



**NOTICE TO BUYER: SELLER-PROCURED INSPECTION REPORT**

The following notice is given with respect to the Purchase and Sale Agreement dated \_\_\_\_\_  
between \_\_\_\_\_ ("Buyer")  
and Roy McIntosh and Linda McIntosh ("Seller")  
concerning 17417 NE 131st St. Redmond, WA 98052 ("the Property").

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

- Whole House Inspection
- Sewer Inspection
- Pest Inspection
- Other: \_\_\_\_\_

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.

[Signature] 10/6/20  
Seller DATE

[Signature] 10/6/20  
Seller DATE

**Buyer's Acknowledgment of Receipt**

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

\_\_\_\_\_  
Buyer DATE

\_\_\_\_\_  
Buyer DATE

Linda and Roy McIntosh, Sellers  
17617 NE 131<sup>st</sup> Street  
Redmond, WA 98052

As of October 13, 2020 the following items listed on inspection summary for this property by Terry Clark have been corrected by the sellers:

- 6.3 **Garage Door Opener.** Photo-eye beams have been relocated to 4-6" off floor.
  - 6.4 **Fire Separation.** Voids indicated have been filled with fire resistant caulk.
  - 7.8 **Electrical Service Panel.** Double tapped terminal has been modified to a single tap.
  - 7.13 **GFCI Receptacles.** Additional GFCI placed in kitchen  
GFCI receptacle in main floor powder room has been replaced.
  - 8.1 **Electrical Heating.** Control knob for wall heater has been installed.
  - 11.8 **Air Gap.** A ¼" hole has been drilled in the Johnson Tee.
  - 12.5 **Upper Floor Hallway Bathroom.** Recently installed toilet has been more firmly secured.
  - 12.15 **Main Floor Powder Room.** Toilet has been removed, new wax rings installed, and resecured to floor.
  - 4.5 & 4.7 **Roof.** Seller will have all work suggested by AAA-1 Roof Care. Work is presently scheduled for October 22, 2020. It is our understanding that a 5-year roof certification will be issued upon completion.
  - 5.4 **Pest Control.** Traps were set in all attic areas. No rodent activity was noticed.
  - 12.3 **Tub Walls.** Additional grout was placed between wall tiles.
  - 12.20 **Countertop.** The backsplash in the main floor powder room has been caulked.
  - 12.27 **Flooring Material.** The intersection of the master bedroom bathroom tub and floor has been caulked.
  - 14.9 **Hose Bibb.** The hose bibb on the rear of the house has been secured.
  - 18.3 **Floor Insulation.** Floor insulation has been added.
- Other:**
- Driveway was recoated in late spring 2020
  - Sequoia Trees on east side of house were significantly trimmed in September 2020
  - Carbon Monoxide alarms have been placed on all floors but not installed; buyer can select permanent location.
  - Window screens removed for window washing will be reinstalled.

Seller has scheduled the following work for 10/22/2020



AAA-1 Roof Care  
 PO Box 1953  
 Woodinville, WA 98072  
 (206) 930-1646  
 Fax (206) 940-9944  
 Quality Roof Cleaning, Repair,  
 Maintenance, & Roof Restoration



Department of  
**LABOR AND  
 INDUSTRIES**



# Estimate

DATE	ESTIMATE #
10/7/2020	209181
Contractors # AAA1RRC919P3	

Roy McIntosh  
 17417 NE 131st St  
 Redmond WA 98052

Valued Customer of AAA-1

Job Description	SQ/QTY	COST	Total
Clean roof to remove moss, fungus, and debris.		1,333.50	1,333.50T
Clean out gutters and inspect all downspouts.			0.00T
Pressure wash outside of gutters too included at no additional charge.			0.00T
Rinse house of debris from cleaning and all hard surfaces surrounding the home that get dirty from the roof.			0.00T
Apply ATCO Shakelast roof preservative/ moss, mildew, fungus treatment, UV protectant, and insect repellent to your roof.			0.00T
Coupon special roof cleaning price.			1,333.50
Roof's normal pitch is 4/12 - 5/12. Your roof's pitch is 12/12			
We will take \$61.68 off of the cleaning charge if you schedule within the next three (3) days reducing the total to \$1,399.00 including tax if paid by a credit card.		-61.68	-61.68
If you would like to pay by a check, we can give you an additional discount and reduce the cleaning charge by \$21.82 making the total for the cleaning portion of this estimate \$1,375.00 including tax if scheduled within the next three (3) days saving us the credit card processing fees.		-21.82	-21.82
Estimator noticed degranulation in the roofing material, flaws in the roofing material and areas of the roofing material that water is starting to penetrate in general. This roof needs sealer treatment added to the roof to slow down the process of growth/weathering/rainwater penetrating/breaking down the roofing material further. The charge to apply a sealant is \$943.95 + tax = \$1,038.35. We can reduce the sealant charge to \$998.00 including tax if scheduled within the next 3 days with the roof cleaning or \$975.00 including tax if scheduled within the next 3 days with the roof cleaning and you pay with a check. \$886.36 + tax = \$975.00.		886.36	886.36T
The rubber jack flashing boots around the vents were damaged tented/lifted and/or torn at the penetration(see photo). This may allow water intrusion that could damage the structure below in between the walls where it is hard to know there is even a leak happening until there is major damage to drywall, frame work, trim work, carpet/flooring. We suggest replacing this rubber jack flashing boot as soon as possible to prevent major damage from leakage to the interior of the home. The charge to replace the flashing boot is \$388.22 + tax each. We can reduce the flashing boot charge to \$363.22 + tax each if scheduled within the next 3 days with the roof cleaning or \$338.22 + tax each if scheduled within the next 3 days with the roof cleaning and you pay with a check.	1	338.22	338.22T



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Contractors # AAA1RRC919P3	

Roy McIntosh  
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Valued Customer of AAA-1

