain system inoperative. It is always best to prevent debris from entering at the inlet.

### 2.2 GRADING

The building site is well drained. The finish grade slopes away from the house. No evidence of recent building site flooding, drainage or soil stability problems was observed.

### 2.3 VEGETATION

Dense shrubbery and trees planted too close to the building can damage siding and the roof overhang and interfere with drainage and air movement, thus promoting fungus growth and accelerated deterioration of exterior finishes and wood. Trees and shrubs in contact with the building also provide carpenter ants with a route into walls or attics. Trees and shrubs should be trimmed back, where required. When landscaping, trees and shrubs should be planted back away from the building so that they have room to grow.

### 2.4 DRIVEWAY

The driveway and parking areas are paved with asphalt paving mix. The driveway and parking areas are in serviceable condition.

### 2.5 PATIO

The masonry patio is properly installed and is performing its intended function.

### 2.6 WALKWAY

The concrete walkway is properly installed and is performing its intended function.

### 2.7 FENCES AND GATES

The fences are properly installed and are performing their intended function. The gates are properly installed and are performing their intended function.

## BUILDING EXTERIOR

The evaluation of the building exterior includes the paint, stain, siding, windows, doors, flashing, trim, fascia, eaves, soffits, decks, porches balconies and railings. These items are visually examined for proper function, excessive or unusual wear and general state of repair. Components or portions of components may not be visible because of soil, vegetation, storage of personal effects and/or the nature of construction. In such cases these items are considered inaccessible and are not inspected.
The following components were inspected:

### 3.1 PRIMARY EXTERIOR WALL CLADDING

Hardie Plank cement fiber siding is used as an exterior wall cladding. It is manufactured from Portland Cement, ground sand, cellulose fiber, select additives and water. It is a durable material that will not burn, rot or dent. It holds paint tenaciously. It comes with a limited 50 year, transferable product warranty. It is a very popular material due to its cost and durability. The siding shows minor wear and deterioration typically caused when the exterior finish is not maintained. The deterioration is cosmetic and does not affect the function of the siding. No action is indicated.

### 3.2 PEST CONTROL

Good building practice requires that foundation walls or pier footings supporting wood frame construction, extend at least 8" above the finish grade with at least a 6 " clearance between the top of the soil and the bottom of the wood finish materials. Soil in direct contact with wood creates a hospitable environment for wood destroying organisms. These minimum standards should be maintained throughout the building exterior.

### 3.3 SOFFITS AND OVERHANGS

The building has adequate overhangs. Overhangs protect the exterior walls, windows, doors, siding and exterior finish from the ravages of direct rain fall. Buildings with adequately sized overhangs will generally require less frequent exterior maintenance and are less likely to suffer from moisture related problems on the exterior walls.

There is a damaged vent screen on the back of the house. The vent screen should be repaired to prevent insect, bird and rodent entry.


### 3.4 GUTTERS AND DOWNSPOUTS

Roof runoff is collected and channeled into the downspouts by aluminum gutters fastened to the rafter tails. The gutters and downspouts are properly installed and are performing their intended function. Gutters should be cleaned regularly to prevent clogging and overflow. The downspouts are properly installed and are functioning as intended.

### 3.5 PAINT

The exterior paint and caulking is in good condition and is functioning as intended. Paint protects the wood from cupping, checking, warping and rot.

The bottom edge of the lower sections of siding on the exterior are unprotected. Paint protects the siding from moisture absorption and its propensity to hold paint. Painting of the exposed edges is recommended.

### 3.6 DECK

The deck is installed close to the ground making it more vulnerable to deterioration. The proximity of the deck to the ground also prevented an inspection of the deck framing. The visible portions of the deck are in good condition.

### 3.7 STAIRS

The deck stairs are properly constructed and are performing their intended function.

### 3.8 PORCH

The front porch is in good condition.

### 3.9 EXTERIOR DOORS

The exterior doors are properly installed and are functioning as intended.

## ROOF

We evaluate the condition of the roof system by inspecting the roofing material, skylights, flashings, penetrations and roof water drainage system for damage and deterioration. If we observe conditions such as damage, deterioration, defects in materials or workmanship, these items will be noted in your report. We may also offer opinions concerning repair and replacement. Opinions stated herein concerning the condition of the roof and roof service life are based on the condition of the roof system at the time of the inspection. These opinions do not constitute a warranty that the roof is, or will remain, free of leaks. All roof systems require annual maintenance and occasional repair. Failure to perform routine roof maintenance will usually result in leaks and accelerated deterioration of the roofing material. Our estimate of the life expectancy of the roof is based on the assumption that the roof will be properly repaired and maintained during that period.
The following components were inspected:

### 4.1 GENERAL INFORMATION

The roofing material is asphalt composition shingles. The slope or pitch of the roof is medium in some areas and steep in others. Metal gutters are used to collect the roof water drainage. The roof is approximately 5 years old.

### 4.2 INSPECTION METHOD

The inspection of this roof was conducted from the lower roof surface. The inspector walked on the roof and made a visual inspection of the components listed below.

### 4.3 SKYLIGHTS

The skylight is properly installed and there was no evidence of leakage underneath.

### 4.4 CHIMNEYS

The visible portion of the metal, factory-built chimney is properly installed and in good condition.

### 4.5 FLASHINGS

Metal flashings are used to seal around chimneys, vents and roof to wall intersections. The flashings are properly installed and are performing their intended function.

### 4.6 GENERAL COMMENTS

The roofing material was properly installed and is in like new condition. With proper care and maintenance this roof should remain serviceable for up to 20 more years.

## ATTIC

The attic contains the roof framing and serves as a raceway for components of the plumbing, electrical and mechanical systems. There are often heating ducts, bathroom vent ducts, electrical wiring, chimneys and gas appliance vents in the attic. We examine the visible portions of the various systems and components for proper function, excessive or unusual wear, general state of repair, roof leakage, attic venting and misguided improvements. When low clearance and/or deep insulation prohibit walking in an unfinished attic, inspection will be performed from the access opening only.

