Healthy Home Inspections LLC

INVOICE

Healthy Home Inspections LLC
4132 Atlanta Hwy Ste 110-169
Loganville, GA 30052
Inspected By: W. David Bledsoe

Inspection Date: 8/22/2020
Report ID: 20200822-4805-Lafayette-Court

Customer Info:	**Inspection Property:**
Brian & Ilissa Feiler **Customer's Real Estate Professional:** Rachael Blatt Atlanta Fine Homes Sotheby's International Realty	4805 Lafayette Court Sandy Springs, GA 30327

Inspection Fee:

Service	Price	Amount	Sub-Total
Home Inspection	795.00	1	795.00
Radon Test	175.00	1	175.00

Tax $0.00
Total Price $970.00

Payment Method: Credit Card
Payment Status: A Paypal Invoice will be e-mailed today
Note:

Inspection Report

Brian & Ilissa Feiler

Property Address:
4805 Lafayette Court
Sandy Springs, GA 30327

Healthy Home Inspections LLC

W. David Bledsoe
4132 Atlanta Hwy Ste 110-169
Loganville, GA 30052

ICC Code Certified

GAHI Certified Inspector

GA Lic. Contractor

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General Info

Property Address
4805 Lafayette Court
Sandy Springs, GA 30327

Date of Inspection
8/22/2020

Report ID
20200822-4805-Lafayette-Court

Customer(s)
Brian & Ilissa Feiler

Time of Inspection
09:30 AM

Real Estate Agent
Rachael Blatt
Atlanta Fine Homes Sotheby's International Realty

Inspection Details

Age Of Home:
Built in 2013-2014

Client Is Present:
Yes

Weather:
Partly Cloudy

Temperature:
Over 80

Rain in last 3 days:
Yes

Radon Test:
Yes

Fungal Testing:
No,Testing for fungal growth is beyond the scope of this inspection Not tested.

Comment Key & Definitions

Comment Key or Definitions

The following definitions of comment descriptions represent this inspection report. All comments by the inspector should be considered before purchasing this home. Any recommendations by the inspector to repair or replace suggests a second opinion or further inspection by a qualified contractor. All costs associated with further inspection fees and repair or replacement of item, component or unit should be considered before you purchase the property.

Inspected (IN) = I visually observed the item, component or unit and if no other comments were made then it appeared to be functioning as intended allowing for normal wear and tear.

Not Inspected (NI)= I did not inspect this item, component or unit and made no representations of whether or not it was functioning as intended and will state a reason for not inspecting.

Not Present (NP) = This item, component or unit is not in this home or building.

Repair or Replace (RR) = The item, component or unit is not functioning as intended or needs further inspection by a qualified contractor. Items, components or units that can be repaired to satisfactory condition may not need replacement.

Building Code Violation (BCV) = The item, component or unit is not installed per the Georgia building code requirement(s) when the item, component or unit was installed.

This home is approximately 6 years old, and the home inspector considers this while inspecting. It is common to have areas that no longer comply with current code. Although references may be made to codes and standards, the inspector is ONLY required to enumerate building codes for new construction inspections. This is not a new home, and this home cannot be expected to meet current code standards. The inspector makes every effort to point out safety issues. It is common that homes of any age will have had repairs performed, and some repairs may not be in a workmanlike manner. Some areas may

appear less than standard. This inspection looks for items that are not functioning as intended. It does not grade the repair. It is common to see old plumbing or mixed materials. Sometimes water signs in crawlspaces or basements could be years old from a problem that no longer exists. On the other hand, it may still need further attention and repair. Determining this can be difficult on an older home. Often in older homes, there are signs of damage to wood from wood eating insects. Having this is typical and fairly common. If the home inspection reveals signs of damage, you should have a pest-control company inspect further for activity and possible hidden damage. The home inspection does not look for possible manufacturer re-calls on components that could be in this home. Always consider hiring the appropriate expert for any repairs or further inspection.

I encourage you to purchase a home warranty to cover the unexpected repairs that are associated with owning a home. I also, recommend hiring a pest-control and a indoor air quality company to perform a WDO (termite), rodent, and air quality inspections, of the home, prior to closing. Inspecting and testing the home for fungal growth is beyond the scope of this inspection. The radon levels were not elevated. I gave the buyers a copy of the radon report.

1. STRUCTURAL COMPONENTS

The Home Inspector shall observe structural components including foundations, floors, walls, columns or piers, ceilings and roof. The home inspector shall describe the type of Foundation, floor structure, wall structure, columns or piers, ceiling structure, roof structure. The home inspector shall: Probe structural components where deterioration is suspected; Enter under floor crawl spaces, basements, and attic spaces except when access is obstructed, when entry could damage the property, or when dangerous or adverse situations are suspected; Report the methods used to observe under floor crawl spaces and attics; and Report signs of abnormal or harmful water penetration into the building or signs of abnormal or harmful condensation on building components. The home inspector is not required to: Enter any area or perform any procedure that may damage the property or its components or be dangerous to or adversely effect the health of the home inspector or other persons.

Styles & Materials

FOUNDATION WALLS:
POURED CONCRETE
NOT VISIBLE IN SOME LOCATIONS

FOUNDATION TYPE:
BASEMENT
CONCRETE SLAB

FLOOR STRUCTURE:
WOOD I JOISTS
CONCRETE SLABS
NOT VISIBLE IN SOME AREAS

WALL STRUCTURE:
2 X 4 WOOD
2 X 6 WOOD
NOT VISIBLE IN SOME AREAS
CONCRETE

ROOF FRAMING:
2 X 6 RAFTERS
OSB SHEATHING
NOT VISIBLE IN SOME AREAS

ROOF-TYPE:
GABLE
HIP
SHED

METHOD USED TO OBSERVE ATTIC:
FROM ENTRY
WALKED
SOME AREAS OF THE ATTIC ARE NOT ACCESSIBLE NOT INSPECTED

ATTIC INFORMATION:
PULL-DOWN STAIRS
KNEE-WALL DOOR
LIGHTS IN ATTICS

		IN	NI	NP	RR	BCV
1.1	FOUNDATIONS (Report signs of abnormal or harmful water penetration into the building or signs of abnormal or harmful condensation on building components.)	•				
1.2	WALLS (Structural)	•				
1.4	FLOORS (Structural)	•				
1.5	ROOF STRUCTURE AND ATTIC	•				
1.6	CEILINGS (structural)	•				

IN= Inspected, NI= Not Inspected, NP= Not Present, RR= Repair or Replace, BCV= Building Code Violation **IN NI NP RR BCV**

The structure of the home was inspected and reported on with the above information. While the inspector makes every effort to find all areas of concern, some areas can go unnoticed. Please be aware that the inspector has your best interest in mind. Any repair items mentioned in this report should be considered before purchase. It is recommended that qualified contractors be used in your further inspection or repair issues as it relates to the comments in this inspection report.

2. EXTERIOR

The home inspector shall observe: Wall cladding, flashings, and trim; Entryway doors and a representative number of windows; Garage door operators; Decks, balconies, stoops, steps, areaways, porches and applicable railings; Eaves, soffits, and fascias; and Vegetation, grading, drainage, driveways, patios, walkways, and retaining walls with respect to their effect on the condition of the building. The home inspector shall: Describe wall cladding materials; Operate all entryway doors and a representative number of windows; Operate garage doors manually or by using permanently installed controls for any garage door operator; Report whether or not any garage door operator will automatically reverse or stop when meeting reasonable resistance during closing; and Probe exterior wood components where deterioration is suspected. The home inspector is not required to observe: Storm windows, storm doors, screening, shutters, awnings, and similar seasonal accessories; Fences; Presence of safety glazing in doors and windows; Garage door operator remote control transmitters; Geological conditions; Soil conditions; Recreational facilities (including spas, saunas, steam baths, swimming pools, tennis courts, playground equipment, and other exercise, entertainment, or athletic facilities); Detached buildings or structures; or Presence or condition of buried fuel storage tanks. The home inspector is not required to: Move personal items, panels, furniture, equipment, plant life, soil, snow, ice or debris that obstructs access or visibility.

Styles & Materials

APPURTENANCE:
SCREEN PORCH
PATIO

GARAGE TYPE:
TWO-CAR
ATTACHED
TWO AUTOMATIC

DRIVEWAY:
CONCRETE

SIDEWALK:
BRICKS

SIDING MATERIAL:
BRICK VENEER
CEDAR SHINGLES

STAIRS MATERIAL:
BRICKS
SLATE PAVERS

RETAINING WALL(S):
BRICKS

		IN	NI	NP	RR	BCV
2.0	EXTERIOR:				•	
2.1	WALL CLADDING FLASHING AND TRIM	•			•	•
2.2	DOORS (Exterior)	•				
2.3	WINDOWS	•				
2.4	GARAGE DOOR OPERATORS (Report whether or not doors will reverse when met with resistance)	•				
2.5	DECKS, BALCONIES, STOOPS, STEPS, AREAWAYS, PORCHES AND APPLICABLE RAILINGS	•			•	•
2.6	VEGETATION, GRADING, DRAINAGE, DRIVEWAYS, PATIOS, WALKWAYS AND RETAINING WALLS (With respect to their effect on the condition of the building)	•			•	
2.7	EAVES, SOFFITS AND FASCIAS	•				

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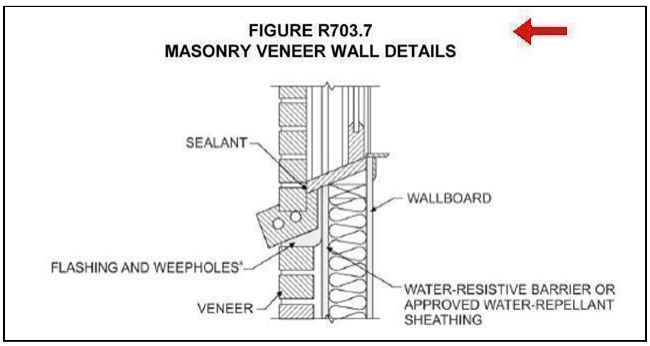
Comments:

2.0 I WOULD RECOMMEND AN ADDITIONAL INSPECTION AND REPAIRS AS NEEDED by a QUALIFIED LIC. CONTRACTOR for the following items BEFORE CLOSING.