Job Description	SQ/QTY	COST	Total
Replace Furnace Vent Stack due to rusting which has caused holes and/or a broken stack which will cause leakage to the interior of the home if it has not already. The charge to replace the furnace vent stack is \$988.00 + tax. We can reduce the furnace vent stack charge to \$938.00 + tax if scheduled within the next 3 days with the roof cleaning or \$988.00 + tax if scheduled within the next 3 days with the roof cleaning and you pay with a check.	1	988.00	988.00T
Replacing one of your skylights. The estimator suggests replacing the skylight as soon as possible before there is leakage to the interior of the home due to broken seals in the skylight and there may be active leakage from the broken seals currently(see photo). The charge is \$888.22 + tax. We can reduce the charge to \$838.22 + tax if scheduled within the next 3 days with the roof cleaning or \$788.22 + tax if scheduled within the next 3 days with the roof cleaning and you pay with a check. This charge is based on a standard 2X2 foot skylight so if this job is authorized and the measurements turn out to be where the skylight is a custom skylight (this is 1 in 25 skylights), there is an additional charge for this custom order but at that point we will not do anything unless the customer agrees to the custom pricing so rest assured you will not be charged any extra without your approval. We never dispose of the old skylight before the new skylight is installed and working in perfect order. Note: Estimator noticed a 2nd skylight made of plexi glass that should be replaced but we cannot replace that one due to the process of installation.	1	838.22	838.22T
Estimator noticed the flashing at the roof to wall area of the roof on the West side of the house is popping up and the nails are popping out. This can cause leakage from wind driven rain and rodents/birds can get up in and under this flashing and cause problems with your roofing system at these roof to wall areas that need to be fixed to work properly (see photo's). We recommend having us repair/fasten down these roof to wall area's as soon as possible to prevent leakage/damage to your home. The charge to repair/fasten down the flashing is \$388.22 + tax. We can reduce the charge to \$363.22 + tax if scheduled within the next 3 days with the roof cleaning or \$338.22 + tax if scheduled within the next 3 days with the roof cleaning and you pay with a check.		338.22	338.22T
Roof Certification Fee		199.00	199.00T
Note: Estimator noticed that this roof is near the end of its life without the repairs mentioned installed in the roof and sealer treatment applied to the entire roof. After that, this roof has up to 10 years or more as described above in my notes.			



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Job Description	SQ/QTY	COST	Total
Note: Estimator noticed this roof needs the debris blown off of it up to 2 times a year to stop further deterioration so please ask the office about putting you on a reminders call list if you are interested.			
Note: The customer should be aware of black fungus in any areas of the roof as it causes deterioration in the composition shingle due to black fungus having the highest acidic content for organic growth.			
Note: The customer should be aware of the tree debris in areas of the roof as it causes deterioration in the composition shingle due to your type of tree debris being very high in acidic content.			
Note: Estimator noticed the roof looks like someone used too high of pressure while washing the roof in the past and the moss, debris and black fungus growth/weathering caused damage to the roof but that should not cause a leakage issue if sealer treatment is applied to the roof and the suggested repairs are completed to the roof.			
Note: Estimator noticed large amounts of debris, fungus and moss in areas of the roof which may have caused additional damage, rot and/or may be covering up problems with the roofing material in areas as we are not able to see under the growth and/or debris so the roofs condition is better assessed upon completion of removal of the growth and debris.			
Note: Estimator wants the customer to know we have the ability to remove the growth and debris from the roof but we do not always have the same ability to clean up that much growth and debris off any other surfaces than the driveways, walkways, decks, patio's and siding. Some of the debris and growth may be left on the property due to how much debris and growth is on this roof but we always try for the best possible clean up. All of our employees are highly experienced and that helps a lot with clean up.			
Note: Estimator noticed that it is possible the roof will leak during the service due to debris/moss/vents at the roof to wall area of the roof and the ridge/skylight areas of the roof and those areas might not be flashed/installed properly. – the customer should be home when we do the roof cleaning just in case of a leak.			
Note: Estimator noticed the seals are broken in one or several of the windows and/or skylights throughout the home.			
Note: Estimator noticed your roof is a laminate roof. We have four roof cleaning and roofing technicians that have worked on laminate/composition roofs for over 8 years EACH with our company as employees so rest assured they know exactly how to treat your laminate roof from their professional experience on laminate roofs weekly.			



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Valued Customer of AAA-1

Job Description	SQ/QTY	COST	Total
<p>Thank you for considering AAA-1 Roof Care. OUR COMPANY WAS NOMINATED FOR SMALL BUSINESS OF THE YEAR BY THE BETTER BUSINESS BUREAU. We are also a member of the Master Builders Association, Built Green, and many other organizations that consider us the best Roof Care company in the industry since 1988.</p> <p>Our Equipment is built to our specifications to be as gentle as possible on every type of roof. We use the latest technology available to the exterior cleaning industry today. Our machines have a holding tank containing 55+ gallons of water. This is necessary in order to keep our machines from running out of water. We run a super high water volume machine ( Approximately 10-12 gal. per . min) with a low pressure. Keep in mind a high pressure clean is a dirty damaging clean while a high water volume, low pressure clean is a very gentle and thorough clean.</p> <p>We are licensed, bonded and insured with a clean positive record. All of our employees are covered by Labor and Industries if they injure themselves while working on your property.</p> <p>Please call us for local references or with any questions and check out our web site at <a href="http://aaa1roofcare.com">aaa1roofcare.com</a>. Thank you for calling AAA-1</p> <p>Customer agrees to not hold AAA-1 Roof Care responsible/liable for any damage to the roof from pressure washing due to rot, debris and/or age or any leakage/damage inside the house due to exposed beams, vaulted ceilings, cedar ceilings, skylights or any leakage/damage in general. Please sign at the X and then print your name on the other line.</p> <p>X _____ -- _____</p>			
Please call with any questions you may have. Thank You		<b>Subtotal</b>	\$4,838.02
		<b>Sales Tax (10.0%)</b>	\$483.80
		<b>Total</b>	\$5,321.82

September 28, 2020

**Mr. & Mrs. Roy & Linda McIntosh**  
**17417 NE 131st St.**  
**Redmond, WA.**

**Re: 17417 NE 131st St.**  
**Redmond, WA.**

Dear Roy & Linda;

At your request, a visual inspection of the above referenced property was conducted on 09/28/2020. 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**

**BUILDING SITE**

**2.6 WALKWAY**

The walkway has cracked and settled differentially. This was probably caused by inadequate preparation of the soil prior to the placement of the concrete. This condition can be repaired by pressure grouting the sunken portion of the walkway or by removing and replacing it. Grinding down the raised edges of the concrete will also mitigate the hazard. The walkway remains functional despite this condition. However, the raised edges of the concrete can be a trip hazard for some people. Repairs should be made as necessary.



The wooden dividers separating the concrete walkway sections have deteriorated to a point where the gaps are a trip hazard. Replacement with mortar is recommended.



**BUILDING EXTERIOR**

**3.8 STAIRS**

The stair rise spacing is too wide. This is a hazard for small children. The spacing should be reduced as a safety upgrade. Current standards require that a 4" sphere not pass through the opening.



**GARAGE**

**ATTACHED GARAGE**

**6.2 OVERHEAD GARAGE DOORS**

Safeties are cables run through the center of the garage door springs that prevent broken springs from becoming projectiles that can cause injury. There are no safeties installed. The installation of safeties is recommended.



**6.3 GARAGE DOOR OPENER**

The Photo-eye beam was installed too high above the floor of the garage to adequately offer protection for small children and/or pets. We recommend that the photo-eye be lowered to within 4-6" of the floor.