The following components were inspected:

### 5.1 ACCESS

The attic access holes are located in the bedrooms. Due to limited clearances, the attic was inspected from the access holes only.

### 5.2 VENTILATION

There are two types of ventilation systems that are typically used in today's design and construction. Natural (passive) and Mechanical (pressure). Passive attic ventilation allows for moisture laden air, that migrates into the attic from the living space below to move out into the atmosphere without forming condensation on cool surfaces within the attic. This method used in design and construction is the most efficient and time tested.

The following are just a few of the conditions that may develop if soffit vents, roof and ridge vents are either missing, obstructed, inadequate, or simply not installed:

When water vapor comes in contact with cold surfaces of the roof sheathing and framing it condenses and remains as water. This water can drip down on the insulation and decrease it's effectiveness, will rot or deteriorate roof sheathing, cause mold and mildew growth, cause plaster or wall board to crack, paint to peel and will reduce the serviceable life of the roofing material.

Pressure induced attic ventilation ie: attic fans, solar fans or other systems that mitigate moisture amounts may be necessary due to certain conditions found within some buildings. However the pressure increase or decrease of the ambient air of the living space may affect the performance of and/or venting of gas appliances or fireplaces when in use creating conditions may be hazardous to your health. These are designed systems that should be installed by a qualified contractor.

The attic is adequately vented.
Wind baffles prevent wind from blowing through the soffit vents and pushing the insulation away from the vent opening. The absence of wind baffles will often result in the exposure of large areas of the ceiling to cold temperatures. Wind baffles also prevent insulation from blocking the vents.

Wind baffles are compromised in some areas of the attic and insulation has bypassed at several locations. Clearing away the insulation from the vent block openings and the proper placement of wind baffles in front of all soffit vents is recommended.


### 5.3 MECHANICAL VENTILATION SYSTEMS

Flexible plastic duct is used to direct air from the vent fan to the exterior. This type of material is unreliable. Replacing the plastic duct with 4" smooth-wall sheet metal duct is recommended.


### 5.4 PEST CONTROL

The first step in preventing rodents from entering the attic is to seal all possible entry points using wire mesh, caulking, wood, stainless steel wool, or aerosol foam. Careful work sealing cracks, holes and gaps over $1 / 4$ " in size will discourage activity.

## ELECTRICAL SYSTEM

An electrical system consists of the service, distribution, wiring and convenience outlets (switches, lights and receptacles). Our examination of the electrical system includes the exposed and accessible wiring, service panels, subpanels, overcurrent protection devices, light fixtures and all accessible wall receptacles. We look for adverse conditions such as improper installation of aluminum wiring, lack of grounding, overfusing, exposed wiring, open-air wire splices, reversed polarity and defective GFCIs. The hidden nature of the electrical wiring prevents inspection of every length of wire. Telephone, video, audio, security system and other low voltage wiring is not included in this inspection. We recommend you have the seller demonstrate the serviceability of these systems to you.
The following components were inspected:

### 6.1 ELECTRICAL SYSTEM SPECIFICATIONS

The voltage is $120 / 240$ single phase three wire service. The power is delivered to this building via an underground service lateral. The amperage rating of this service is 200 . Copper wire is used for all 120 volt circuits. Aluminum is used for some of the 240 volt circuits. Non-metallic sheathed cable (Romex) is the type of wiring used throughout the house. The grounding of the service is provided by two driven rods.

### 6.2 UNDERGROUND SERVICE LATERAL

The underground service lateral was not visible for inspection. However, there was $120 / 240$ volt power to the building which suggests that it is functioning as intended.

### 6.3 SERVICE PANEL LOCATION

The service panel is located in the living room.

### 6.4 MAIN DISCONNECT LOCATION

The main disconnect is an integral part of the service panel. The ampacity of the main disconnect is 200 amps .

### 6.5 SERVICE ENTRANCE CONDUCTORS/CABLES/RACEWAYS

The service entrance conductors are $2 / 0$ copper and have an ampacity of 200 amps . The service entrance conductors are properly installed and in serviceable condition.

### 6.6 SERVICE AMPACITY

The capacity of the electrical service is 200 amps . A 200 amp service is adequate for this house with the existing electrical equipment. There is also room to add additional circuits if necessary.

### 6.7 SERVICE GROUNDING AND BONDING

The service grounding electrode conductor is detached from the grounding rod. The service grounding electrode conductor should be reattached using a suitable clamp.


### 6.8 SERVICE PANEL

The electrical service panel is properly installed and in serviceable condition. The circuits are labeled. The accuracy of the labeling was not verified. Do not assume the labeled circuit is off unless it has been checked with a voltage tester.

### 6.9 OVER CURRENT PROTECTION

Circuit breakers are used for over current protection. The circuit breakers are properly installed and the ampacity of the connected wires is compatible with that of the circuit breakers. The circuit breakers were not tested.

### 6.10 WIRING

The visible portions of the wiring are properly installed except where noted below.
The exterior conduit is not properly connected. This could damage the wires or cause a ground fault. The conduit connection should be made weathertight in accordance with industry standards.


### 6.11 ALUMINUM WIRING

This house uses copper service entrance conductors and stranded aluminum wire for dedicated major appliance circuits. This type of aluminum wire circuitry is typically found in most houses and is considered safe and reliable when installed correctly.

This house also uses 10 and 12 gauge solid aluminum wire for lighting and/or small appliance circuits. This wiring can be a fire hazard if it is installed incorrectly or improperly modified. Verifying proper installation would require the removal and inspection of connections behind every light, switch and receptacle in the house which is beyond the scope of this inspection. A qualified electrical contractor should be retained to perform such an inspection.