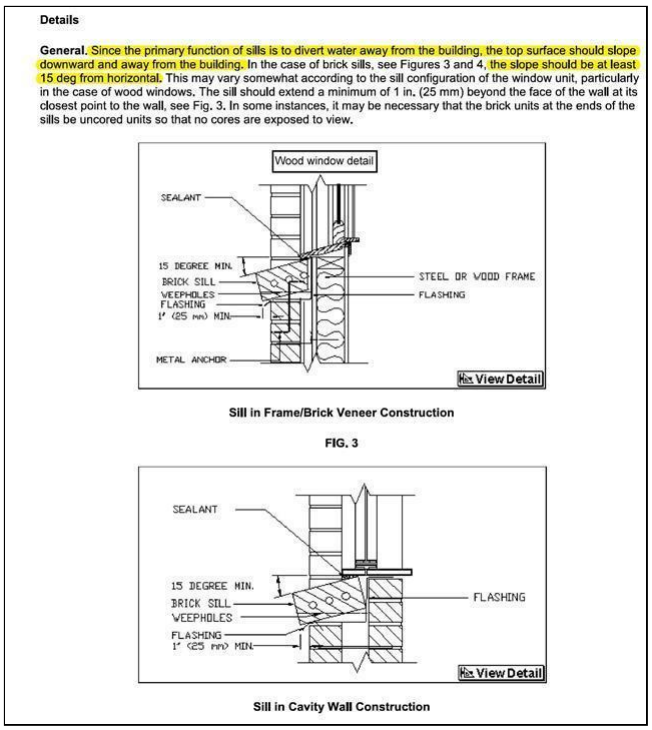
2.1 (1) Brick veneer window sills and ledges are pitched less than 15 degrees. Pitching the top row of bricks will help direct rain water away from the home. See a requirement when the home was built. 2006 International Residential Code Section R703.7. Stone and masonry veneer, general. Stone and masonry veneer shall be installed in accordance with this chapter, Table R703.4 and Figure R703.7. For more information, see the attached pictures.

2.1 Item 1(Picture)

2.1 Item 2(Picture)



2.1 Item 3(Picture)

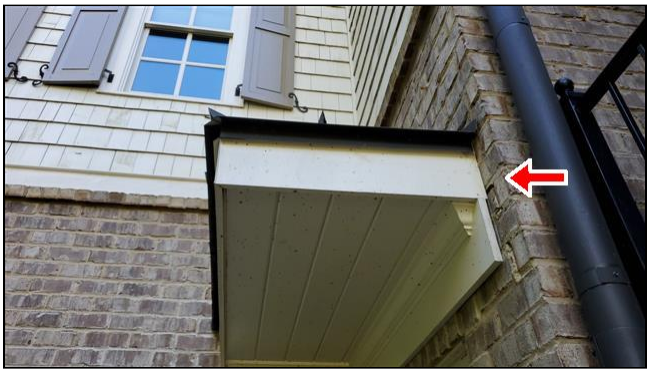


2.1 Item 4(Picture)

2.1 (2) There's a settlement crack in the brick veneer wall, at the basement entry door, roof. Is the roof improperly supported on the brick veneer wall? See a requirement when the home was built. 2006 International Residential Code Section 703.7.3. Masonry veneer shall not support any vertical load other than the dead load of the veneer above.

2.1 Item 5(Picture)

2.1 Item 6(Picture)



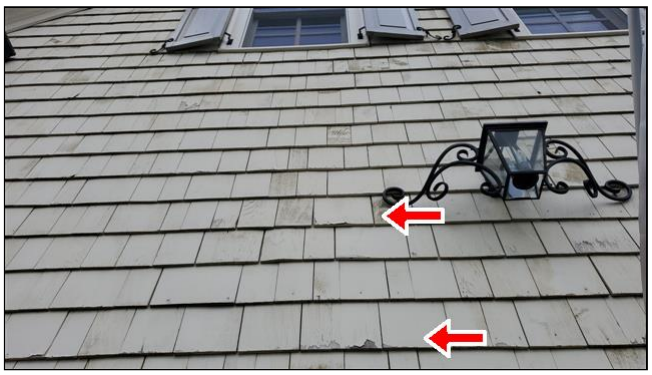
2.1 Item 7(Picture)

2.1 (3) The home's exterior wood trim boards and cedar shingles wall cladding are peeling paint in numerous locations.

2.1 Item 8(Picture)

2.1 Item 9(Picture)

2.1 Item 10(Picture)



2.1 Item 11(Picture)

2.1 Item 12(Picture)

2.1 Item 13(Picture)

2.4 Sensors are in place and will reverse the doors. The garage doors will reverse when met with resistance.

2.5 (1) The screen porch bolts are carriage bolts. Carriage bolts are not approved by the 1996 Forest Product Guide, the National Design Standard, or the Georgia Prescriptive Deck Details Guide for decks or porches. For more information, see the attached material.

The American Wood Council puts out what is essentially a code book for engineers and wood designs. The information is called the National Design Standard. In that standard it does not mention carriage bolts as meeting the standards of the American Society of Mechanical Engineers (ASME). The NDS is the information from which local codes are developed and implemented.

Here is the issue. The through bolt and carriage bolt are essentially the same steel "dowel." They have the same strength.

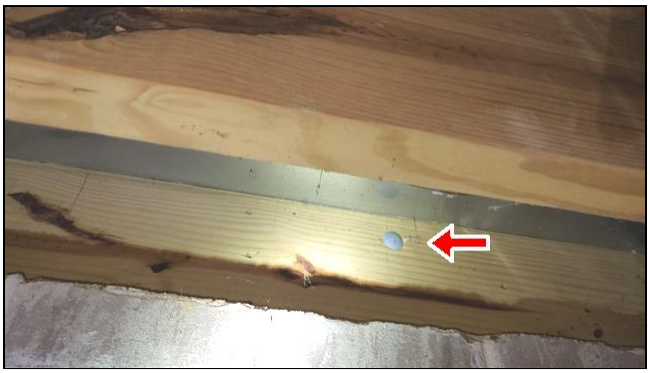
The problem comes with the head. The 1/2" carriage bolt head has 35% less **BEARING AREA** than the standard 1 3/8" washer under a 1/2" through bolt's ending nut.

The head of the carriage bolt is what takes the force if a guardrail post is pushed out. It is the head, or the washer with a through bolt, that takes the brunt of the force. Having less surface area A CARRIAGE BOLT HEAD IS SIMPLY ABLE TO WITHSTAND LESS FORCE.

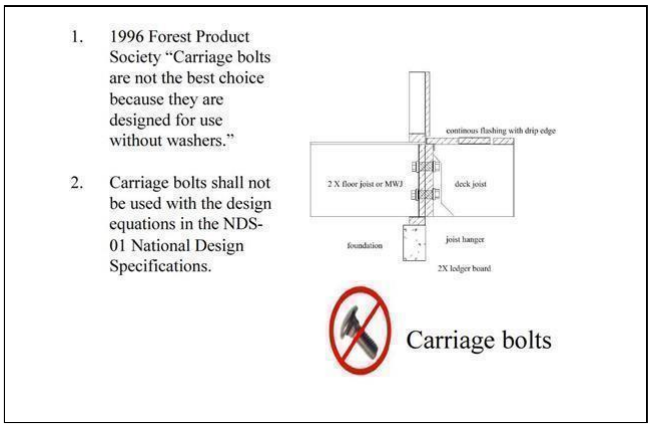
How much less force? That is what they are trying to determine! Until that is determined ASME cannot cover carriage bolts in any standard. Nor can a new product be designed.

Why they don't just design a carriage bolt with more surface area? **That leads to the second concern.**

A carriage bolt can only be tightened so much. Eventually the head will spin due to tension and it cannot be tightened any more. There is nothing to grip on both ends, so friction takes over. A through bolt with its washer, as shown above, can be held with a wrench on both ends and can always be tightened further.



2.5 Item 1(Picture)



2.5 Item 2(Picture)

2.5 (2) The front stoop landing has a larger than normal settlement crack.

2.5 Item 3(Picture)

2.6 (1) Trees, shrubs, and/or vegetation should be properly trimmed back from the home.

2.6 Item 1(Picture)

2.6 Item 2(Picture)

2.6 (2) The ground is heavily saturated with rain water.

The exterior of the home was inspected and reported on with the above information. While the inspector makes every effort to find all areas of concern, some areas can go unnoticed. Please be aware that the inspector has your best interest in mind. Any repair items mentioned in this report should be considered before purchase. It is recommended that qualified contractors be used in your further inspection or repair issues as it relates to the comments in this inspection report.

3. ROOFING

The home inspector shall observe: Roof covering; Roof drainage systems; Flashings; Skylights, chimneys, and roof penetrations; and Signs of' leaks or abnormal condensation on building components. The home inspector shall: Describe the type of roof covering materials; and Report the methods used to observe the roofing. The home inspector is not required to: Walk on the roofing; or Observe attached accessories including but not limited to solar systems, antennae, and lightning arrestors.

Styles & Materials

ROOF COVERING:
COMPOSITION SHINGLES
ARCHITECTURAL
METAL

VIEWED ROOF COVERING FROM:
GROUND
LADDER
BINOCULARS
UPPER-LEVEL WINDOWS

CHIMNEY (exterior):
METAL FLUE PIPES

ROOF PITCH:
MEDIUM
LOW

FLASHING:
STEP FLASHING
NOT VISIBLE IN SOME AREAS.

ESTIMATED AGE OF ROOF:
ORIGINAL
LIFE EXPECTANCES OF FIBERGLASS REINFORCED (upgraded) ASPHALT SHINGLES 22 TO 25 YEARS

		IN	NI	NP	RR	BCV
3.0	ROOFING:				•	
3.1	ROOF COVERINGS	•			•	
3.2	FLASHINGS	•				
3.3	SKYLIGHTS, CHIMNEYS AND ROOF PENETRATIONS	•				
3.4	ROOFING DRAINAGE SYSTEMS	•				

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Comments:

3.0 I WOULD RECOMMEND AN ADDITIONAL INSPECTION AND REPAIRS AS NEEDED by a QUALIFIED LIC. CONTRACTOR for the following items BEFORE CLOSING.

3.1 There are 2"x4" boards improperly nailed on top of the roof shingles.

3.1 Item 1(Picture)

The roof of the home was inspected and reported on with the above information. While the inspector makes every effort to find all areas of concern, some areas can go unnoticed. Roof coverings and skylights can appear to be leak proof during inspection and weather conditions. Our inspection makes an attempt to find a leak but sometimes cannot. Please be aware that the inspector has your best interest in mind. Any repair items mentioned in this report should be considered before purchase. It is recommended that qualified contractors be used in your further inspection or repair issues as it relates to the comments in this inspection report.