**6.4 FIRE SEPARATION**

There are voids in the fire resistive barrier between the living space and garage that will allow flames to penetrate. The gypsum barrier slows the spread of a fire from the garage to the structure and/or living space. Patching the voids with a fire retardant caulk is recommended.



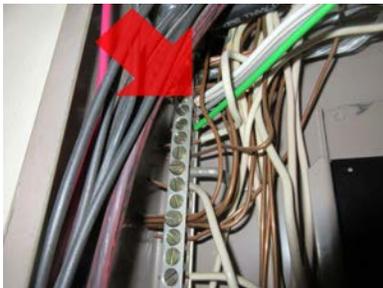
The installation of a furnace vent thimble is recommended to prevent flames to spread to the structure.



## **ELECTRICAL SYSTEM**

### ***7.8 SERVICE PANEL***

One of the neutral wires is double tapped on the buss bar. Double tapping means that two conductors share a single terminal. Double tapped terminals can loosen and overheat and therefore are not permitted unless the terminal is specifically listed for multiple wires. This defect is easily repaired by connecting the two wires to a "pig tail", securing them with a wire cap, and then inserting the pig tail conductor under the terminal.



### ***7.13 GFCI RECEPTACLES***

The installation of additional GFCI protection in the all of the garage, kitchen and exterior receptacles is recommended.

The GFCI receptacle in the main floor powder room does not trip when a ground fault is introduced. This is caused by an improperly wired or defective GFCI. Repair or replacement of this GFCI is recommended.

## **ELECTRIC HEATING**

### **ELECTRIC HEATING**

#### ***8.1 ELECTRIC FAN ASSISTED WALL HEATERS***

The control knob is missing. We recommend replacement of the heater control knob.



## WATER HEATER

### 10.10 VENT

The water heater vent connector is too close to combustible material. The minimum clearance of 6" is required between the single wall vent connector and the combustible surface. The double wall type B vent requires only 1" of clearance.



## KITCHEN

### 11.8 AIR GAP

An air gap called a Johnson Tee is installed in the kitchen wall. This air gap protects the dishwasher from contamination caused by a backflow of waste water. The cap protruding on the exterior wall opposite the dishwasher is not drilled. This renders the air gap non-functional. Drilling a 1/4" hole in the end of the cap will restore its function.



### 11.9 RANGE

No tip out protection was installed for the range. This is a hazard for small children. We recommend tip out protection devices be installed.

## BATHROOMS

### UPPER FLOOR HALLWAY BATHROOM

#### 12.5 TOILET

The toilet is loose where it mounts to the floor. A loose toilet will eventually start to leak and will damage the flooring material, underlayment and subfloor. The most reliable fix for this condition is to remove the toilet and

install a new wax seal. The toilet should then be securely mounted to the floor.

#### MAIN FLOOR POWDER ROOM

##### *12.15 TOILET*

The toilet is loose where it mounts to the floor. A loose toilet will eventually start to leak and will damage the flooring material, underlayment and subfloor. The most reliable fix for this condition is to remove the toilet and install a new wax seal. The toilet should then be securely mounted to the floor.

#### **PLUMBING SYSTEM**

##### *14.12 SEPTIC SYSTEM*

The house uses a private (septic) sewage disposal system. The septic system was not inspected. Our general house inspection will sometimes reveal major defects in the septic system (e.g., complete blockage, complete drain field failure), providing that it is not raining and the ground is dry. However, we still recommend that you have the septic tank pumped out and the septic system inspected by a qualified septic system service company, prior to the closing of the sale. Ask for a "Septic Tank Operational Report". It is also recommended that you have the tank pumped out every four years and avoid introducing grease and non-biodegradable foreign matter into the septic system. This septic system uses a pump to move the effluent from the pump tank on up to the drain field which is located at an elevation that is higher than the septic tank. These pumps have a limited service life of about 10-15 years. Pump failure will allow effluent to seep out of the septic tank and pump tank.

#### **INTERIOR**

##### *15.3 STAIRS*

The stair railing baluster spacing is too wide. This is a hazard for small children. The baluster spacing should be reduced as a safety upgrade. Current standards require that a 4" sphere not pass through the railing.

##### *15.8 SMOKE DETECTORS*

There is a smoke detector in the hallway outside of the bedrooms. Additional smoke detectors should be installed inside the bedrooms near the door.

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**

##### *2.3 VEGETATION*

Trees are touching the building on the east side. Low hanging tree branches can damage the roof, gutters, siding, doors and/or windows. Tree branches should be trimmed back where necessary.



## BUILDING EXTERIOR

### 3.2 PEST CONTROL

Untreated wood in direct contact with concrete was observed along the patio and front stoop. Untreated wood should be raised 1-2" above the concrete. Treating the wood with a preservative sometimes will prevent wood destroy organism damage.



### 3.3 SOFFITS AND OVERHANGS

Gaps over 1/4" in size adjacent the soffit vent blocks will allow insects and rodents to enter the attic. Covering any gaps with screening, a strip of wood and/or caulking is recommended.



### 3.6 DECK

The deck structure lacks lateral bracing. The installation of a diagonal brace underneath the deck is recommended.

## ROOF

### 4.5 GAS APPLIANCE VENTS

The gas appliance vent is corroded above the roof line. Cleaning and painting the vent will prolong its service life.

### 4.7 MAINTENANCE AND REPAIRS

The roof is in need of routine maintenance. The surface should be blown off or washed with a high volume low pressure garden hose to remove moss and organic debris. Performing this maintenance will improve the appearance and increase the life expectancy of the roof.

**ATTIC**

**5.2 VENTILATION**

Wind baffles locations are compromised in some areas of the attic. 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 fans 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**

There is evidence of rodent activity in the attic. The first step in eliminating rodents from 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 further activity. Once this work is completed, snap traps baited with peanut butter should be installed and monitored. The absence of rodents in the traps typically means that the rodents have been excluded from the area.

**GARAGE**

**ATTACHED GARAGE**

**6.6 EXTERIOR DOOR(S)**

The back door has a thin panel at the bottom which can easily be kicked in. Replacing or reinforcing the door is recommended as an upgrade to enhance your personal security.

**WATER HEATER**

**10.6 EXPANSION TANK**

The expansion tank is not adequately secured to the framing. 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**

**UPPER FLOOR HALLWAY BATHROOM**

**12.3 TUB WALLS**

Grout is missing from between some of the wall tiles. This can allow water to enter through the tile and can damage the walls. Regrouting the wall tile is recommended.