Aluminum branch wiring, when used for general lighting circuits, can be hazardous because of its tendency to oxidize and its incompatibility with fittings designed for other metals used in the electrical system. Improper connections can cause electrical resistance, which may in turn cause overheating and fires. These single strand aluminum wires, used in many houses built between 1961 and 1978, are not necessarily dangerous as long as proper connections are used, and the connections are made without damaging the wire. If installed properly, aluminum wiring is considered safe. The main factor in determining whether a system is safe is the type of connectors, light fixtures, receptacles and switches to which the aluminum wire is connected and the workmanship of the installation. Receptacles and switches which are designated CO/ALR are considered appropriate for use with aluminum wire. These markings are found at the top or bottom of fitting mounting tabs, located under the plastic wall plates. Where indications are such that this is not the case, a licensed electrician should be called in to make a further evaluation of the system and to make repairs or modifications to the aluminum wiring to insure future safety.

Warning signs of unsafe aluminum wiring include: unusually warm or warped receptacle and switch cover plates, smoke or sparks coming from receptacles or switches, periodic flickering of lights, circuits that don't work, an acrid burning plastic smell at receptacles or switches, or untraceable problems with plug-in lights and appliances. If any of the above are ever encountered, a licensed electrician should be called in to further evaluate the problem and make repairs as needed. The use of anti-oxidant paste on all exposed portions of aluminum wiring is also recommended as a precaution.

### 6.12 RECEPTACLES

All of the readily accessible receptacles were tested. Testing revealed defects requiring repair. These defects are outlined below.

There are several loose receptacles throughout the home. This is a potential shock and a fire hazard. All loose receptacles should be repaired as necessary.

The cover plate is missing from a receptacle in the garden tool shed. This is a shock and fire hazard. The installation of a cover plate is recommended.


### 6.13 GFCI RECEPTACLES

A ground fault circuit interrupter (GFCI) is a device that detects ground faults (current leakage to ground). It protects you from electrocution. GFCI protection is required for receptacles in bathrooms, kitchens, garages, unfinished basements, crawlspaces and at exterior receptacles. GFCI protected receptacles were found in the bathrooms, kitchen, garage and exterior.

One of the receptacles in the kitchen is unprotected. The installation of GFCI protection for all of the kitchen receptacles is recommended.

### 6.14 AFCI RECEPTACLES

AFCI protection is required for all 15 and 20 amp branch circuits to have protection from the entire branch circuit when that circuit has outlets in dwelling family homes, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, or similar rooms or areas.

Replacement receptacles are now required to be arc-fault circuit interrupter (AFCI) protected. This means that if you are replacing an old outlet in an old home in a location that needs AFCI protection in a new home, the replacement outlet needs to be AFCl protected. AFCl protection was installed in the panel for several of the circuits.

### 6.15 LIGHTS

All of the accessible luminaries were tested and were found to be functional.

### 6.16 SWITCHES

All of the accessible switches were tested and were found to be properly wired and functional.

### 6.17 CEILING FAN

Ceiling fans can fall from the ceiling if not properly installed. Verifying proper installation requires removal of the ceiling fan which is beyond the scope of this inspection. The fan should be installed on a special electrical box that is approved for use with a ceiling fan. The box should be securely fastened to the framing. The ceiling fan was tested and was functioning as intended.

## AIR CONDITIONER/ HEAT PUMP

Heat pump and air conditioning systems consist of the condenser located outside, the air handler or furnace on the inside, refrigerant lines, ducts, air filters, thermostat, condensate drains and condensate pump. These items are visually examined for proper function, excessive or unusual wear, and general state of repair. The heat pump or air conditioner is tested whenever possible. Air conditioning systems are not tested if the outside temperature is too cool for proper operation. Detailed testing of the many components of the heat pump or air conditioning equipment or predicting their life expectancy requires special equipment and training and is beyond the scope of this inspection.

Heat pumps are air conditioners designed to operate "in either direction". When heating, air is cooled and exhausted to the outside, while the "waste" heat is distributed through the living space by a blower and ducts. Heat pumps operate most efficiently in moderate to hot climates where winter temperatures are not extreme and where there is a need for air conditioning. Additional electric strip heaters are generally installed when winter capability is marginal. The cost of operating the supplemental strip heaters is significantly higher than operating the heat pump in its regular mode. Limiting changes of the temperature setting on the thermostat to two degrees will usually prevent the strip heater from coming on. Insulation, weather stripping and other energy saving steps can help minimize the need for the back-up capability.

Heat pumps and air conditioners are technically complex pieces of equipment. Detailed analysis of all components of the system is beyond the scope of this inspection. For greatest efficiency and service life, we recommend regular annual maintenance by an HVAC contractor.
The following components were inspected.:

### 7.1 GENERAL INFORMATION

Unit Type - Split system Heat Pump, Age - The heat pump for the north half of house is approximately 20 years old, The condenser is located on the north side of the house. The heat pump for the south half of house is approximately 11 years old. The condenser is located on the south side of the house.

### 7.2 CONDENSER

The condenser contains all the equipment necessary to reclaim the refrigerant gas and convert it back to a liquid. It consists of a compressor, condenser, hot gas discharge line, condenser fan, electrical panel box, and some accessory components. The condensers were tested and were functioning as intended.

The air conditioner condenser contains many different parts and pieces. Many of these pieces are quite heavy and a condenser can weigh several hundred pounds. The weight of the unit is mostly caused by the copper coil that runs along one or several sides of the AC unit. Copper is quite dense and weighs about 559 pounds per square foot. While only a fraction of this amount of copper is held inside the condenser, a little bit of the metal can add up to a lot of weight. This weight causes the side of the unit where the condenser coil is located to be heavy. If the unit is not level, then this uneven weight can cause the unit to sink into the ground. The unit can then tip or rip free from the coolant line that feeds into your home.