4. PLUMBING SYSTEM

The home inspector shall observe: Interior water supply and distribution system, including: piping materials, supports, and insulation; fixtures and faucets; functional flow; leaks; and cross connections; Interior drain, waste, and vent system, including: traps; drain, waste, and vent piping; piping supports and pipe insulation; leaks; and functional drainage; Hot water systems including: water heating equipment; normal operating controls; automatic safety controls; and chimneys, flues, and vents; Fuel storage and distribution systems including: interior fuel storage equipment, supply piping, venting, and supports; leaks; and Sump pumps. The home inspector shall describe: Water supply and distribution piping materials; Drain, waste, and vent piping materials; Water heating equipment; and Location of main water supply shutoff device. The home inspector shall operate all plumbing fixtures, including their faucets and all exterior faucets attached to the house, except where the flow end of the faucet is connected to an appliance. The home inspector is not required to: State the effectiveness of anti-siphon devices; Determine whether water supply and waste disposal systems are public or private; Operate automatic safety controls; Operate any valve except water closet flush valves, fixture faucets, and hose faucets; Observe: Water conditioning systems; Fire and lawn sprinkler systems; On-site water supply quantity and quality; On-site waste disposal systems; Foundation irrigation systems; Spas, except as to functional flow and functional drainage; Swimming pools; Solar water heating equipment; or Observe the system for proper sizing, design, or use of proper materials.

Styles & Materials

WATER SOURCE:
PUBLIC

WATER SERVICE:
NOT VISIBLE

PLUMBING DISTRIBUTION:
PEX (CROSS-LINK POLYETHYLENE) WHERE VISIBLE

WASHER DRAIN SIZE:
2" DIAMETER

PLUMBING WASTE:
PVC WHERE VISIBLE

WATER HEATER POWER SOURCE:
GAS

APPROXIMATE CAPACITY:
(2) 50 GAL

AGE OF WATER HEATER:
APPROXIMATELY 6 YEARS OLD
LIFE EXPECTANCIES OF GAS WATER HEATER 8 TO 14 YEARS

SEWER:
YES (according to the MLS listing)

LOCATION OF WATER HEATER (S):
BASEMENT

LOCATION OF MAIN GAS SHUT OFF VALVE:
OUTDOORS AT GAS METER

		IN	NI	NP	RR	BCV
4.0	PLUMBING:				•	
4.1	INTERIOR DRAIN, WASTE AND VENT SYSTEMS	•				
4.2	INTERIOR WATER SUPPLY AND DISTRIBUTION SYSTEMS AND FIXTURES	•			•	•
4.3	HOT WATER SYSTEMS, CONTROLS, CHIMNEYS, FLUES AND VENTS	•			•	•
4.4	MAIN WATER SHUT-OFF DEVICE (Describe location)	•	•		•	•
4.5	FUEL STORAGE AND DISTRIBUTION SYSTEMS (Interior fuel storage, piping, venting, supports, leaks)	•			•	

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IN NI NP RR BCV

Comments:

4.0 I WOULD RECOMMEND AN ADDITIONAL INSPECTION AND REPAIRS AS NEEDED by a QUALIFIED LIC. PLUMBER CONTRACTOR for the following items BEFORE CLOSING.

4.2 (1) Hose bibbs need securing to the walls with screws.

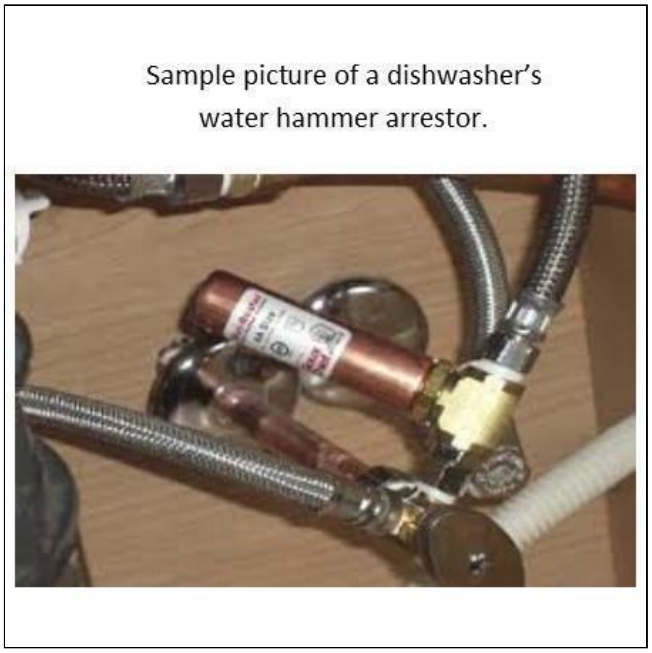
4.2 Item 1(Picture)

4.2 (2) Water pressure is 63 PSI. This is within the approved 40PSI to 80PSI range.

4.2 Item 2(Picture)

4.2 (3) Dishwasher's water hammer arrestor is missing. See a requirement when the home was built. 2006 International Plumbing Code Section 604.9. **Water hammer**. The flow velocity of the water distribution system shall be controlled to reduce the possibility of water hammer. A water-hammer arrestor shall be installed where quick-closing valves are utilized. Water-hammer arrestors shall be installed in accordance with manufacturers' specifications. Water-hammer arrestors shall conform to ASSE 1010.

4.2 Item 3(Picture)



4.2 Item 4(Picture)

4.2 (4) The main-level private bathroom sink faucet's cold water control valve needs securing to the countertop.

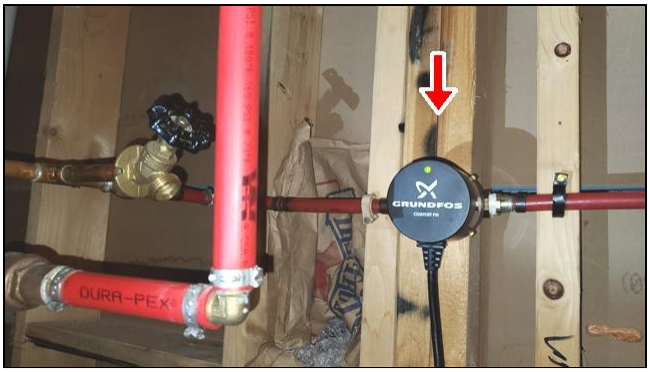
4.2 Item 5(Picture)

4.2 Item 6(Video)

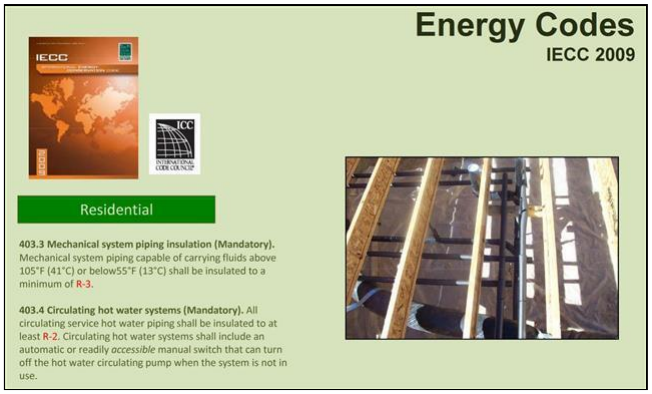
4.2 (5) The master suite bathtub's handheld sprayer did not work when tested.

4.2 Item 7(Picture)

4.3 (1) The water circulation pump's pipes are not insulated. See a requirement when the home was built. 2009 international International Energy Conservation Code section R403.4. Piping insulation. Circulation hot water system's piping shall be insulated to at least R-2.



4.3 Item 1(Picture)



4.3 Item 2(Picture)

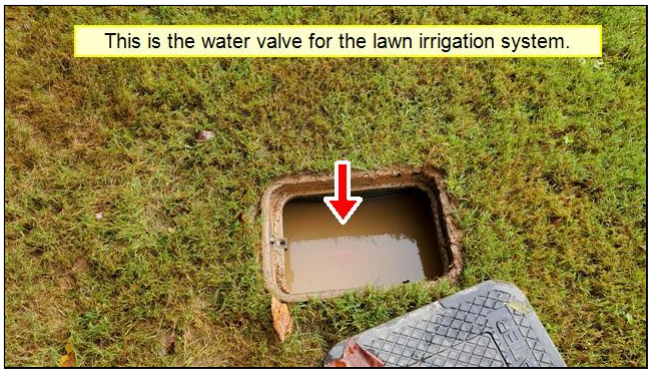
4.3 (2) The top of one water heater is heavily corroded.

4.3 Item 3(Picture)

4.3 (3) There is a smell at the corroded water heater. Is the water heater drafting properly?

4.4 (1) The home is missing a full open water valve on the discharge side of the water meter. See a requirement when the home was built. 2006 International Plumbing Code Section 606.1. A full open water valve shall be installed on the discharge side of every water meter.

4.4 Item 1(Picture)



4.4 Item 2(Picture)

4.4 (2) I could not locate the main water shut-off for the home. Please ask the current owner for the location.

The plumbing in the home was inspected and reported on with the above information. While the inspector makes every effort to find all areas of concern, some areas can go unnoticed. Washing machine drain line for example cannot be checked for leaks or the ability to handle the volume during drain cycle. Older homes with galvanized supply lines or cast iron drain lines can be obstructed and barely working during an inspection but then fails under heavy use. If the water is turned off or not used for periods of time (like a vacant home waiting for closing) rust or deposits within the pipes can further clog the piping system. Please be aware that the inspector has your best interest in mind. Any repair items mentioned in this report should be considered before purchase. It is recommended that qualified contractors be used in your further inspection or repair issues as it relates to the comments in this inspection report.