**MAIN FLOOR POWDER ROOM**

**12.20 COUNTERTOP**

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

**MASTER BEDROOM BATHROOM**

**12.27 FLOORING MATERIAL**

The grout is cracked at the intersection between the tub and floor. This can lead to water damage to the flooring and substrate. Caulking this area with a flexible grout is recommended.

**12.29 SINK**

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

**LAUNDRY ROOM**

**13.8 APPLIANCES**

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



**PLUMBING SYSTEM**

**14.9 HOSE BIBBS AND EXTERIOR SUPPLY PIPES**

The hose bibb on the rear of the house is loose. This could result in damage to the water pipe and leakage. The bibb should be securely fastened to the wall.



**INTERIOR**

**15.5 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 the doors are equipped with hinge mounted door stops. This type of door stop can damage the door skin, tear out hinge screws, and damage the door trim and frame. The removal and replacement with wall or floor mounted door stops is recommended.

One of the bedroom doors rub on the carpeting. This can damage the carpet and prevents air circulation under the door. Doors should be undercut 3/4".

## INSULATION

### 18.3 FLOOR INSULATION

The entry floor is not insulated. This allows heat loss to occur through the floor. The installation of floor insulation is recommended.



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**

**17417 NE 131st St.  
Redmond, WA**

**September 28, 2020**

**Prepared for: Roy & Linda McIntosh**

**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.**

## Inspection Table of Contents

GENERAL INFORMATION	4
BUILDING SITE	7
BUILDING EXTERIOR	8
ROOF	10
ATTIC	11
GARAGE	12
ELECTRICAL SYSTEM	13
ELECTRIC HEATING	15
HEATING SYSTEM	15
WATER HEATER	17
KITCHEN	18
BATHROOMS	20
LAUNDRY ROOM	23
PLUMBING SYSTEM	23
INTERIOR	25
FIREPLACES, WOOD STOVES AND SPACE HEATERS	26
ENVIRONMENTAL ISSUES	27
INSULATION	28
STRUCTURE	29
CRAWLSPACE	30

9/29/2020

**Mr. & Mrs. Roy & Linda McIntosh  
17417 NE 131st St.  
Redmond,WA**

Dear Roy & Linda,

Thank you for inviting Clark Inspections 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;

**17417 NE 131st St.**

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

Clark Inspections

## GENERAL INFORMATION

### CLIENT & SITE INFORMATION:

**1.1 DATE OF INSPECTION:**

9/28/2020.

**1.2 INSPECTOR'S NAME:**

Terry Clark.

**1.3 CLIENT NAME:**

Mr. & Mrs. Roy & Linda McIntosh.

**1.4 MAILING ADDRESS:**

17417 NE 131st St.  
Redmond WA.

**1.5 CLIENT E-MAIL ADDRESS**

[roym132180@aol.com](mailto:roym132180@aol.com).

**1.6 ADDRESS OF PROPERTY INSPECTED**

17417 NE 131st St.  
Redmond WA.



Northwest elevation



South elevation

### CLIMATIC CONDITIONS:

**1.7 WEATHER:**

Clear.

**1.8 APPROXIMATE OUTSIDE TEMPERATURE:**

72 degrees.

**BUILDING CHARACTERISTICS:****1.9 MAIN ENTRY FACES:**

North.

**1.10 ESTIMATED AGE OF BUILDING:**

The building is approximately 38 years old.

**1.11 BUILDING TYPE:**

Single family residence.

**1.12 SPACE BELOW GRADE:**

Slab on grade, Garage & Crawlspce.

**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

A below grade roof water drain system is used to divert rain water discharged from the downspouts 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. When water entry or moisture problems are discovered we recommend checking the entire roof water drain system to insure that it is functioning properly.

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.

Trees are touching the building on the east side. Low hanging tree branches can damage the roof, gutters, siding, doors and/or windows. Tree branches should be trimmed back where necessary.



### 2.4 DRIVEWAY

The driveway is paved with asphalt paving mix. The driveway is properly installed and is performing its intended function.

### 2.5 PATIO

The wooden dividers separating the concrete patio sections will eventually deteriorate to a condition where the gaps would be

a trip hazard. Replacement with mortar is recommended.

## 2.6 WALKWAY

The walkway has cracked and settled differentially. This was probably caused by inadequate preparation of the soil prior to the placement of the concrete. This condition can be repaired by pressure grouting the sunken portion of the walkway or by removing and replacing it. Grinding down the raised edges of the concrete will also mitigate the hazard. The walkway remains functional despite this condition. However, the raised edges of the concrete can be a trip hazard for some people. Repairs should be made as necessary.

The wooden dividers separating the concrete walkway sections have deteriorated to a point where the gaps are a trip hazard. Replacement with mortar is recommended.

Many legal and public works departments have defined a trip hazard as an irregularity in a walking surface exceeding one inch (1") in height. All walking surfaces should maintain, free of a vertical surface change of 3/4" or more, in the interest of public and personal safety.



## 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

Cedar lap siding is used as an exterior wall cladding. Cedar is a wood that is durable and moderately resistant to decay. Maintaining the finish on the exposed siding will maximize its service life. 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.

Untreated wood in direct contact with concrete was observed along the patio and front stoop. Untreated wood should be raised 1-2" above the concrete. Treating the wood with a preservative sometimes will prevent wood destroy organism damage.



### 3.3 SOFFITS AND OVERHANGS

The roof lacks overhangs on the gable ends. Overhangs protect the exterior walls, windows, doors, siding and exterior finish from the ravages of direct rainfall. Houses without overhangs will generally require more frequent exterior maintenance and are also more likely to suffer from moisture related problems in the exterior walls. Regular maintenance of gutters, exterior finishes and caulking is recommended.

Gaps over 1/4" in size adjacent the soffit vent blocks will allow insects and rodents to enter the attic. Covering any gaps with screening, a strip of wood and/or caulking is recommended.



### 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.

### 3.6 DECK

The deck is constructed from a combination of pressure treated fir and cedar. The deck is well constructed and is performing its intended function. Untreated wood (fir or cedar) will eventually rot. Annual treatments of the deck with a good quality wood preservative/water repellent will prevent cupping, checking and rotting of the wood and will maximize its service life. Do not use paint on exposed deck surfaces as it will peel and become difficult to maintain. Paint also traps moisture in the wood and will accelerate deterioration.

The deck structure lacks lateral bracing. The installation of a diagonal brace underneath the deck is recommended.

### 3.7 DECK RAILINGS

The deck railings are well constructed and are performing their intended function.

### 3.8 STAIRS

The deck stairs are performing their intended function.

The stair rise spacing is too wide. This is a hazard for small children. The spacing should be reduced as a safety upgrade. Current standards require that a 4" sphere not pass through the opening.



### 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 steep. Metal gutters are used to collect the roof water drainage. The roof is approximately 15 years old.