Also, if the condenser is not level, then the air conditioner will not work correctly. Specifically, the pump may not work the way it is supposed to. The condenser pump contains some oil that travels with the cooling fluid and then redeposits itself back into the pump. This helps to keep the device well lubricated. Sometimes the oil can separate from the coolant and pool in one area of the condenser. For example, a good deal of the oil can end up in the condenser coil. This is the case if the unit were tipped towards the coil. When this happens, the pump no longer has the lubrication it needs. The result is a pump that can wear out more quickly and also overheat.

One of the only ways to make sure that the condenser oil stays moves smoothly and mostly deposits in the compressor is to keep the unit upright and level.

### 7.3 REFRIGERANT LINES

The accessible refrigerant lines appear to be in good condition.

### 7.4 CONDENSATE PUMP

Air conditioners produce condensate water that must be collected and disposed of. A gravity system is used or a small
vessel with an automatic pump is installed to receive the condensate water and pump (drain) it out to the exterior of the house. This system is properly installed and is functioning as intended.

### 7.5 BLOWER

The blower was tested and was functioning as intended.

### 7.6 AIR FILTER

The air filter(s) is located in the blower compartment. The air filter(s) should be cleaned or replaced at least 2-3 times during the heating season.

### 7.7 THERMOSTAT

The unit responded to the remote control. This is a programmable device with options for automatic temperature settings (up and down). Testing the automatic operations of the remote is beyond the scope of this inspection.

### 7.8 ELECTRICAL DISCONNECT

An electrical disconnect is installed adjacent to each condenser.

### 7.9 GENERAL COMMENTS

The heat pump split system responded to the thermostats call for cooling/heating and all major components were functional. This type of heat pump system should be serviced annually. Having the split system serviced before the start of the next cooling season is recommended.

## WATER HEATER

Our review of water heaters includes the tank, gas and/or water connections, electrical connections, venting and safety valves. These items are examined for proper function, excessive or unusual wear, leakage and general state of repair. The hidden nature of piping and venting prevents inspection of every pipe, joint, vent and connection.
The following components were inspected:

### 8.1 LOCATION OF UNIT

The water heater is located in the bedroom.

### 8.2 GENERAL INFORMATION

The water heater is electric. The capacity of the water heater is 50 gallons. The water heater is approximately 4 years old. Water heaters of this type typically last about 10-15 years.

### 8.3 PRESSURE RELIEF VALVE

The pressure relief valve is properly installed. The valve was not tested, as this could cause the valve to leak.

### 8.4 SHUTOFF VALVE

The shutoff valve for the water supply to the water heater is properly installed and is functioning as intended.

### 8.5 WATER CONNECTIONS AT TANK

The water connections at the tank are properly installed and are performing their intended function.

### 8.6 EXPANSION TANK

The expansion tank has an air pocket inside that compresses as the water is heated. It prevents the pressure relief valve from leaking as the water is heated.

The expansion tank is not adequately secured to the wall. This could result in damage to the water pipe and leakage during an earth quake. A seismic restraint should be installed to secure the expansion tank.


### 8.7 SEISMIC RESTRAINT

The water heater is secured to the wall. This prevents it from falling over during an earthquake and rupturing gas and water lines.

### 8.8 GENERAL COMMENTS

The water heater is properly installed and is performing its intended function.

## KITCHEN

The kitchen was inspected for proper function of components, active leakage, excessive or unusual wear and general state of repair. We inspect built-in appliances using normal operating controls. This includes running the dishwasher, operating the garbage disposal and microwave and checking the burners or heating elements in the stove and oven. Accuracy and/or function of clocks, timers, temperature controls and self cleaning functions on ovens is beyond the scope of our testing procedure. Refrigerators are not tested or inspected unless specifically noted.
The following components were inspected:

### 9.1 COUNTERTOPS

The countertops are covered with slab quartz. The counter tops are properly installed and are in good condition.

### 9.2 CABINETS

The finish on the kitchen cabinets is slightly worn. The cabinets are otherwise in good condition.

### 9.3 FLOORING MATERIAL

Manufactured flooring is used in the kitchen. This is a durable wood composite product. The flooring has been properly installed and is in good condition.

### 9.4 VENTILATION

Ventilation in the kitchen is provided by a range hood over the stove. The vent is ducted to the exterior. The vent fan is properly installed and is performing its intended function.

### 9.5 SINK FAUCET

The sink faucet is properly installed and is in good condition.

### 9.6 SINK

The kitchen sink is properly installed and is in good condition.

### 9.7 DRAINS, TRAPS AND TRAP ARMS

The sink drain is properly installed and is performing its intended function.

### 9.8 AIR GAP

The dishwasher drain lacks an air gap. The dishwasher will function without one, but there is a risk of contamination of the inside of the dishwasher by waste water. The installation of an air gap is recommended.


### 9.9 RANGE

The range was tested and was functioning as intended.

### 9.10 OVEN

The gas oven is functional. Gas ovens produce carbon monoxide when turned on. Always run the exhaust fan when baking or broiling.

### 9.11 COOKTOP

The cooktop was tested and was functioning as intended.

### 9.12 DISHWASHER

The dishwasher was tested and was functioning as intended.

### 9.13 GARBAGE DISPOSAL

The garbage disposal was tested and was functioning as intended.

### 9.14 REFRIGERATOR

The refrigerator is functioning as intended.

### 9.15 RECEPTACLES

There are unprotected receptacles in the kitchen. The installation of GFCI protection for all of the kitchen receptacles is recommended.

## BATHROOMS

Our inspection of the bathrooms consists of testing of the plumbing fixtures for condition and function. Defects such as leaks, cracked or damaged sinks, tubs and toilets will be listed under the heading of the bathroom in which they were found. The bathroom floor, tub and shower walls are examined for water damage. Ventilation fans are tested for proper operation. Cabinets and countertops are examined for excessive wear and deterioration. Hydromassage tubs are tested and the pump and related equipment are examined when accessible.
BATHROOM

### 10.1 LOCATION

Hallway.