5. ELECTRICAL SYSTEMS

The home inspector shall observe: Service entrance conductors; Service equipment, grounding equipment, main over current device, and main and distribution panels; Amperage and voltage ratings of the service; Branch circuit conductors, their over current devices, and the compatibility of their ampacities and voltages; The operation of a representative number of installed ceiling fans, lighting fixtures, switches and receptacles located inside the house, garage, and on the dwelling's exterior walls; The polarity and grounding of all receptacles within six feet of interior plumbing fixtures, and all receptacles in the garage or carport, and on the exterior of inspected structures; The operation of ground fault circuit interrupters; and Smoke detectors. The home inspector shall describe: Service amperage and voltage; Service entry conductor materials; Service type as being overhead or underground; and Location of main and distribution panels. The home inspector shall report any observed aluminum branch circuit wiring. The home inspector shall report on presence or absence of smoke detectors, and operate their test function, if accessible, except when detectors are part of a central system. The home inspector is not required to: Insert any tool, probe, or testing device inside the panels; Test or operate any over current device except ground fault circuit interrupters; Dismantle any electrical device or control other than to remove the covers of the main and auxiliary distribution panels; or Observe: Low voltage systems; Security system devices, heat detectors, or carbon monoxide detectors; Telephone, security, cable TV, intercoms, or other ancillary wiring that is not a part of the primary electrical distribution system; or Built-in vacuum equipment.

Styles & Materials

ELECTRICAL SERVICE CONDUCTORS:
BELOW GROUND

PANEL CAPACITY:
(2) 150 AMP SERVICE PANELS

PANEL TYPE:
CIRCUIT BREAKERS

BRANCH WIRE 15 and 20 AMP:
COPPER

WIRING METHODS:
NM CABLES
NOT VISIBLE IN SOME AREAS

LOCATION OF ELECTRICAL SYSTEM GROUND(S):
NOT LOCATED
RECOMMEND HAVING THE HOMEOWNERS ELECTRICIAN LOCATE OR INSTALL AS NEEDED.

GFCI LOCATION (S):
OUTDOORS
GARAGE
BATHROOM (S)
BASEMENT KITCHEN
KITCHEN

		IN	NI	NP	RR	BCV
5.0	ELECTRICAL SYSTEMS:				•	
5.1	SERVICE ENTRANCE CONDUCTORS	•				
5.2	SERVICE AND GROUNDING EQUIPMENT, MAIN OVERCURRENT DEVICE, MAIN AND DISTRIBUTION PANELS	•			•	•
5.3	CONNECTED DEVICES AND FIXTURES (Observed from a representative number operation of ceiling fans, lighting fixtures, switches and receptacles located inside the house, garage, and on the dwelling's exterior walls)	•				
5.4	BRANCH CIRCUIT CONDUCTORS, OVERCURRENT DEVICES AND COMPATIBILITY OF THEIR AMPERAGE AND VOLTAGE	•				
5.5	OPERATION OF GFCI (GROUND FAULT CIRCUIT INTERRUPTERS)	•				
5.6	LOCATION OF MAIN AND DISTRIBUTION PANELS	•				
5.7	SMOKE DETECTORS (Information) Smoke detectors should also be replaced every ten-fifteen years according the fire professionals.	•				

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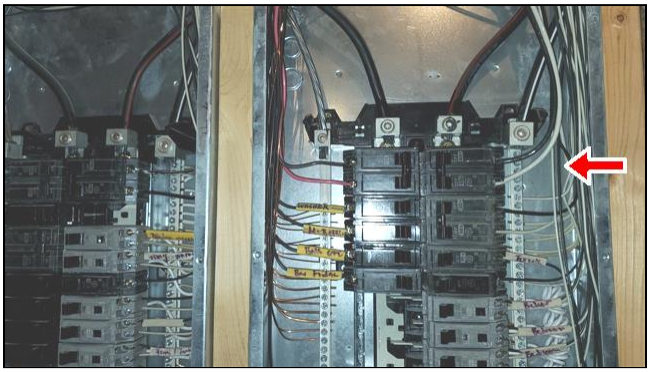
Comments:

5.0 I WOULD RECOMMEND AN ADDITIONAL INSPECTION AND REPAIRS AS NEEDED by a QUALIFIED LIC. ELECTRICAL CONTRACTOR for the following items BEFORE CLOSING.

5.2 (1) One high voltage white conductor in the right side electrical panel is not reidentified. See a requirement when the home was built. 2011 National Electrical Code Article 200.7(c). Electrical white conductors of 50 volts or more shall be permitted to be used as ungrounded conductors (If part of a cable assembly and where) the insulation is permanently reidentified to indicate its use as an ungrounded conductor, by painting or other effective means at its termination, and at each location where the conductor is visible and accessible.



5.2 Item 1(Picture)

5.2 (2) This is a complimentary view of the electrical panels.

5.2 Item 2(Picture)

5.6 Electrical panel boxes are located in the basement. However, the main electrical disconnects (shut-offs) are outside at the meter base panel (for your information).

5.6 Item 1(Picture)

The electrical system of the home was inspected and reported on with the above information. While the inspector makes every effort to find all areas of concern, some areas can go unnoticed. Outlets were not removed and the inspection was only visual. Any outlet not accessible (behind the refrigerator for example) was not inspected or accessible. Please be aware that the inspector has your best interest in mind. Any repair items mentioned in this report should be considered before purchase. It is recommended that qualified contractors be used in your further inspection or repair issues as it relates to the comments in this inspection report.

6. HEATING

The home inspector shall observe permanently installed heating systems including: Heating equipment; Normal operating controls; Automatic safety controls; Chimneys, flues, and vents, where readily visible; Solid fuel heating devices; Heat distribution systems including fans, pumps, ducts and piping, with supports, insulation, air filters, registers, radiators, fan coil units, convectors; and the presence of an installed heat source in each room. The home inspector shall describe: Energy source; and Heating equipment and distribution type. The home inspector shall operate the systems using normal operating controls. The home inspector shall open readily openable access panels provided by the manufacturer or installer for routine homeowner maintenance. The home inspector is not required to: Operate heating systems when weather conditions or other circumstances may cause equipment damage; Operate automatic safety controls; Ignite or extinguish solid fuel fires; or Observe: The interior of flues; Fireplace insert flue connections; Humidifiers; Electronic air filters; or The uniformity or adequacy of heat supply to the various rooms.

Styles & Materials

HEAT TYPE:
GAS (FORCED AIR)
HEAT PUMP (FORCED AIR)

ENERGY SOURCE:
GAS
ELECTRIC

NUMBER OF HEAT SYSTEMS (excluding wood):
THREE

DUCTWORK:
INSULATED FLEXIBLE DUCTS
NOT VISIBLE IN AREAS

AGE OF HEATING SYSTEM:
APPROXIMATELY 6 YEARS OLD
LIFE EXPECTANCIES OF GAS FURNACE 13 TO 25 YEARS
LIFE EXPECTANCIES OF ELECTRIC AIR HANDLERS 13 TO 15 YEARS

APPROXIMATE CAPACITY:
88,000 BTUH
24,000 BTUH HEAT PUMP PLUS ELECTRIC HEATER

LOCATION (S) FURNACE (S) /AIR HANDLER (S):
ATTIC
BASEMENT

FIREPLACE:
FACTORY BUILT
GAS LOG STARTER
VENTED GAS LOGS

OPERABLE FIREPLACES:
TWO

		IN	NI	NP	RR	BCV
6.0	HEATING:				•	
6.1	HEATING EQUIPMENT	•				
6.2	NORMAL OPERATING CONTROLS	•				
6.3	AUTOMATIC SAFETY CONTROLS	•				
6.4	CHIMNEYS, FLUES AND VENTS	•			•	•
6.5	HEAT DISTRIBUTION SYSTEMS (including fans, pumps, ducts and piping, with supports, insulation, air filters, registers, radiators, fan coil units and convectors)	•				
6.6	GAS/LP FIRELOGS AND FIREPLACES	•			•	•

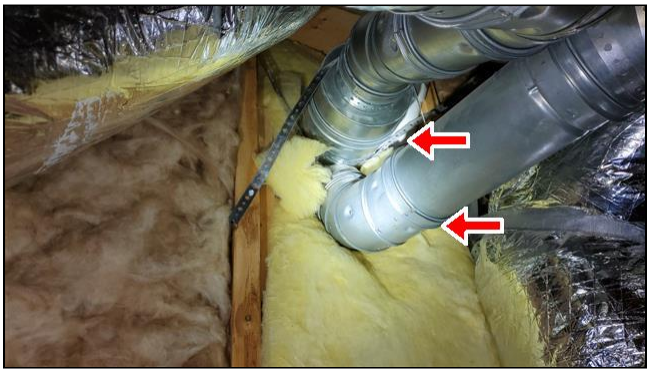
IN= Inspected, NI= Not Inspected, NP= Not Present, RR= Repair or Replace, BCV= Building Code Violation

Comments:

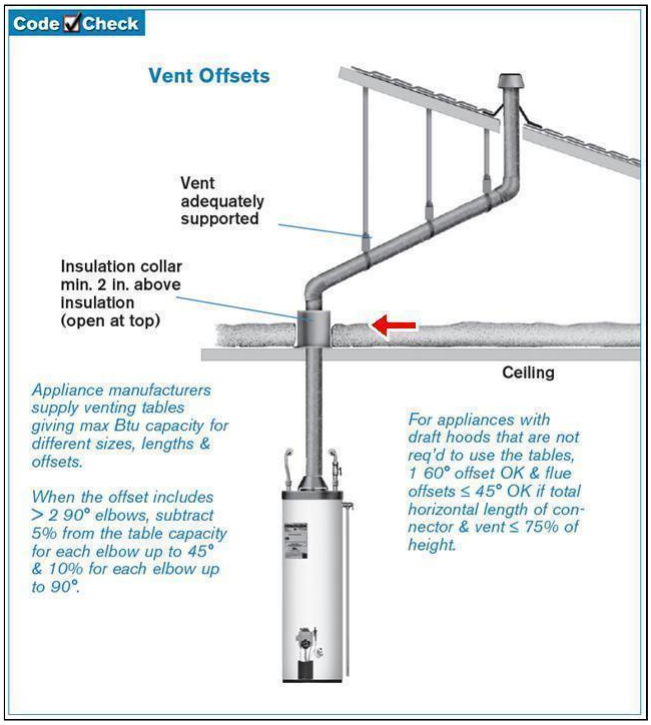
6.0 I WOULD RECOMMEND AN ADDITIONAL INSPECTION AND REPAIRS AS NEEDED by a QUALIFIED LIC. HVAC CONTRACTOR for the following items BEFORE CLOSING.

6.1 Heating and cooling units are due for a regular maintenance checkup and servicing.

6.4 Basement's gas appliances (furnace and water heaters) flue pipes are not shielded from the wall insulation. See a requirement when the home was built. 2006 International Fuel Gas Code section 502.4 **Insulation shield.** Where the vent passes through insulation a shield constructed of not less than 26 gage sheet metal shall be installed to provide clearance between the vent and the insulation material. The clearance shall not be less than the clearance to combustibles specified by the vent manufacturer's.