### 4.2 INSPECTION METHOD

The roof was too steep to walk on safely. Therefore the inspector examined the roof from the edge and from windows.

### 4.3 SKYLIGHTS

The skylights are properly installed and there was no evidence of leakage underneath them.

### 4.4 CHIMNEYS

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

### 4.5 GAS APPLIANCE VENTS

The gas appliance vent is corroded above the roof line. Cleaning and painting the vent will prolong its service life.

### 4.6 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.

### 4.7 MAINTENANCE AND REPAIRS

The roof is in need of routine maintenance. The surface should be blown off or washed with a high volume low pressure garden hose to remove moss and organic debris. Performing this maintenance will improve the appearance and increase the life expectancy of the roof.

### 4.8 GENERAL COMMENTS

The roofing material was properly installed and is in serviceable condition. With proper care and maintenance this roof should

remain serviceable for up to 15 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 two of the bedrooms. The attics were entered and inspected from within.

### 5.2 VENTILATION

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 locations are compromised in some areas of the attic. 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 fans 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

There is evidence of rodent activity in the attic. The first step in eliminating rodents from 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 further activity. Once this work is completed, snap traps baited with peanut butter should be installed and monitored. The absence of rodents in the traps typically means that the rodents have been excluded from the area.

## GARAGE

The garage often contains major components of the plumbing, heating and electrical systems. These components are discussed under their respective headings. Components that were tested and/or inspected in the garage and reported here include the garage floor, overhead door(s), automatic openers and fire resistive barriers.

*ATTACHED GARAGE - The following components were inspected:*

### 6.1 GARAGE FLOOR

There are small shrinkage cracks visible in the concrete, however, there is no vertical displacement of any portion of the slab. Shrinkage cracks are common in garage floors and are not considered a structural defect. The garage floor is properly installed and is functioning as intended.

### 6.2 OVERHEAD GARAGE DOORS

The garage is fitted with three roll-up doors. The garage doors are properly installed and are performing their intended function.

Safeties are cables run through the center of the garage door springs that prevent broken springs from becoming projectiles that can cause injury. There are no safeties installed. The installation of safeties is recommended.



### 6.3 GARAGE DOOR OPENER

The garage door openers were tested and were functional. The auto stop reverse safety switches were functioning as intended.

The Photo-eye beam was installed too high above the floor of the garage to adequately offer protection for small children and/or pets. We recommend that the photo-eye be lowered to within 4-6" of the floor.



### 6.4 FIRE SEPARATION

There are voids in the fire resistive barrier between the living space and garage that will allow flames to penetrate. The gypsum barrier slows the spread of a fire from the garage to the structure and/or living space. Patching the voids with a fire retardant caulk is recommended.

The installation of a furnace vent thimble is recommended to prevent flames to spread to the structure.



### 6.5 PASSAGE DOOR

The door between the garage and living space is a solid core door with a self closing hinge. The door is properly installed and is in good condition.

### 6.6 EXTERIOR DOOR(S)

The exterior door to the garage has been properly installed and is in good condition.

The back door has a thin panel at the bottom which can easily be kicked in. Replacing or reinforcing the door is recommended as an upgrade to enhance your personal security.

## 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:*

### 7.1 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.

### 7.2 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.

### 7.3 SERVICE PANEL LOCATION

The service panel is located in the garage.

### 7.4 MAIN DISCONNECT LOCATION

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

### 7.5 SERVICE ENTRANCE CONDUCTORS/CABLES/RACEWAYS

The service entrance conductors are 4/0 aluminum and have an ampacity of 200 amps. The service entrance conductors are properly installed and in serviceable condition.

### 7.6 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.

### 7.7 SERVICE GROUNDING AND BONDING

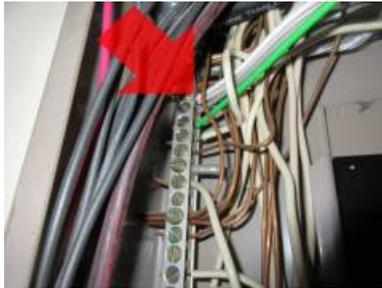
The service grounding electrode conductor attachment point was not visible for inspection. The adequacy of the service ground was not determined. The evaluation of this connection may require removal of finish materials and is beyond the scope of this inspection.

### 7.8 SERVICE PANEL

The electrical service panel is properly installed and in serviceable condition except where noted below.

One of the neutral wires is double tapped on the buss bar. Double tapping means that two conductors share a single terminal. Double tapped terminals can loosen and overheat and therefore are not permitted unless the terminal is specifically listed for multiple wires. This defect is easily repaired by connecting the two wires to a "pig tail", securing them with a wire cap, and then inserting the pig tail conductor under the terminal.

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.



### 7.9 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.

### 7.10 WIRING

There were no defects observed in the visible and accessible wiring.

### 7.11 ALUMINUM WIRING

This house uses stranded aluminum wire for service entrance conductors and 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.

### 7.12 RECEPTACLES

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

### 7.13 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.

The installation of additional GFCI protection in the all of the garage, kitchen and exterior receptacles is recommended.

The GFCI receptacle in the main floor powder room does not trip when a ground fault is introduced. This is caused by an improperly wired or defective GFCI. Repair or replacement of this GFCI is recommended.

### 7.14 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 AFCI protected.

### 7.15 LIGHTS

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

### 7.16 SWITCHES

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

### 7.17 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.

## ELECTRIC HEATING

Heat is provided by electric resistance heaters. Electric heat is 100% efficient as there is no waste heat of combustion gases as in fossil fuel burning furnaces. However, electric heaters are more expensive to operate than gas or oil fired heaters because electrical energy is more expensive per therm (i.e., unit of energy equal to 100,000 Btu). Each heating unit and/or heating zone is tested using existing operator controls. Information on heating units is outlined below.

*ELECTRIC HEATING - The following components were inspected:*

### 8.1 ELECTRIC FAN ASSISTED WALL HEATERS

An electric wall heater is used for space heating in the bedroom. These heaters have small fans in them to circulate the air over an electric heating element. The heater was inspected and tested. The heater is functional.

The control knob is missing. We recommend replacement of the heater control knob.

This type of heater must be cleaned annually. An accumulation of dust inside this type of heater is a fire hazard. To clean the heater, turn off the power at the circuit breaker panel then remove the cover from the front of the heater. Use a paint brush to loosen the dirt and then vacuum it up.



## HEATING SYSTEM

A natural gas, propane or oil fired furnace or boiler consists of the self contained furnace or boiler, ducts or pipes for heated air or water distribution, thermostats for regulating the amount of heat and a vent system for removing the combustion gases from the building. The readily accessible portions of these items are examined for defects and are tested using normal operator controls. Most heating systems should be serviced annually by a qualified service technician. Failure to perform regular maintenance will affect the reliability of the heating system and will reduce service life.