### 10.2 BATHTUB

The bathtub is properly installed and is in good condition.

### 10.3 TUB WALLS

The tub walls are properly installed and are in good condition. Most ceramic tile is applied directly over gypsum board rather than on a concrete board such as "Durock" or "Wonder Board". Where the tile is applied directly over the gypsum board, it is critical that the tile grout be maintained to prevent water intrusion behind the tile. Missing or cracked grout should be repaired. Inside corners, and penetrations in the tile should be kept sealed with a high quality caulk.

### 10.4 FLOORING MATERIAL

The floor is covered with ceramic tile. The tile is properly installed and is in good condition.

### 10.5 TOILET

The toilet was flushed and was functioning as intended.

### 10.6 SINK

The bathroom sink is properly installed and is in good condition.

### 10.7 DRAINS, TRAPS AND TRAP ARMS

The sink drain is properly installed and is performing its intended function.

### 10.8 FAUCET FIXTURES

The faucet fixture was tested and was functioning as intended.

### 10.9 CABINETS

The finish on the bathroom cabinet is slightly worn. The cabinet is otherwise in good condition.

### 10.10 COUNTERTOP

The countertops are covered with slab quartz. The counter tops are properly installed and are in good condition.
The backsplash is not caulked. Cracking of the grout allows water to enter the gap between the back splash and counter and is difficult to clean. Caulking should be installed at this location.

### 10.11 VENTILATION

Ventilation in this bathroom is provided by a ceiling fan. This fan was operated and was found to be working satisfactorily.

### 10.12 SUPPLEMENTAL HEAT

An electric resistance radiant heating system is installed in the floor. The heating system was tested and was functioning as intended.

### 10.13 WINDOWS

The window in the bathtub wall surround is vulnerable to water intrusion. It is essential the window sill be kept sealed. The installation of a shower curtain over the window will also help reduce water intrusion problems.

### 10.14 GFCI RECEPTACLES

GFCI protected receptacles were found in this bathroom.
The reset button for the GFCI protected receptacles in the bathroom is located in the kitchen.
BATHROOM
10.15 LOCATION

Upper Floor Hallway.

### 10.16 SHOWER

The shower walls are properly installed and are in good condition. Most ceramic tile is applied directly over gypsum board rather than on a concrete board such as "Durock" or "Wonder Board". Where the tile is applied directly over the gypsum board, it is critical that the tile grout be maintained to prevent water intrusion behind the tile. Missing or cracked grout should be repaired. Inside corners, and penetrations in the tile should be kept sealed with a high quality caulk.

The shower pan was tested by filling it with water and letting it stand for 20 minutes. There was no evidence of leakage underneath.

### 10.17 GLASS ENCLOSURE

The glass shower enclosure is labeled as tempered safety glass, is properly installed and in good condition.

### 10.18 FLOORING MATERIAL

The floor is covered with ceramic tile. The tile is properly installed and is in good condition.

### 10.19 TOILET

The toilet was flushed and was functioning as intended.

### 10.20 SINK

The bathroom sinks are properly installed and are in good condition.
The left sink drain stop is not operational. It should be repaired or replaced.

### 10.21 DRAINS, TRAPS AND TRAP ARMS

The sink drains are properly installed and are performing their intended function.

### 10.22 FAUCET FIXTURES

The faucet fixtures were tested and were functioning as intended.

### 10.23 CABINETS

The finish on the bathroom cabinet is slightly worn. The cabinet is otherwise in good condition.

### 10.24 COUNTERTOP

The countertops are covered with slab quartz. The counter tops are properly installed and are in good condition.

### 10.25 VENTILATION

Ventilation in this bathroom is provided by a ceiling fan. This fan was operated and was found to be working satisfactorily.

### 10.26 GFCI RECEPTACLES

A ground fault circuit interrupter (GFCI) is a device that detects ground faults (current leakage to ground). It protects you from electrocution. GFCI protection is required for receptacles in bathrooms, kitchens, garages, unfinished basements, crawlspaces and at exterior receptacles. GFCI protected receptacles were found in this bathroom.

## LAUNDRY ROOM

Appliances are tested when present and when circumstances allow.
The following components were inspected:

### 11.1 APPLIANCES

The hookups for the washer are properly installed and in serviceable condition. The washer itself was operated through a partial cycle, however we did not conform the complete operation of the cycle timer.

Upgrading the washer connections to high pressure (steel braided) lines is recommended.
The hookups for the dryer are properly installed and in serviceable condition. The dryer itself was operated through a partial cycle, however we did not confirm the complete operation of the cycle timer.


### 11.2 DRYER VENT

The visible portions of the dryer vent are properly installed and in serviceable condition. Dryer ducts should be cleaned annually as part of routine home maintenance. A dryer duct that is clogged with lint is a fire hazard.

## PLUMBING SYSTEM

A plumbing system consists of the water heater, domestic water supply lines, drain, waste and vent lines and gas lines. Inspection of the plumbing system is limited to the water heater, visible faucets, fixtures, valves, drains, traps, exposed pipes and fittings. These items are examined for proper function, excessive or unusual wear, leakage, and general state of repair. Valves are not tested except where specifically noted. The hidden nature of piping prevents inspection of every pipe and joint. A sewer lateral test, necessary to determine the condition of the underground sewer lines, is beyond the scope of this inspection. If desired, a qualified individual could be retained for such a test. Our review of the plumbing system does not include landscape irrigation systems, off site community water supply systems or private (septic) waste disposal systems. Review of these systems should be performed by qualified and licensed specialists prior to the close of escrow.
The following components were inspected:

### 12.1 PLUMBING SYSTEM SPECIFICATIONS

The building is on a public water supply system. The building is connected to the municipal sewer system. Copper tubing is used for the water supply piping. Cross link polyethylene (PEX) plastic tubing is also used for portions of the, ABS plastic is used for the drain, waste and vent pipes. water supply piping.