6.4 Item 1(Picture)

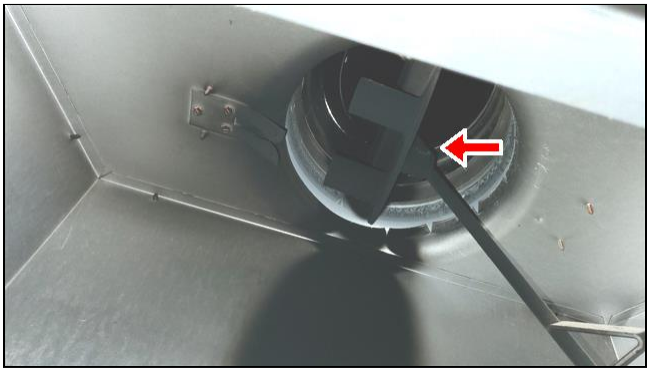


6.4 Item 2(Picture)

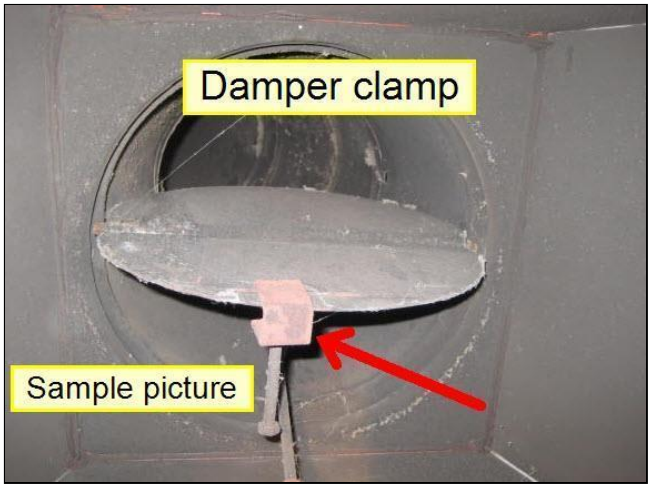
6.6 (1) This is a complementary picture of the screen porch fireplace.

6.6 Item 1(Picture)

6.6 (2) When the family room fireplace gas logs were installed the (damper clamp) which is designed to keep the damper open a minimum of 10% for safety was not installed. See requirement: Manual fireplace dampers must be fixed in a manner that maintains the gas appliance manufacturers required minimum permanent vent opening at all times. If the manufacturer does not specify a minimum opening, then Table VII of the Fuel Gas Code, NFPA 54 shall be used.



6.6 Item 2(Picture)



6.6 Item 3(Picture)

6.6 (3) Black soot build-up on the family room fireplace gas logs indicates the Gas Fire logs are not arranged or positioned according to manufacturer's specs. If logs are not positioned correctly, carbon monoxide can be produced.

6.6 Item 4(Picture)

6.6 (4) This is a complementary picture of the family room fireplace.

6.6 Item 5(Picture)

The heating system of this home was inspected and reported on with the above information. While the inspector makes every effort to find all areas of concern, some areas can go unnoticed. The inspection is not meant to be technically exhaustive. The inspection does not involve removal and inspection behind service door or dismantling that would otherwise reveal something only a licensed heat contractor would discover. Please be aware that the inspector has your best interest in mind. Any repair items mentioned in this report should be considered before purchase. It is recommended that qualified contractors be used in your further inspection or repair issues as it relates to the comments in this inspection report.

7. CENTRAL AIR CONDITIONING

The home inspector shall observe: Central air conditioning and permanently installed cooling systems including: Cooling and air handling equipment; and Normal operating controls. Distribution systems including: Fans, pumps, ducts and piping, with associated supports, dampers, insulation, air filters, registers, fan-coil units; and The presence of an installed cooling source in each room. The home inspector shall describe: Energy sources; and Cooling equipment type. The home inspector shall operate the systems using normal operating controls. The home inspector shall open readily openable access panels provided by the manufacturer or installer for routine homeowner maintenance The home inspector is not required to: Observe window air conditioners or operate cooling systems when weather conditions or other circumstances may cause equipment damage; Observe non-central air conditioners; or Observe the uniformity or adequacy of cool-air supply to the various rooms.

Styles & Materials

COOLING EQUIPMENT TYPE:
AIR CONDITIONERS
HEAT PUMP

COOLING EQUIPMENT ENERGY SOURCE:
ELECTRICITY

NUMBER OF A/C UNITS:
THREE

CAPACITY:
24,000 BTUH
36,000 BTUH
48,000 BTUH

AGE OF COOLING SYSTEM:
APPROXIMATELY 6 YEARS OLD
LIFE EXPECTANCIES OF AIR CONDITIONERS AND HEAT PUMPS
10-15 YEARS

LOCATION:
LEFTSIDE OF HOME FACING FRONT

		IN	NI	NP	RR	BCV
7.1	COOLING AND AIR HANDLER EQUIPMENT	•				
7.2	NORMAL OPERATING CONTROLS	•				
7.3	DISTRIBUTION SYSTEMS (including fans, pumps, ducts and piping, with supports, insulation, air filters, registers, radiators, fan coil units and convectors)	•				

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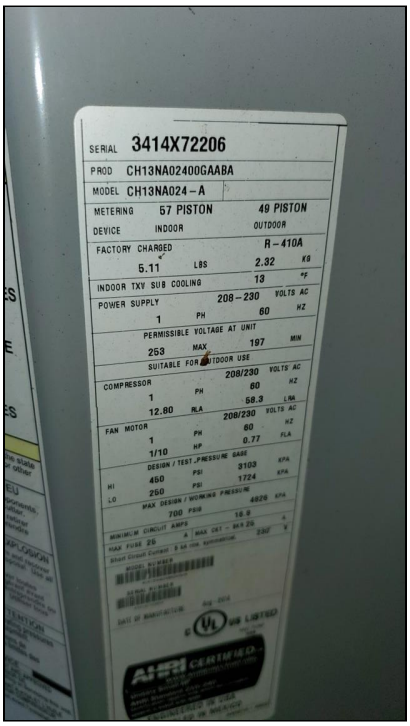
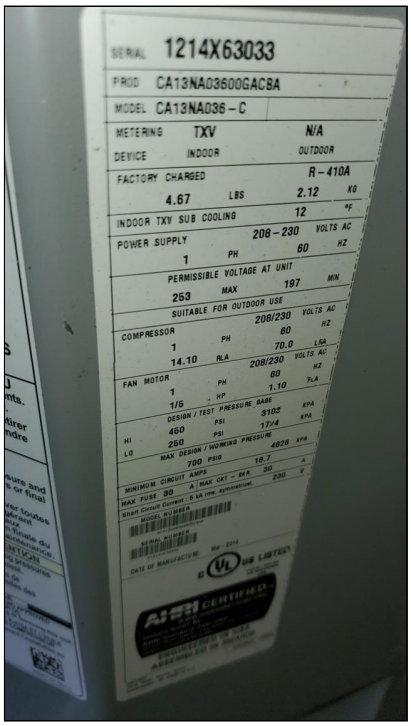
IN NI NP RR BCV

Comments:

7.1 Ambient air test was performed by using a thermal imaging camera to determine if the difference in temperatures of the supply and return air are between 14 degrees and 22 degrees, which indicates the units are cooling as intended. The air conditioners and heat pump are cooling correctly.



7.1 Item 1(Picture)



7.1 Item 2(Picture)

7.1 Item 3(Picture)

The cooling system of this home was inspected and reported on with the above information. While the inspector makes every effort to find all areas of concern, some areas can go unnoticed. The inspection is not meant to be technically exhaustive. The inspection does not involve removal and inspection behind service door or dismantling that would otherwise reveal something only a licensed HVAC contractor would discover (Heating, Ventilation, and Air Conditioning). Please be aware that the inspector has your best interest in mind. Any repair items mentioned in this report should be considered before purchase. It is recommended that qualified contractors be used in your further inspection or repair issues as it relates to the comments in this inspection report.

8. INTERIORS

The home inspector shall observe: Walls, ceiling, and floors; Steps, stairways, balconies, and railings; Counters and a representative number of installed cabinets; and A representative number of doors and windows. The home inspector shall: Operate a representative number of windows and interior doors; and Report signs of abnormal or harmful water penetration into the building or signs of abnormal or harmful condensation on building components. The home inspector is not required to observe: Paint, wallpaper, and other finish treatments on the interior walls, ceilings, and floors; Carpeting; or Draperies, blinds, or other window treatments.

Styles & Materials

WINDOW TYPES:

WOOD
THERMAL/INSULATED
DOUBLE-HUNG
FIX PANE

		IN	NI	NP	RR	BCV
8.0	INTERIORS:				•	
8.1	CEILINGS	•				
8.2	WALLS	•				
8.3	FLOORS	•				
8.4	STEPS, STAIRWAYS, BALCONIES AND RAILINGS	•		•	•	•
8.5	COUNTERS AND A REPRESENTATIVE NUMBER OF CABINETS	•				
8.6	DOORS (OPERATE ALL ACCESSIBLE DOORS)	•				
8.7	WINDOWS (OPERATE ALL READILY ACCESSIBLE WINDOWS)	•				

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IN NI NP RR BCV

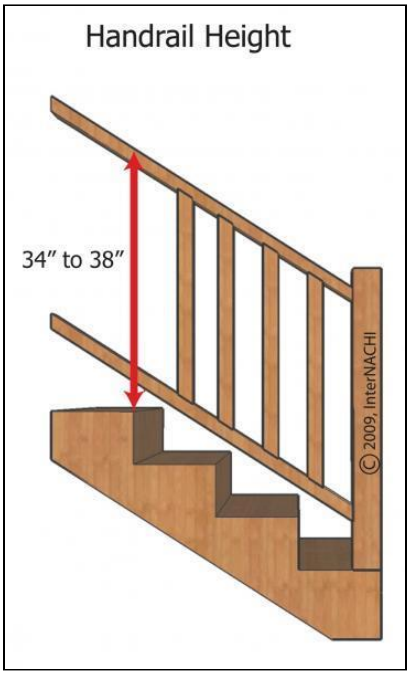
Comments:

8.0 I WOULD RECOMMEND AN ADDITIONAL INSPECTION AND REPAIRS AS NEEDED by a QUALIFIED LIC. CONTRACTOR for the following items BEFORE CLOSING.