*FORCED AIR HEATING SYSTEM - The following components were inspected:*

### 9.1 GENERAL INFORMATION

Heat is provided by a high efficiency natural gas fired condensing furnace. The furnace is located in the garage. The furnace is approximately 12 years old. The input rating of the furnace is 80,000 BTU. This BTU rating is typical of a home of this size and age.

### 9.2 GAS PIPING

The flex connector is properly installed and is performing its intended function.

### **9.3 AUTOMATIC GAS VALVE**

The automatic gas valve or safety valve is designed to prevent the emission of fuel into the furnace if it does not detect heat for ignition. These valves are generally very reliable. The automatic gas valve was functioning as intended.

### **9.4 IGNITION**

The furnace uses an electronic spark ignition. This component was functioning as intended.

### **9.5 BURNERS**

The gas burners are properly installed and are functioning as intended.

### **9.6 COMBUSTION AIR**

The combustion air provides the oxygen for the fuel burning appliances. Combustion air also aids in the movement of combustion gases up the flue. Adequate ventilation around all fuel burning appliances is vital for their safe operation. The air can come from inside the house or from outside providing that the amount of air reaching the appliance is sufficient to maintain efficient combustion and draft. The combustion air supply is adequate.

### **9.7 ELEVATION ABOVE GARAGE FLOOR**

The burners in the furnace are elevated at least 18" above the garage floor in accordance with industry standards. This elevation prevents ignition of gasoline fumes that might leak from cars, lawn mowers, gas cans, etc.

### **9.8 HEAT EXCHANGER**

The heat exchanger is not visible without disassembling and removing it from the furnace. Cracks typically develop in heat exchangers after 10-20 years. Have your gas furnace technician check the heat exchanger during the next major service.

### **9.9 DRAFT INDUCER**

The draft inducer pulls the combustion gases through the heat exchanger and pushes them up the vent connector into the flue. The draft inducer was functioning as intended.

### **9.10 VENT**

The PVC plastic vent pipe for the condensing furnace is properly installed and is functioning as intended.

### **9.11 BLOWER**

The blower draws air from the return air ducts and pushes it over the heat exchanger where it is heated. The air is then pushed through the distribution ducts into the rooms. The blower was tested and was functioning as intended.

### **9.12 AIR FILTER**

The air filter is located in the return air plenum adjacent to the furnace. The air filter should be cleaned or replaced at least 2-3 times during the heating season.

### **9.13 DUCTS**

The ducts are constructed out of sheet metal. The ducts are properly installed and are performing their intended function.

### **9.14 THERMOSTAT**

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

### **9.15 CONDENSATE DRAIN/PUMP**

High efficiency furnaces like this one produce condensate water inside the furnace that must be collected and disposed of. A small vessel with an automatic pump is installed to receive the condensate water and pump it to the exterior of the house. This pump is properly installed and is functioning as intended.

### **9.16 GENERAL COMMENTS**

The furnace responded to the thermostats call for heat and all major components were functional. This type of furnace should

be serviced annually.

## 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:*

### 10.1 LOCATION OF UNIT

The water heater is located in the garage.

### 10.2 GENERAL INFORMATION

The water heater fuel is natural gas. The capacity of the water heater is 40 gallons. The input rating of the burner is approximately 40,000 BTU. The water heater is approximately 6 years old. Water heaters of this type typically last about 10-15 years.

### 10.3 PRESSURE RELIEF VALVE

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

### 10.4 SHUTOFF VALVE

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

### 10.5 WATER CONNECTIONS AT TANK

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

### 10.6 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 framing. 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.



### 10.7 AUTOMATIC GAS VALVE

The automatic gas valve or safety valve is designed to prevent the emission of fuel into the appliance if it does not detect heat for ignition. These valves are generally very reliable. The automatic gas valve was functioning as intended.

### 10.8 BURNER

The gas burner is properly installed and is functioning as intended.

### 10.9 GAS PIPING

The flex connector is properly installed and is performing its intended function.

### 10.10 VENT

The water heater uses a type B vent from the top of the draft hood to the exterior. The visible portion of the B vent is functioning as intended.

The water heater vent connector is too close to combustible material. The minimum clearance of 6" is required between the single wall vent connector and the combustible surface. The double wall type B vent requires only 1" of clearance.



#### 10.11 COMBUSTION AIR

The combustion air provides the oxygen for the fuel burning appliances. Combustion air also aids in the movement of combustion gases up the flue. Adequate ventilation around all fuel burning appliances is vital for their safe operation. The air can come from inside the house or from outside providing that the amount of air reaching the appliance is sufficient to maintain efficient combustion and draft. The combustion air supply is adequate.

#### 10.12 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.

#### 10.13 ELEVATION ABOVE GARAGE FLOOR

The burner of the water heater is elevated at least 18" above the garage floor in accordance with industry standards. This elevation prevents ignition of gasoline fumes that might leak from cars, lawn mowers, gas cans, etc.

#### 10.14 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:*

#### 11.1 COUNTERTOPS

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

#### 11.2 CABINETS

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

#### 11.3 FLOORING MATERIAL

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

#### 11.4 VENTILATION

Ventilation in the kitchen is provided by a fan built into the bottom of the microwave oven over the stove. The vent is ducted to the exterior. The vent fan is properly installed and is performing its intended function.

#### 11.5 SINK FAUCET

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

#### 11.6 SINK

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

**11.7 DRAINS, TRAPS AND TRAP ARMS**

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

**11.8 AIR GAP**

An air gap called a Johnson Tee is installed in the kitchen wall. This air gap protects the dishwasher from contamination caused by a backflow of waste water. The cap protruding on the exterior wall opposite the dishwasher is not drilled. This renders the air gap non-functional. Drilling a 1/4" hole in the end of the cap will restore its function. The remaining visible portions of the Johnson Tee were properly installed and functioning as intended.

**11.9 RANGE**

The range was tested and was functioning as intended.

No tip out protection was installed for the range. This is a hazard for small children. We recommend tip out protection devices be installed.

**11.10 OVEN**

The oven was tested and was functioning as intended.

**11.11 MICROWAVE**

The microwave oven was tested and was functioning as intended.

**11.12 DISHWASHER**

The dishwasher was tested and was functioning as intended.

**11.13 GARBAGE DISPOSAL**

The garbage disposal was tested and was functioning as intended.

**11.14 REFRIGERATOR**

The refrigerator is functioning as intended.

**11.15 RECEPTACLES**

There are no GFCI protected receptacles in the kitchen. The installation of GFCI protection is recommended.

*The following components were inspected:*

**11.16 AREA**

Lower.