### 12.2 MAIN WATER SHUTOFF VALVE

The main water supply shutoff valve is located in the crawlspace. The valve was not tested and its function was not verified.

### 12.3 MAIN WATER LINE

The main water line is buried underground and was not visible for inspection.

### 12.4 INTERIOR WATER SUPPLY PIPES

The visible portions of the copper water supply pipes are properly installed and functional. Copper is considered one of the most desirable materials for interior supply pipes and is expected to last the lifetime of the building.

Cross link polyethylene (PEX) plastic tubing is used for portions of the water supply piping. PEX is a tough, flexible plastic tube that can be used for both hot and cold water. It has been a relatively uncommon material in this area but, has been in use extensively in Europe and in other parts of this country. The service life of this material is not known, as it has a limited track record.

### 12.5 WATER PRESSURE

The water pressure at 100 PSI is excessive. The normal range is $30-80$ PSI. High water pressure can result in leaking valves, detached supply tubes, water hammer and is hard on solenoid valves. Consideration should be given to the installation of a pressure reduction valve.

### 12.6 DRAIN AND WASTE PIPES

ABS plastic is used for drain, waste and vent pipes. All of the visible drain pipes were properly installed and functional. ABS is a durable, reliable material and should last the lifetime of the building. All drain, waste and vent pipes were stress tested by filling bathtubs and fixtures to the overflow and then draining them while simultaneously flushing the toilet and running the sinks and showers. No leaks were observed and all fixtures emptied in a reasonable amount of time with no fluctuation in the rate of flow down the drain. This is commonly referred to as "functional drainage".

### 12.7 SEWER LINE

The main sewer line is buried underground and was not visible for inspection. If you have concerns regarding the condition of the buried waste line(s) the services of a 'sewer line inspection service' is likely to determine the condition of the buried waste lines.

### 12.8 VENT PIPES

The visible portions of the vent pipes are properly installed and are performing their intended function.

### 12.9 FAUCET FIXTURES

All faucet fixtures were tested and were functioning as intended.

### 12.10 HOSE BIBBS AND EXTERIOR SUPPLY PIPES

The hose bibbs on this building are the frost free type. These hose bibbs typically will not freeze as long as the hoses are removed. Failure to remove hoses during freezing weather could result in a cracked pipe and leakage. The bibbs were tested and were functioning as intended.

### 12.11 GAS PIPING

The visible portions of the gas piping were properly installed and are performing their intended function. There was no odor of gas leakage at the time of the inspection.

### 12.12 GAS METER

The gas meter is located on the north side of the building. The main gas shut off valve is installed on the high pressure line emanating out of the ground. This valve requires a wrench to open and close. Keeping a gas valve wrench or adjustable wrench accessible near the gas meter is recommended.

## INTERIOR

Our review of the interior includes inspection of walls, ceilings, floors, doors, windows, cabinetry, countertops, steps, stairways, balconies and railings. These features are examined for proper function, excessive wear and general state of repair. In some cases, all or portions of these components may not be visible because of furnishings and personal effects. In such cases these items are not inspected.
The following items were inspected:

### 13.1 GENERAL COMMENTS

The interior wall, floor, and ceiling surfaces were properly installed and generally in serviceable condition, taking into consideration normal wear and tear.

### 13.2 FLOORS

The floors squeak in some areas. This is not indicative of a structural defect and in most cases can be eliminated with additional mechanical fastening of the subfloor to the joists. Repairs are easily performed during floor covering replacement.

### 13.3 STAIRS

The stairs were used several times during the inspection. The stair components are properly installed with exceptions noted below.

The run of the stairs is too short. This creates a potential trip hazard. Stair run (width of tread) should not be less than 9" with $11 "$ being the ideal width. Consideration should be given to modifying the stairs. If this proves to be too impractical or expensive, then you should exercise extreme caution when using these stairs.


### 13.4 GUARD RAILINGS

There is no guardrail at the stairs. This is a safety hazard. The installation of a guardrail that conforms to present industry standards is recommended.


### 13.5 WALLS AND CEILINGS

There are minor cracks in the walls and/or ceilings. This is a common condition with this type of construction and does not indicate a structural deficiency. The cracks can be repaired or painted over during routine maintenance. Cracks in drywall that have been repaired will often reoccur several months after the repairs have been completed. This is due to seasonal movement of the structure caused by changes in humidity.

### 13.6 DOORS

All of the doors were tested and were found to be functioning as intended.
Some of the doors are missing their door stops. This condition will lead to damage of the wall surfaces. Door stops should be installed where necessary.

### 13.7 CLOSET DOORS

All of the closet doors were tested and were found to be functioning as intended.

### 13.8 WINDOWS

The window frames are constructed from PVC and have insulated glass in them. All of the windows were tested and/or inspected. All of the windows tested and/or inspected were found to be functioning as intended.

### 13.9 SMOKE DETECTORS

There is a smoke detector inside each of the bedrooms and in the hallway outside of the bedrooms on the upper and lower floors.

Smoke detectors are examined for location only. They are not tested. Smoke detector batteries should be replaced when you move in and every year thereafter. Once batteries have been replaced, the smoke detectors should be tested for proper operation.

Ionization technology is generally more sensitive than photoelectric technology at detecting small particles, which tend to be produced in greater amounts by flaming fires, which consume combustible materials rapidly and spread quickly. Sources of these fires may include paper burning in a wastebasket or a grease fire in the kitchen.

Photoelectric technology is generally more sensitive than ionization technology at detecting large particles, which tend to be produced in greater amounts by smoldering fires, which may smolder for hours before bursting into flame. Sources of these fires may include cigarettes burning on couches or bedding.

FOR MAXIMUM PROTECTION: Use both lonization and Photoelectric smoke alarms in every bedroom/hallway on every level of your home.

At least one carbon monoxide monitor should be installed for each floor. The best place to install the monitor is in an open area near the gas appliance.