8.4 (1) The basement handrails are too low. See a requirement when the home was built. 2006 International Residential Code section. R311.5.6.1 **Height**. Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finish surface of ramp slope, shall be not less than 34 inches (864 mm) and not more than 38 inches (965 mm).

8.4 Item 1(Picture)

8.4 Item 2(Picture)



8.4 Item 3(Picture)

8.4 (2) One basement stairway handrail spindle is missing.

The interior of the home was inspected and reported on with the above information. While the inspector makes every effort to find all areas of concern, some areas can go unnoticed. The inspection did not involve moving furniture and inspecting behind furniture, area rugs or areas obstructed from view. Please be aware that the inspector has your best interest in mind. Any repair items mentioned in this report should be considered before purchase. It is recommended that qualified contractors be used in your further inspection or repair issues as it relates to the comments in this inspection report.

9. INSULATION AND VENTILATION

The home inspector shall observe: Insulation and vapor retarders in unfinished spaces; Ventilation of attics and foundation areas; Kitchen, bathroom, and laundry venting systems; and the operation of any readily accessible attic ventilation fan, and, when temperature permits, the operation of any readily accessible thermostatic control. The home inspector shall describe: Insulation in unfinished spaces; and Absence of insulation in unfinished space at conditioned surfaces. The home inspector shall: Move insulation where readily visible evidence indicates the need to do so; and Move insulation where chimneys penetrate roofs, where plumbing drain/waste pipes penetrate floors, adjacent to earth filled stoops or porches, and at exterior doors. The home inspector is not required to report on: Concealed insulation and vapor retarders; or Venting equipment that is integral with household appliances.

Styles & Materials

ATTIC INSULATION:	APPROXIMATE THICKNESS OF INSULATION:	VENTILATION:
BLOWN	>8 IN.	GABLE VENTS
BATTS	6 IN.	RIDGE VENTS
NOT VISIBLE IN SOME AREAS		SOFFIT VENTS

		IN	NI	NP	RR	BCV
9.0	INSULATION AND VENTILATION:				•	
9.1	INSULATION AND VAPOR RETARDERS (in unfinished spaces)	•				
9.2	VENTILATION OF ATTIC AND FOUNDATION AREAS	•			•	
9.3	VENTING SYSTEMS (Kitchens, baths and laundry)	•				

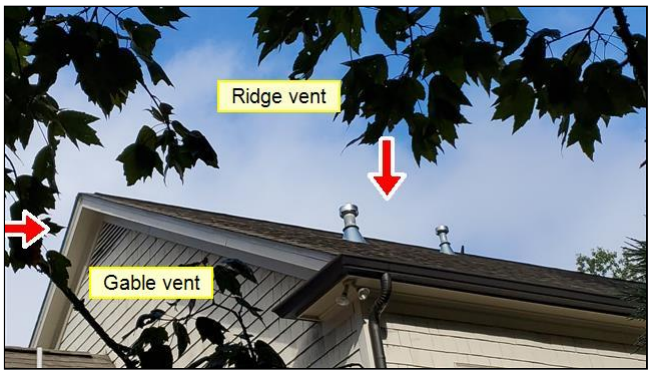
IN= Inspected, NI= Not Inspected, NP= Not Present, RR= Repair or Replace, BCV= Building Code Violation

Comments:

9.0 I WOULD RECOMMEND AN ADDITIONAL INSPECTION AND REPAIRS AS NEEDED by a QUALIFIED LIC. CONTRACTOR for the following items BEFORE CLOSING.

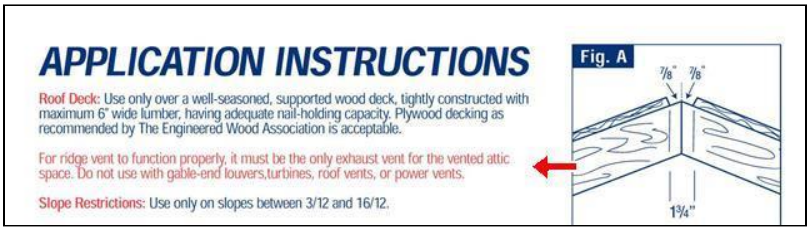
9.2 The home has gables, soffits, and ridge vents. The gable vents should be closed off. For more information, see the attached ridge vent installation instructions.

9.2 Item 1(Picture)

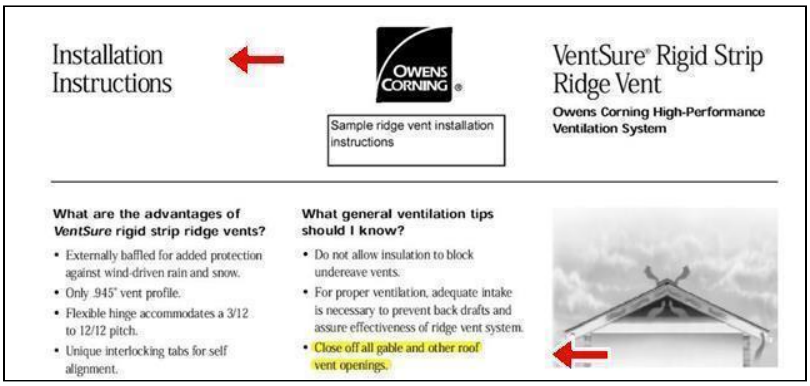


9.2 Item 2(Picture)

9.2 Item 3(Picture)



9.2 Item 4(Picture)



9.2 Item 5(Picture)

The insulation and ventilation of the home was inspected and reported on with the above information. While the inspector makes every effort to find all areas of concern, some areas can go unnoticed. Venting of exhaust fans or clothes dryer cannot be fully inspected and bends or obstructions can occur without being accessible or visible (behind wall and ceiling coverings). Only insulation that is visible was inspected. Please be aware that the inspector has your best interest in mind. Any repair items mentioned in this report should be considered before purchase. It is recommended that qualified contractors be used in your further inspection or repair issues as it relates to the comments in this inspection report.

10. BUILT-IN KITCHEN APPLIANCES

The home inspector shall observe and operate the basic functions of the following kitchen appliances: Permanently installed dishwasher, through its normal cycle; Range, cook top, and permanently installed oven; Trash compactor; Garbage disposal; Ventilation equipment or range hood; and Permanently installed microwave oven. The home inspector is not required to observe: Clocks, timers, self-cleaning oven function, or thermostats for calibration or automatic operation; Non built-in appliances; or Refrigeration units. The home inspector is not required to operate: Appliances in use; or Any appliance that is shut down or otherwise inoperable.

Styles & Materials

STOVE/OVEN/RANGE ENERGY SOURCE (S):

GAS

ELECTRIC

EXHAUST/RANGE HOOD:

VENTED

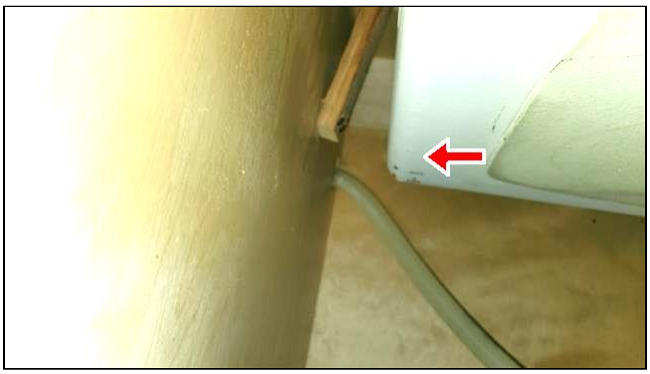
		IN	NI	NP	RR	BCV
10.0	BUILT-IN KITCHEN APPLIANCES:				•	
10.1	DISHWASHERS	•			•	•
10.2	RANGES/OVENS/COOKTOPS	•			•	•
10.3	RANGE HOOD	•				
10.5	FOOD WASTE DISPOSERS	•			•	•
10.6	MICROWAVE COOKING EQUIPMENT	•				
10.7	REFRIGERATOR	•				

IN= Inspected, NI= Not Inspected, NP= Not Present, RR= Repair or Replace, BCV= Building Code Violation

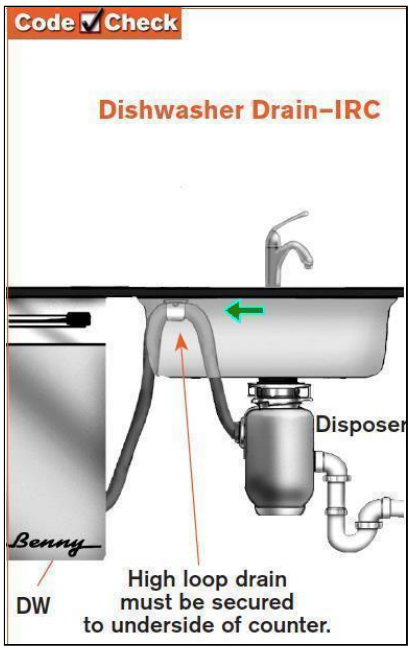
Comments:

10.0 I WOULD RECOMMEND AN ADDITIONAL INSPECTION AND REPAIRS AS NEEDED by a QUALIFIED LIC. CONTRACTOR for the following items BEFORE CLOSING.

10.1 (1) Dishwasher's plumbing discharge pipe should rise and be secured to the underside of the counter. See a requirement when the home was built. 2006 International Plumbing Code section 802.1.6. A sink and dishwasher are permitted to discharge through a single 1.5-inch trap. The dishwasher waste line shall rise and be securely fastened to the underside of the counter before connecting to the sink tailpiece.



10.1 Item 1(Picture)



10.1 Item 2(Picture)

10.1 (2) Dishwasher's electrical disconnect is not within sight of the appliance and is not capable of being locked in the open position. The electrical panel needs a breaker lockout installed. See a requirement when the home was built. 2011 National Electrical Code article 422.31 (B). Appliances rated Over 300 Volt-Amperes. For permanently connected appliances rated over 300 volt-amperes, the branch-circuit switch or circuit breaker shall be permitted to serve as the disconnecting means where the switch or circuit breaker is within sight from the appliance or is capable of being locked in the open position. The provision for locking or adding a lock to the disconnecting means shall be installed on or at the switch or circuit breaker used as the disconnecting means and shall remain in place with or without the lock installed.