**11.17 COUNTERTOPS**

The countertops are covered with plastic laminate. The counter tops are properly installed and are in good condition.

**11.18 CABINETS**

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

**11.19 SINK FAUCET**

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

**11.20 SINK**

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

**11.21 DRAINS, TRAPS AND TRAP ARMS**

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

**11.22 REFRIGERATOR**

The refrigerator is functioning as intended.

**11.23 RECEPTACLES**

There are no GFCI protected receptacles in the kitchen. The installation of GFCI protection 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****12.1 LOCATION**

Upper Floor Hallway.

**12.2 BATHTUB**

The bathtub is properly installed and is in good condition.

**12.3 TUB WALLS**

Grout is missing from between some of the wall tiles. This can allow water to enter through the tile and can damage the walls. Regrouting the wall tile is recommended.

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.

**12.4 FLOORING MATERIAL**

The floor is covered with vinyl tiles. The floor is properly installed and is in good condition.

It is important to maintain the caulking around bathtubs and showers, especially at the intersection between the tub or shower and the floor. Failure to maintain this seal will often result in damage to flooring materials, subflooring and framing.

**12.5 TOILET**

The toilet is loose where it mounts to the floor. A loose toilet will eventually start to leak and will damage the flooring material, underlayment and subfloor. The most reliable fix for this condition is to remove the toilet and install a new wax seal. The toilet should then be securely mounted to the floor.

**12.6 SINK**

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

**12.7 DRAINS, TRAPS AND TRAP ARMS**

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

**12.8 FAUCET FIXTURES**

The faucet fixtures were tested and were functioning as intended.

**12.9 CABINETS**

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

**12.10 COUNTERTOP**

The countertop is covered with slab granite. The countertop is properly installed and in good condition.

**12.11 VENTILATION**

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

**12.12 GFCI RECEPTACLES**

There are no GFCI protected receptacles in this bathroom. The installation of GFCI protection is recommended.

**BATHROOM****12.13 LOCATION**

Main Floor, Powder Room.

**12.14 FLOORING MATERIAL**

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

**12.15 TOILET**

The toilet is loose where it mounts to the floor. A loose toilet will eventually start to leak and will damage the flooring material, underlayment and subfloor. The most reliable fix for this condition is to remove the toilet and install a new wax seal. The toilet should then be securely mounted to the floor.

**12.16 SINK**

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

**12.17 DRAINS, TRAPS AND TRAP ARMS**

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

**12.18 FAUCET FIXTURES**

The faucet fixture was tested and was functioning as intended.

**12.19 CABINETS**

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

**12.20 COUNTERTOP**

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

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

**12.21 VENTILATION**

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

**12.22 GFCI RECEPTACLES**

The GFCI receptacle in the main floor powder room does not trip when a ground fault is introduced. This is caused by a

improperly wired or defective GFCI. Repair or replacement of this GFCI is recommended.

#### *BATHROOM*

#### **12.23 LOCATION**

Master Bedroom.

#### **12.24 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.

#### **12.25 BATHTUB**

The bathtub is properly installed and is in good condition.

#### **12.26 GLASS ENCLOSURE**

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

#### **12.27 FLOORING MATERIAL**

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

The grout is cracked at the intersection between the tub and floor. This can lead to water damage to the flooring and substrate. Caulking this area with a flexible grout is recommended.

#### **12.28 TOILET**

The toilet was flushed and was functioning as intended.

#### **12.29 SINK**

The bathroom sinks are properly installed and are in good condition.

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

#### **12.30 DRAINS, TRAPS AND TRAP ARMS**

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

#### **12.31 FAUCET FIXTURES**

The faucet fixtures were tested and were functioning as intended.

#### **12.32 CABINETS**

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

#### **12.33 COUNTERTOP**

The countertop is covered with Corian. The countertop is properly installed and in good condition.

#### **12.34 VENTILATION**

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

#### **12.35 GFCI RECEPTACLES**

There are no GFCI protected receptacles in this bathroom. The installation of GFCI protection is recommended.

## LAUNDRY ROOM

Appliances are tested when present and when circumstances allow.

*The following components were inspected:*

### 13.1 CABINETS

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

### 13.2 COUNTERTOP

The counter top is covered with plastic laminate. The counter top is properly installed and in good condition.

### 13.3 FLOORING MATERIAL

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

### 13.4 VENTILATION

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

### 13.5 SINK

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

### 13.6 SINK FAUCET

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

### 13.7 DRAINS, TRAPS AND TRAP ARMS

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

### 13.8 APPLIANCES

The plumbing and electrical hookups for the washer and dryer appear to be properly installed and in serviceable condition. The appliances themselves were not tested.

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



### 13.9 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:*

#### **14.1 PLUMBING SYSTEM SPECIFICATIONS**

The building is on a public water supply system. The building is on a private (septic) sewage disposal system. Copper tubing is used for the water supply piping. ABS plastic is used for the drain, waste and vent pipes.

#### **14.2 MAIN WATER SHUTOFF VALVE**

The main water supply shutoff valve is located in the garage. It was tested and was functional.

#### **14.3 MAIN WATER LINE**

The main water line is buried underground and was not visible for inspection. The flow indicator on the water meter was checked with all the water shut off in the house. There was no movement of the flow indicator. This suggests that there are no leaks in the main water line. You should check the meter periodically (2-4 times a year) with all the water in the house shut off. Movement of the flow indicator on the meter means that there is a leak either inside the house or in the main line underground.

#### **14.4 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.

#### **14.5 WATER PRESSURE**

The water pressure is 60 PSI. This is in the normal range of 30-80 PSI.

#### **14.6 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".

#### **14.7 VENT PIPES**

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

#### **14.8 FAUCET FIXTURES**

All faucet fixtures were tested and were functioning as intended.

#### **14.9 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.

The hose bibb on the rear of the house is loose. This could result in damage to the water pipe and leakage. The bibb should be securely fastened to the wall.



#### **14.10 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.

#### **14.11 GAS METER**

The gas meter is located on the south 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.

#### **14.12 SEPTIC SYSTEM**

The house uses a private (septic) sewage disposal system. The septic system was not inspected. Our general house inspection will sometimes reveal major defects in the septic system (e.g., complete blockage, complete drain field failure), providing that it is not raining and the ground is dry. However, we still recommend that you have the septic tank pumped out and the septic system inspected by a qualified septic system service company, prior to the closing of the sale. Ask for a "Septic Tank Operational Report". It is also recommended that you have the tank pumped out every four years and avoid introducing grease and non-biodegradable foreign matter into the septic system. This septic system uses a pump to move the effluent from the pump tank on up to the drain field which is located at an elevation that is higher than the septic tank. These pumps have a limited service life of about 10-15 years. Pump failure will allow effluent to seep out of the septic tank and pump tank.