## ENVIRONMENTAL ISSUES

Environmental issues include but are not limited to carbon monoxide, radon, asbestos, lead paint, lead contamination, toxic waste, formaldehyde, electromagnetic radiation, buried fuel oil tanks, ground water contamination and soil contamination. The absence of a statement on any of the environmental issues listed above does not necessarily mean that they are not present. We make reference to these substances only when we recognize them during the normal inspection process. Most of the toxic substances listed above cannot be identified without laboratory testing. If further study or analysis seems prudent, the advice and services of the appropriate specialists are advised.
The following items may exist in this building:

### 14.1 CARBON MONOXIDE

Many of us encounter CO regularly and never know it because it's invisible and odorless. That's why victims of CO poisoning often have no warning that they are in danger... until it's too late. Symptoms include headache, nausea, chronic fatigue, confusion and dizziness. Extreme exposure can even cause a coma or death.

Carbon monoxide is a product of incomplete (poor) combustion. It's a direct and cumulative poison. When combined with blood hemoglobin, CO replaces oxygen in the blood until it completely overcomes the body. Death from CO occurs suddenly. The victim inhaling the toxic concentration of the gas becomes helpless before realizing that danger exists.

According to the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) (Ventilation Standard 62-89), a concentration of no more than 9 parts per million ( ppm ) $(0.0009 \%)$, of CO is permissible in residential living spaces. In addition, the Occupational Safety and Health Administration (OSHA) has set an eight-hour work place maximum of 35 ppm. And in flue gas, the Environmental Protection Agency (EPA) and the American Gas Association (AGA) have established the maximum allowable concentration of CO at 400 ppm (See charts).

To ensure safe and efficient combustion, it is imperative that all gas burning appliances be inspected and serviced regularly (once a year) if used in normal service conditions).

### 14.2 FORMALDEHYDE

Formaldehyde, a colorless gas with a pungent odor, is so commonly used today that virtually everyone is likely to be exposed to at least small amounts of it, and a significant number of people are developing symptoms due to exposure to large amounts of formaldehyde in their homes or workplaces. It was an integral component of the urea formaldehyde foam insulation (UFFI) that was installed in more than five hundred thousand homes in the 1970's. (The use of formaldehyde in insulation was banned by the Consumer Product Safety Commission in 1982, but this ruling was overturned by a federal court in 1983.) In addition, it is present in a large variety of consumer products. It is a major part of the resins used as glue in particle board, plywood, and other pressed wood products used extensively in the construction of homes and furniture. Some cosmetics, paper towels, upholstery, permanent press fabrics, carpets, milk, toilet seats, pesticides, and explosives contain it too. Formaldehyde is also present in the exhaust from combustion appliances and in tobacco smoke.

The most common symptoms of excessive formaldehyde exposure are burning eyes, itching, shortness of breath, tightness in the chest, coughing, headaches, nausea, and asthma attacks. Large amounts of the gas have produced cancer in laboratory animals, and government policy assumes that any substance that can cause cancer in animals may also cause it in humans.

People who live in homes that have been "tightened" for maximum energy conservation are most likely to suffer from the effects of formaldehyde gas. The formaldehyde gas seeps from the walls, furniture, carpet, etc. into the air, building up to high levels in the "tightened" home, which can be irritating, particularly to sensitive people.

To minimize your exposure to formaldehyde, ventilate your home - in good weather, open the windows to provide a constant supply of fresh air. Some methods of heat recovery, such as heat recovery ventilators (also known as air-to-air heat exchangers), are available that can ventilate the home while also conserving energy.

You can seal exposed, raw surfaces of particle board and plywood with oil enamel, varnish, wallpaper, or vinyl floor coverings. If you have UFFI insulation, make certain it is completely sealed in the walls or, as a last resort, have it removed.

## INSULATION

Insulation, weatherstripping, dampers, storm windows, insulated glass and set-back thermostats are features that help reduce heat loss and increase the comfort and thermal efficiency of your home. We examine these items and identify approximate R values for insulation. When appropriate, we offer suggestions for upgrading. Our review of insulation is based upon a random sampling of accessible areas and does not constitute a warranty that all such areas are uniformly insulated or are insulated to current standards.
The following items were inspected:

### 15.1 ATTIC INSULATION

The attic is insulated with fiberglass batt and blown in cellulose insulation. The approximate $R$ value of this insulation is 21 . This provides moderate resistance to heat transfer. Adding additional insulation to achieve an R value of 30 is recommended to reduce heat loss through the ceilings.

### 15.2 VAULTED CEILING

The insulation in portions of the vaulted ceiling was not visible for inspection. Houses of this age typically have $3-1 / 2$ " R-11 or 6" R-19 fiberglass batt insulation between the rafters.

### 15.3 WALL INSULATION

The walls are insulated with fiberglass batt insulation. The $2 \times 4$ walls suggest that it is $3-1 / 2^{\prime \prime} \mathrm{R}-11$ fiberglass.

### 15.4 FLOOR INSULATION

The floors are insulated with 6" R-19 fiberglass batt insulation. The floor insulation has been properly installed and is in good condition.

## STRUCTURE

The structural elements of most residential buildings include a foundation, footings, floor, wall, ceiling and roof framing. The visible portions of these items are examined for proper function, wear, deterioration or signs of non-performance. Some structural components or portions of them are inaccessible because they are buried below grade or hidden behind finished surfaces. Therefore, much of the structural inspection is performed by identifying resultant symptoms of movement, damage and deterioration. Where there are no visible symptoms, components or conditions requiring repair may go undetected and identification will not be possible. We make no representations as to the internal conditions or stabilities of soils, concrete footings and foundations, except as exhibited by their performance.