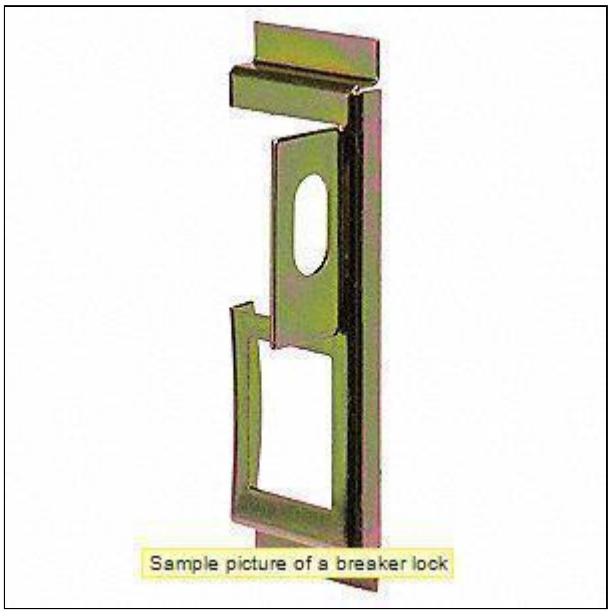
For your information some electricians question whether the National Electrical Code Article 422.34 exempts a modern dishwasher from needing a separate electrical disconnect. See attached National Electrical Code and Underwriters Laboratories response.

Does the unit control switch on a household dishwasher qualify as a disconnect in accordance with National Electrical Code article 422.34? **Underwriters Laboratories response.**

No, the unit switch in a household dishwasher is not required to disconnect all ungrounded conductors from the source of supply and does not qualify as a disconnect in accordance with National Electrical Code Article 422.34.

Household dishwashers are listed under the product category Dishwashers, Household (DMIY), located on page 97 in the UL White Book. They are evaluated for compliance with the Standard for Safety for Household Dishwashers, UL 749. UL 749 does not require the unit switch to disconnect all ungrounded conductors from the source of supply. In fact, many more advanced dishwashers rely on constant power to maintain the memory circuits as the dishwashers run diagnostics at regular intervals when not in use.

10.1 Item 3(Picture)



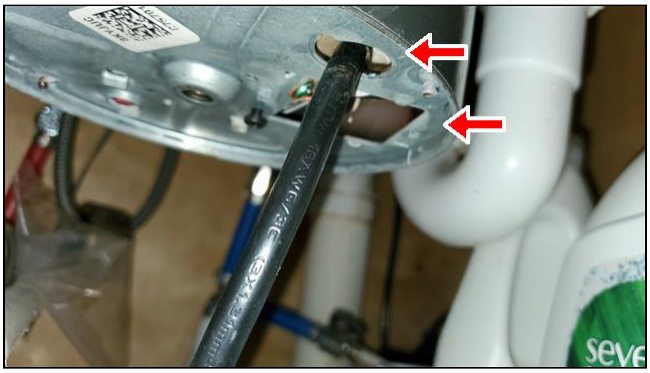
10.1 Item 4(Picture)

10.2 Ovens' electrical disconnect is not within sight of the appliance, and is not capable of being locked in the open position. The electrical panel needs a breaker lockout installed. See a requirement when the home was built. 2011 National Electrical Code article 422.20 (B). Appliances rated Over 300 Volt-Amperes. For permanently connected appliances rated over 300 volt-amperes the branch-circuit switch or circuit breaker shall be permitted to serve as the disconnecting means where the switch or circuit breaker is within sight from the appliance or is capable of being locked in the open position. The provision for locking or adding a lock to the disconnecting means shall be installed on or at the switch or circuit breaker used as the disconnecting means and shall remain in place with or without the lock installed.

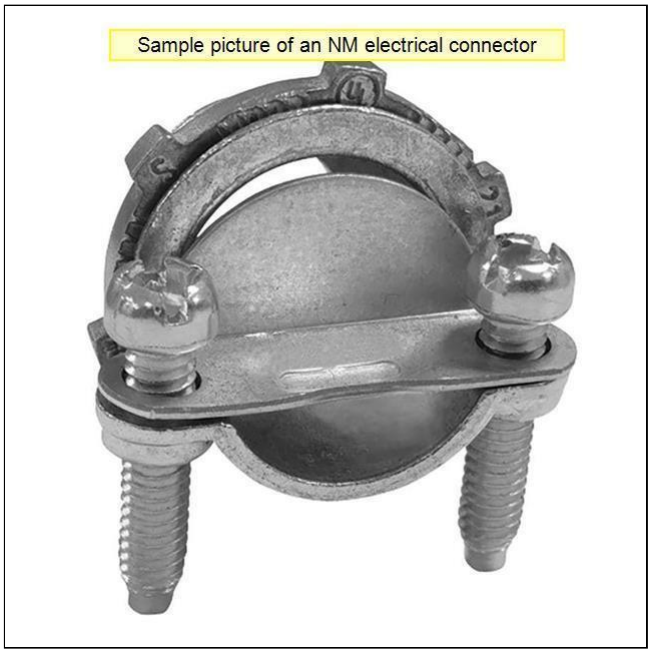
10.2 Item 1(Picture)

10.2 Item 2(Picture)

10.5 The food waste disposer's electrical connector and electrical cover-plate are missing.



10.5 Item 1(Picture)



10.5 Item 2(Picture)

The built-in appliances of the home were inspected and reported on with the above information. While the inspector makes every effort to find all areas of concern, some areas can go unnoticed. Please be aware that the inspector has your best interest in mind. Any repair items mentioned in this report should be considered before purchase. It is recommended that qualified contractors be used in your further inspection or repair issues as it relates to the comments in this inspection report.

13. LAWN SPRINKLER

		IN	NI	NP	RR	BCV
13.0	SPRINKLER OPERATION	•				
13.1	CONTROLLER	•				
13.2	ROTARY HEADS	•				
13.3	VISIBLE CONNECTIONS OR CLAMPS	•				
13.4	DRAINS	•				
13.5	SENSORS	•				

IN= Inspected, NI= Not Inspected, NP= Not Present, RR= Repair or Replace, BCV= Building Code Violation **IN NI NP RR BCV**

Comments:

13.0 The yard sprinkler was tested in the manual mode. The sprinkler has five zones that cover the front, sides, and back yard. For additional information, I would recommend having the homeowner answer or demo the system.

13.0 Item 1(Picture)

13.0 Item 2(Picture)

13.0 Item 3(Picture)

13.0 Item 4(Picture)

13.0 Item 5(Picture)

13.0 Item 6(Picture)

13.0 Item 7(Picture)

13.0 Item 8(Picture)

13.0 Item 9(Picture)

13.0 Item 10(Picture)

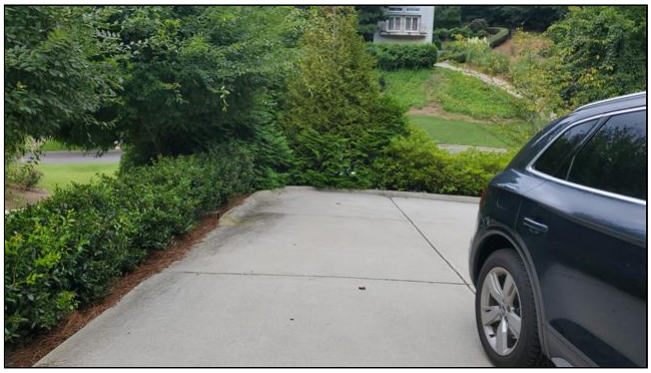
13.0 Item 11(Picture)

13.0 Item 12(Picture)

13.0 Item 13(Picture)

13.0 Item 14(Picture)

13.0 Item 15(Picture)



13.0 Item 16(Picture)

General Summary

Healthy Home Inspections LLC

4132 Atlanta Hwy Ste 110-169
Loganville, GA 30052

Customer
Brian & Ilissa Feiler

Address
4805 Lafayette Court
Sandy Springs, GA 30327

The following items or discoveries indicate that these systems or components do not function as intended or adversely affects the habitability of the dwelling; or appear to warrant further investigation by a specialist, or requires subsequent observation. This summary shall not contain recommendations for routine upkeep of a system or component to keep it in proper functioning condition or recommendations to upgrade or enhance the function, efficiency, or safety of the home. This Summary is not the entire report. The complete report may include additional information of concern to the customer. It is recommended that the customer read the complete report.

2. EXTERIOR

2.0 EXTERIOR:

Repair or Replace
I WOULD RECOMMEND AN ADDITIONAL INSPECTION AND REPAIRS AS NEEDED by a QUALIFIED LIC. CONTRACTOR for the following items BEFORE CLOSING.

2.1 WALL CLADDING FLASHING AND TRIM

Inspected, Repair or Replace, Building Code Violation

(1) Brick veneer window sills and ledges are pitched less than 15 degrees. Pitching the top row of bricks will help direct rain water away from the home. See a requirement when the home was built. 2006 International Residential Code Section R703.7. Stone and masonry veneer, general. Stone and masonry veneer shall be installed in accordance with this chapter, Table R703.4 and Figure R703.7. For more information, see the attached pictures.

(2) There's a settlement crack in the brick veneer wall, at the basement entry door, roof. Is the roof improperly supported on the brick veneer wall? See a requirement when the home was built. 2006 International Residential Code Section 703.7.3. Masonry veneer shall not support any vertical load other than the dead load of the veneer above.

(3) The home's exterior wood trim boards and cedar shingles wall cladding are peeling paint in numerous locations.

2.5 DECKS, BALCONIES, STOOPS, STEPS, AREAWAYS, PORCHES AND APPLICABLE RAILINGS

Inspected, Repair or Replace, Building Code Violation

(1) The screen porch bolts are carriage bolts. Carriage bolts are not approved by the 1996 Forest Product Guide, the National Design Standard, or the Georgia Prescriptive Deck Details Guide for decks or porches. For more information, see the attached material.

The American Wood Council puts out what is essentially a code book for engineers and wood designs. The information is called the National Design Standard. In that standard it does not mention carriage bolts as meeting the standards of the American Society of Mechanical Engineers (ASME). The NDS is the information from which local codes are developed and implemented.

Here is the issue. The through bolt and carriage bolt are essentially the same steel "dowel." They have the same strength.

The problem comes with the head. The 1/2" carriage bolt head has 35% less **BEARING AREA** than the standard 1 3/8" washer under a 1/2" through bolt's ending nut.

The head of the carriage bolt is what takes the force if a guardrail post is pushed out. It is the head, or the washer with a through bolt, that takes the brunt of the force. Having less surface area A CARRIAGE BOLT HEAD IS SIMPLY ABLE TO WITHSTAND LESS FORCE.