The pump tank is equipped with an alarm that will be activated if the pump fails. If you hear the alarm sound, do not introduce any additional sewage into the septic tank and call a septic systems contractor for repair.

## **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:*

#### **15.1 GENERAL COMMENTS**

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

#### **15.2 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.

#### **15.3 STAIRS**

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

The stair railing baluster spacing is too wide. This is a hazard for small children. The baluster spacing should be reduced as a safety upgrade. Current standards require that a 4" sphere not pass through the railing.

#### **15.4 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.

#### **15.5 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.

Several of the doors are equipped with hinge mounted door stops. This type of door stop can damage the door skin, tear out

hinge screws, and damage the door trim and frame. The removal and replacement with wall or floor mounted door stops is recommended.

One of the bedroom doors rub on the carpeting. This can damage the carpet and prevents air circulation under the door. Doors should be undercut 3/4".

### **15.6 CLOSET DOORS**

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

### **15.7 WINDOWS**

The window frames are constructed from aluminum and 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.

### **15.8 SMOKE DETECTORS**

There is a smoke detector in the hallway outside of the bedrooms. Additional smoke detectors should be installed inside the bedrooms near the door.

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 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.

### **15.9 DOOR BELL**

The doorbell was functioning as intended.

## **FIREPLACES, WOOD STOVES AND SPACE HEATERS**

*The following components were inspected:*

### **16.1 METAL FIREPLACES**

The visible portion of the metal fireplace in the family room was evaluated. The fireplace is in good condition and no defects or deficiencies were observed.

The living room fireplace is a factory built gas appliance. The firebox is sealed from the house interior which makes it more efficient and prevents combustion gases from spilling into the house. The vent for this type of fireplace is above the roof. The gas valve and piezo ignition is located underneath behind a removable panel. Instructions for lighting the pilot are located in this area. Testing revealed that the fireplace was functioning properly.

The gas supply for the fireplace is located on the wall or floor adjacent to the hearth. The key that turns on this valve should be kept out of the reach of children.

### **16.2 DAMPERS**

The fireplace damper is functioning as intended. A fireplace damper that is left open when the fireplace is not being used allows huge quantities of heated air to escape up the chimney. Keeping your fireplace damper closed will result in a

significant reduction in heating costs.

## 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:*

### 17.1 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).

### 17.2 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.

### 17.3 ASBESTOS

Asbestos is a naturally occurring mineral fiber that has been used in more than 3,000 different construction materials and manufactured products. It is commonly found in heating system insulation, decorative spray-on ceiling treatments, vinyl flooring, cement shake siding and a variety of additional materials. Some asbestos-containing materials were still being installed into the late 1980s.

The asbestos content of different materials varies according to the product and how it is used. Among those materials with higher concentrations of asbestos are insulating products on heating systems and the backing on sheet vinyl flooring. However, an uncontrolled disturbance of any asbestos-containing material in any concentration may be dangerous to your health!

Why is it a problem? Breathing asbestos fibers could kill you. When disturbed, asbestos breaks down into fibers up to 1,200 times thinner than a human hair. When inhaled, they become trapped in lung tissues. Medical research tells us that up to 30 years after inhalation, asbestos fibers can cause lung cancer or mesothelioma, a related terminal cancer of the tissue lining the chest cavity.

Because asbestos is a naturally occurring mineral and has been so widely used in manufactured products, including automobile brake linings, it can be found almost everywhere. Trace amounts are in the air we breathe every day. Most of us have asbestos fibers in our lungs.

On the other hand, there's no known safe level of asbestos exposure. That's why medical, environmental health and regulatory organizations stress the need to protect health by minimizing exposure to airborne asbestos fibers. This is particularly true when asbestos fibers accumulate at elevated levels. Elevated levels result from uncontrolled disturbances and removal of asbestos-containing materials.

How do I know if it's asbestos? Don't guess! Look for asbestos markings on the product or track the product back to its manufacturer or supplier. If these approaches don't work, submit a small sample for laboratory analysis. Cost is minimal. Laboratories are listed in the yellow pages under "Asbestos - Consulting and Testing." Ask a laboratory technician to instruct you how to safely take a sample. If you decide not to check for asbestos in a suspected material, you should assume it contains asbestos and treat it accordingly.

## 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:*

### 18.1 ATTIC INSULATION

The attic is insulated with blown in fiberglass insulation. The approximate R value of this insulation is 27. This provides good resistance to heat transfer.

### 18.2 WALL INSULATION

The walls are insulated with fiberglass batt insulation. The 2x4 walls suggest that it is 3-1/2" R-11 fiberglass.

### 18.3 FLOOR INSULATION

Most of the floors are insulated with 3-1/2" R-11 fiberglass batt insulation. The floor insulation has been properly installed and is in good condition.

The entry floor is not insulated. This allows heat loss to occur through the floor. The installation of floor insulation is recommended.



#### 18.4 DUCT INSULATION

The duct insulation has been properly installed and is performing its intended function.

## 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:*

#### 19.1 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 X 4 dimensional lumber. The exterior wall sheathing is plywood. The roof structure is constructed out of a combination of manufactured trusses and conventional stick framing. The roof sheathing is plywood installed over a layer of open sheathing.

#### 19.2 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.

#### 19.3 MUDDSILL

The mudsill is typically a 2x4 or 2x6 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.

#### 19.4 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.

#### 19.5 BEAMS AND POSTS

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

#### 19.6 FLOOR JOISTS

The visible portions of the floor joists are properly installed and are performing their intended function.

**19.7 SUBFLOORING**

The visible portions of the subfloor are properly installed and are functioning as intended.

**19.8 WALLS**

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

**19.9 ROOF STRUCTURE**

The roof structure is constructed from a combination of factory-built, engineered trusses and 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. No defects or deficiencies were observed.

**19.10 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:*

**20.1 CRAWLSPACE ACCESS**

The crawlspace access is located on the lower floor. The crawlspace was entered and all accessible areas were inspected.

**20.2 MOISTURE**

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

**20.3 VAPOR RETARDER**

A thin layer of concrete often referred to as "rat proofing" covers the soil in the crawlspace. Besides the function that the name implies, the concrete retards the transmission of moisture from the soil into the crawlspace atmosphere.

**20.4 PEST CONTROL**

An examination of the crawlspace did not reveal evidence of rodent activity.

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:

- x Good construction practices which exclude water and prevent high moisture conditions.
- x Removal of wood debris and form wood from the crawlspace and around the building exterior.
- x Maintaining the roof water drain system.
- x Maintaining good yard drainage away from the foundation wall.
- x Avoiding wood-soil contact in the crawlspace or around the house exterior.

- × 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.