The following components were inspected:

### 16.1 GENERAL INFORMATION

The foundation is constructed from poured in place concrete. A perimeter foundation wall supports the exterior walls of the building. Interior load bearing components are supported by pier footings and/or continuous spread footings. The floor structure is constructed out of wood joists. The subflooring is plywood. The stud walls are constructed from $2 \times 4$ dimensional lumber. The exterior wall sheathing is plywood. The roof structure is conventionally framed out of dimensional lumber. The roof sheathing is plywood.

### 16.2 FOUNDATION

The foundation is constructed in a manner typical of buildings of this type and age. There are minor shrinkage cracks in the foundation. Shrinkage cracks are common in poured concrete foundation walls. They do not affect the performance of the foundation. No action is indicated.

### 16.3 MUDSILL

The mudsill is typically a $2 \times 4$ or $2 \times 6$ member that is laid flat directly on the top of or cast into the top of the foundation wall. The mudsill is usually bolted to the foundation wall and serves as a base for the rest of the floor framing. In this building, the mudsill is inaccessible and cannot be evaluated. There was no evidence present that would suggest that there are defects in this component.

### 16.4 ANCHOR BOLTS

Anchor bolts are bolts that are cast into the top of the concrete foundation and retain the mudsill. Anchor bolts primary function in this area, is to prevent the building from being displaced from its foundation during an earthquake. Anchor bolts have grown in diameter over the years as have the nuts and washers that retain the mudsill. Generally speaking, the newer the building, the better resistance it will have to seismic activity. Due to the design of this building, anchor bolts are not visible and could not be evaluated.

### 16.5 BEAMS AND POSTS

The beams and posts are properly installed and are performing their intended function.

### 16.6 FLOOR JOISTS

The floor joists are covered with finished surfaces and therefore were not visible for inspection. There was no evidence present suggesting that defects or deficiencies are present.

### 16.7 SUBFLOORING

The subfloor was covered with insulation and finished surfaces and was not visible for inspection. There was no evidence present suggesting that defects or deficiencies are present.

### 16.8 WALLS

The walls are covered with finished surfaces and therefore were not visible for inspection. No evidence of defects or deficiencies was observed.

### 16.9 ROOF STRUCTURE

The roof structure is constructed from site cut and assembled dimensional lumber. The roof structure is constructed in a manner consistent with buildings of this type and is performing its intended function. Portions of the roof framing was not visible for inspection. An inspection of the roof and ceilings did not reveal evidence that would suggest that defects are present.

### 16.10 ROOF SHEATHING

The roof sheathing is installed in a manner consistent with buildings of this type and is performing its intended function. No defects or deficiencies were observed.

## CRAWLSPACE

The crawl space is where some of the building's structural elements and portions of its mechanical systems are located. These include foundation, structural framing, electrical, plumbing and heating. The visible portions of accessible systems and components are examined for proper function, excessive or unusual wear and general state of repair. Some items observed in the crawlspace will be discussed under the individual systems to which they belong. It is not unusual to find occasional moisture and dampness in crawl spaces. However, significant and/or frequent water accumulation can adversely affect the building foundation and support system and creates conditions conducive to various types of wood destroying organisms. We check for signs of excessive moisture and water entry. Unfortunately, water entry is often seasonal and therefore evidence may not be present at the time of the inspection.
The following components were inspected:

### 17.1 CRAWLSPACE ACCESS

The crawlspace access is located in the closet under the stairs. The crawlspace was entered and all accessible areas were inspected.

### 17.2 MOISTURE

The crawlspace was dry. No evidence of excessive moisture or standing water was observed.

### 17.3 VENTILATION

The crawlspace is adequately ventilated. Vents should be kept unobstructed and clear of leaves and other organic debris. Screens should be maintained to prevent rodent entry.

### 17.4 VAPOR RETARDER

The soil under the house is covered with a polyethylene plastic vapor retarder. This component is typically referred to as a "vapor barrier". While not a true vapor barrier, it does reduce the transmission of water vapor from the soil to the air. The vapor retarder is properly installed and is performing its intended function. The vapor retarder should be maintained so that it covers at least $85 \%$ of the entire surface of the soil.

### 17.5 PEST CONTROL

Wood boring insect activity in the Puget Sound area usually does not occur unless there is a ventilation problem inside or underneath the structure, a water leakage/rotting condition in the house or significant quantities of soil to untreated wood contact in a crawlspace or outside around the building exterior. Carpenter ant, termite and wood boring beetle activity is most often a direct result of rot damaged wood and/or excessively moist, humid or damp conditions inside, around or underneath the building. Structural damage from termites and ants in most cases does not extend much past the moisture source and/or rot damaged wood. Eliminating high moisture conditions, improving ventilation, correcting the conditions that are conducive to rotting wood and replacing rot damaged wood will usually eliminate the wood boring insect activity, providing that the building is properly maintained thereafter.

The best way to avoid wood boring insect problems is by preventative maintenance. This includes:
$\times \quad$ Good construction practices which exclude water and prevent high moisture conditions.
$\times \quad$ Removal of wood debris and form wood from the crawlspace and around the building exterior.
$\times \quad$ Maintaining the roof water drain system.
$\times \quad$ Maintaining good yard drainage away from the foundation wall.
$\times \quad$ Avoiding wood-soil contact in the crawlspace or around the house exterior.
$\times \quad$ Storing fire wood 6 " above grade and in a dry area.
There should be no soil to wood contact in any part of the building exterior or crawlspace, unless that wood is pressure treated. For the greatest safety to permanent structures there should be no soil to wood contact of any kind. Untreated wood in direct contact with exterior flatwork should also be avoided.

Good building practice requires that foundation walls or pier footings supporting wood frame construction, should extend at least 8 " above the finish grade with at least a 6 " clearance between the top of the soil and the bottom of the wood finish materials. Untreated wood should be raised 1-2" above surrounding flatwork and should have a moisture barrier such as 30 lb. asphalt impregnated felt installed between the concrete and wood. For additional information and treatment options, you should retain the services of a qualified pest control operator.