How much less force? That is what they are trying to determine! Until that is determined ASME cannot cover carriage bolts in any standard. Nor can a new product be designed.

Why they don't just design a carriage bolt with more surface area? **That leads to the second concern.**

A carriage bolt can only be tightened so much. Eventually the head will spin due to tension and it cannot be tightened any more. There is nothing to grip on both ends, so friction takes over. A through bolt with its washer, as shown above, can be held with a wrench on both ends and can always be tightened further.

(2) The front stoop landing has a larger than normal settlement crack.

2.6 VEGETATION, GRADING, DRAINAGE, DRIVEWAYS, PATIOS, WALKWAYS AND RETAINING WALLS (With respect to their effect on the condition of the building)

Inspected, Repair or Replace

(1) Trees, shrubs, and/or vegetation should be properly trimmed back from the home.

(2) The ground is heavily saturated with rain water.

3. ROOFING

3.0 ROOFING:

Repair or Replace

I WOULD RECOMMEND AN ADDITIONAL INSPECTION AND REPAIRS AS NEEDED by a QUALIFIED LIC. CONTRACTOR for the following items BEFORE CLOSING.

3.1 ROOF COVERINGS

Inspected, Repair or Replace

There are 2"x4" boards improperly nailed on top of the roof shingles.

4. PLUMBING SYSTEM

4.0 PLUMBING:

Repair or Replace

I WOULD RECOMMEND AN ADDITIONAL INSPECTION AND REPAIRS AS NEEDED by a QUALIFIED LIC. PLUMBER CONTRACTOR for the following items BEFORE CLOSING.

4.2 INTERIOR WATER SUPPLY AND DISTRIBUTION SYSTEMS AND FIXTURES

Inspected, Repair or Replace, Building Code Violation

(1) Hose bibbs need securing to the walls with screws.

(2) Water pressure is 63 PSI. This is within the approved 40PSI to 80PSI range.

(3) Dishwasher's water hammer arrestor is missing. See a requirement when the home was built. 2006 International Plumbing Code Section 604.9. **Water hammer**. The flow velocity of the water distribution system shall be controlled to reduce the possibility of water hammer. A water-hammer arrestor shall be installed where quick-closing valves are utilized. Water-hammer arrestors shall be installed in accordance with manufacturers' specifications. Water-hammer arrestors shall conform to ASSE 1010.

(4) The main-level private bathroom sink faucet's cold water control valve needs securing to the countertop.

(5) The master suite bathtub's handheld sprayer did not work when tested.

4.3 HOT WATER SYSTEMS, CONTROLS, CHIMNEYS, FLUES AND VENTS

Inspected, Repair or Replace, Building Code Violation

(1) The water circulation pump's pipes are not insulated. See a requirement when the home was built. 2009 international International Energy Conservation Code section R403.4. Piping insulation. Circulation hot water system's piping shall be insulated to at least R-2.

(2) The top of one water heater is heavily corroded.

(3) There is a smell at the corroded water heater. Is the water heater drafting properly?

4.4 MAIN WATER SHUT-OFF DEVICE (Describe location)

Inspected, Not Inspected, Repair or Replace, Building Code Violation

(1) The home is missing a full open water valve on the discharge side of the water meter. See a requirement when the home was built. 2006 International Plumbing Code Section 606.1. A full open water valve shall be installed on the discharge side of every water meter.

(2) I could not locate the main water shut-off for the home. Please ask the current owner for the location.

5. ELECTRICAL SYSTEMS

5.0 ELECTRICAL SYSTEMS:

Repair or Replace

I WOULD RECOMMEND AN ADDITIONAL INSPECTION AND REPAIRS AS NEEDED by a QUALIFIED LIC. ELECTRICAL CONTRACTOR for the following items BEFORE CLOSING.

5.2 SERVICE AND GROUNDING EQUIPMENT, MAIN OVERCURRENT DEVICE, MAIN AND DISTRIBUTION PANELS

Inspected, Repair or Replace, Building Code Violation

(1) One high voltage white conductor in the right side electrical panel is not reidentified. See a requirement when the home was built. 2011 National Electrical Code Article 200.7(c). Electrical white conductors of 50 volts or more shall be permitted to be used as ungrounded conductors (If part of a cable assembly and where) the insulation is permanently reidentified to indicate its use as an ungrounded conductor, by painting or other effective means at its termination, and at each location where the conductor is visible and accessible.

(2) This is a complimentary view of the electrical panels.

6. HEATING

6.0 HEATING:

Repair or Replace

I WOULD RECOMMEND AN ADDITIONAL INSPECTION AND REPAIRS AS NEEDED by a QUALIFIED LIC. HVAC CONTRACTOR for the following items BEFORE CLOSING.

6.4 CHIMNEYS, FLUES AND VENTS

Inspected, Repair or Replace, Building Code Violation

Basement's gas appliances (furnace and water heaters) flue pipes are not shielded from the wall insulation. See a requirement when the home was built. 2006 International Fuel Gas Code section 502.4 **Insulation shield.** Where the vent passes through insulation a shield constructed of not less than 26 gage sheet metal shall be installed to provide clearance between the vent and the insulation material. The clearance shall not be less than the clearance to combustibles specified by the vent manufacturer's.

6.6 GAS/LP FIRELOGS AND FIREPLACES

Inspected, Repair or Replace, Building Code Violation

(1) This is a complementary picture of the screen porch fireplace.

(2) When the family room fireplace gas logs were installed the (damper clamp) which is designed to keep the damper open a minimum of 10% for safety was not installed. See requirement: Manual fireplace dampers must be fixed in a manner that maintains the gas appliance manufacturers required minimum permanent vent opening at all times. If the manufacturer does not specify a minimum opening, then Table VII of the Fuel Gas Code, NFPA 54 shall be used.

(3) Black soot build-up on the family room fireplace gas logs indicates the Gas Fire logs are not arranged or positioned according to manufacturer's specs. If logs are not positioned correctly, carbon monoxide can be produced.

(4) This is a complementary picture of the family room fireplace.

8. INTERIORS

8.0 INTERIORS:

Repair or Replace

I WOULD RECOMMEND AN ADDITIONAL INSPECTION AND REPAIRS AS NEEDED by a QUALIFIED LIC. CONTRACTOR for the following items BEFORE CLOSING.

8.4 STEPS, STAIRWAYS, BALCONIES AND RAILINGS

Inspected, Not Present, Repair or Replace, Building Code Violation

(1) The basement handrails are too low. See a requirement when the home was built. 2006 International Residential Code section. R311.5.6.1 **Height**. Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finish surface of ramp slope, shall be not less than 34 inches (864 mm) and not more than 38 inches (965 mm).

(2) One basement stairway handrail spindle is missing.

9. INSULATION AND VENTILATION

9.0 INSULATION AND VENTILATION:

Repair or Replace

I WOULD RECOMMEND AN ADDITIONAL INSPECTION AND REPAIRS AS NEEDED by a QUALIFIED LIC. CONTRACTOR for the following items BEFORE CLOSING.

9.2 VENTILATION OF ATTIC AND FOUNDATION AREAS

Inspected, Repair or Replace

The home has gables, soffits, and ridge vents. The gable vents should be closed off. For more information, see the attached ridge vent installation instructions.

10. BUILT-IN KITCHEN APPLIANCES

10.0 BUILT-IN KITCHEN APPLIANCES:

Repair or Replace

I WOULD RECOMMEND AN ADDITIONAL INSPECTION AND REPAIRS AS NEEDED by a QUALIFIED LIC. CONTRACTOR for the following items BEFORE CLOSING.

10.1 DISHWASHERS

Inspected, Repair or Replace, Building Code Violation

(1) Dishwasher's plumbing discharge pipe should rise and be secured to the underside of the counter. See a requirement when the home was built. 2006 International Plumbing Code section 802.1.6. A sink and dishwasher are permitted to discharge through a single 1.5-inch trap. The dishwasher waste line shall rise and be securely fastened to the underside of the counter before connecting to the sink tailpiece.

(2) Dishwasher's electrical disconnect is not within sight of the appliance and is not capable of being locked in the open position. The electrical panel needs a breaker lockout installed. See a requirement when the home was built. 2011 National Electrical Code article 422.31 (B). Appliances rated Over 300 Volt-Amperes. For permanently connected appliances rated over 300 volt-amperes, the branch-circuit switch or circuit breaker shall be permitted to serve as the disconnecting means where the switch or circuit breaker is within sight from the appliance or is capable of being locked in the open position. The provision for locking or adding a lock to the disconnecting means shall be installed on or at the switch or circuit breaker used as the disconnecting means and shall remain in place with or without the lock installed.

For your information some electricians question whether the National Electrical Code Article 422.34 exempts a modern dishwasher from needing a separate electrical disconnect. See attached National Electrical Code and Underwriters Laboratories response.

Does the unit control switch on a household dishwasher qualify as a disconnect in accordance with National Electrical Code article 422.34? **Underwriters Laboratories response.**

No, the unit switch in a household dishwasher is not required to disconnect all ungrounded conductors from the source of supply and does not qualify as a disconnect in accordance with National Electrical Code Article 422.34.

Household dishwashers are listed under the product category Dishwashers, Household (DMIY), located on page 97 in the UL White Book. They are evaluated for compliance with the Standard for Safety for Household Dishwashers, UL 749. UL 749 does not require the unit switch to disconnect all ungrounded conductors from the source of supply. In fact, many more advanced dishwashers rely on constant power to maintain the memory circuits as the dishwashers run diagnostics at regular intervals when not in use.

10.2 RANGES/OVENS/COOKTOPS

Inspected, Repair or Replace, Building Code Violation

Ovens' electrical disconnect is not within sight of the appliance, and is not capable of being locked in the open position. The electrical panel needs a breaker lockout installed. See a requirement when the home was built. 2011 National Electrical Code article 422.20 (B). Appliances rated Over 300 Volt-Amperes. For permanently connected appliances rated over 300 volt-amperes the branch-circuit switch or circuit breaker shall be permitted to serve as the disconnecting means where the switch or circuit breaker is within sight from the appliance or is capable of being locked in the open position. The provision for locking or adding a lock to the disconnecting means shall be installed on or at the switch or circuit breaker used as the disconnecting means and shall remain in place with or without the lock installed.

10.5 FOOD WASTE DISPOSERS

Inspected, Repair or Replace, Building Code Violation

The food waste disposer's electrical connector and electrical cover-plate are missing.
