PROPERTY INSPECTION REPORT

RUBY
HOME INSPECTIONS, INC.
INTERNACHI® CERTIFIED

Inspector:Rich Mennecke
IL License:450.0011874
Ruby Home Inspection Services, Inc
Inspection Address:
Lake Shore Drive
Town,
Inspection Prepared For: Client

Date of Inspection: 7/5/2019
Year Built: 2000 Size:3000 sq ft
Weather: Clear, 85 deg Number:Sample

Inspection Details

INTRODUCTION:

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

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Definitions of Conditions

When items are rated the categories are as follows: Inspected and Acceptable ratings should give satisfactory service within the limits of its age. A Maintenance or Monitor rating is considered less than satisfactory and may need repair soon. A Significantly Deficient rating requires repair, replacement or corrective action. A Hazardous (H) rating is a dangerous situation and requires immediate attention. Not applicable (N/A) means simply that this component, system or condition is not present on the premises or cannot be observed due to something blocking the inspector's view.

Inspected and Acceptable
A system or component that appeared maintained and functioning as intended.

Maintenance or Monitor
A system or component that would benefit from maintenance or requires close monitoring. (This does not mean the seller is required to fix it, just that the repair should be made.)

Significantly Deficient
A system or component that did not respond to the users controls, was not able to be safely used, was not functioning as intended, or was otherwise defective.

Hazardous
A condition, which we feel, poses a health or safety risk that can be reduced or eliminated with repair or upgrade. Some of these items may be safety upgrades or improvements.

Not Applicable
A component or system is not present or is not visible.

Report Summary

The summary below consists of potentially significant findings. These findings can be a safety hazard, a deficiency requiring a major expense to correct or items I would like to draw extra attention to. The summary is not a complete listing of all the findings in the report, and reflects the opinion of the inspector. Please review all pages of the report as the summary alone does not explain all of the issues. All repairs should be done by a licensed & bonded tradesman or qualified professional. I recommend obtaining a copy of all receipts, warranties and permits for the work done.

Interior Areas			
	Page 15 Item: 3	Smoke Detectors	• SAFETY CONCERN: There are no visible smoke detectors. You need to be alarmed in case of a fire. Recommend installing at least one smoke detector on each level of the home.

Only Carbon Monoxide detector located in the furnace closet. Recommend adding to living areas.

No smoke detectors

	Page 17 Item: 11	Stairs & Handrail	• A handrail is MISSING.
Bedrooms			

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	Page 18 Item: 2	Electrical	• No Arc-Fault Circuit Interrupter (AFCI) protection was installed to protect electrical circuits in bedrooms. Building codes with which new homes must comply require the installation of AFCI protection of all bedroom outlets. This type of protection is designed to detect electrical arcing, which is a potential fire hazard. Although AFCI protection was not required at the time the home was originally constructed, as general knowledge of safe building practices has improved with the passage of time, building standards have changed to reflect current understanding. Consider updating the existing electrical to provide AFCI protection. Arc-fault protection can be provided using either of two methods: 1. Arc Fault Circuit Interrupters (AFCI's) electrical outlets which have this capability built in. 2. AFCI circuit breakers installed at the main electrical panel which provide this protection to all non-AFCI outlets on the circuit controlled by that AFCI breaker. • AFCI's protect circuits from fire. The parallel arc fault arises, when the current flows through damaged insulation from one conductor to another conductor, producing a short circuit that is too weak to be detected by the circuit breaker. A Series arc fault arises, when a single wire damaged and cannot tolerate the current, causing the current to arc from the conductor into the insulation. This leakage current can burn and eventually burn the insulation. • Open ground (or 2-wire) outlets present. This means that the 3rd (round) part of an appliance plug is not getting ground protection. The 3rd wire (ground) is designed to ground the case of an appliance so that no electricity is present on the surface of the appliance. Absence of this wire can lead to a shock hazard or even electrocution.

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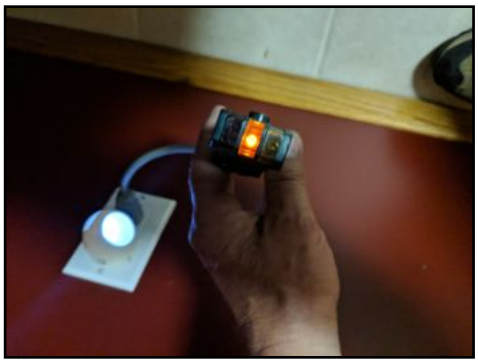
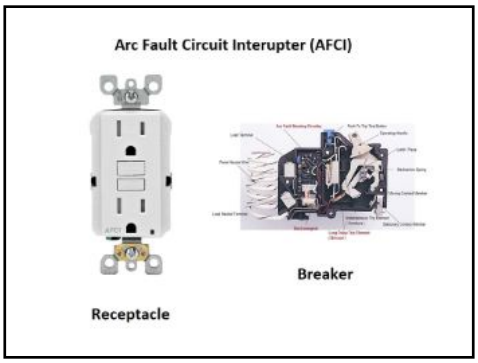
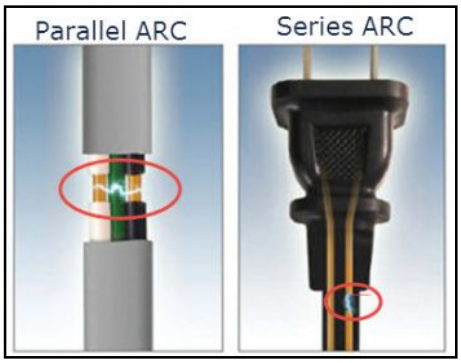
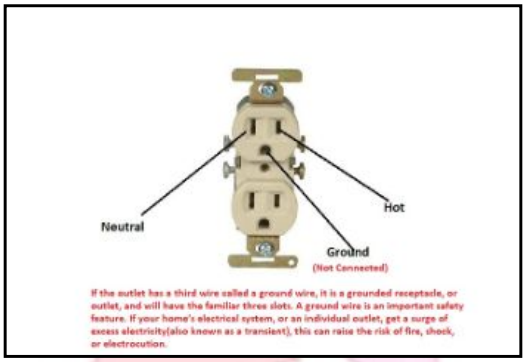




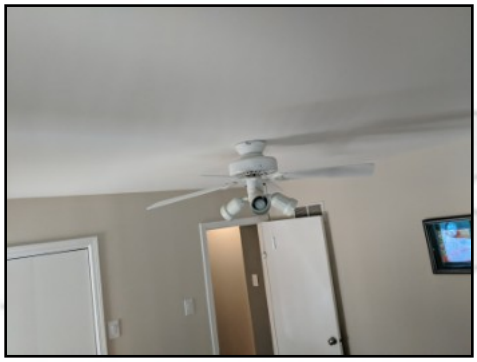


Basement bedroom. Open ground.



	Page 19 Item: 3	Smoke Detectors	• There were no smoke detectors present in the bedroom(s).

No smoke detector in bedrooms

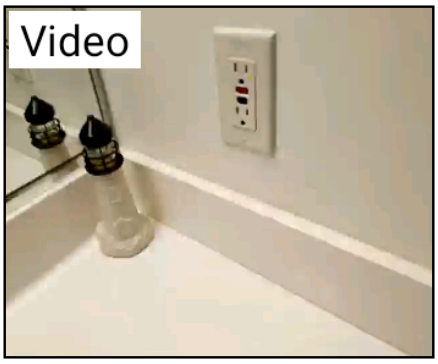


No smoke detector in bedrooms

Only smoke detector in home found in basement bedroom.

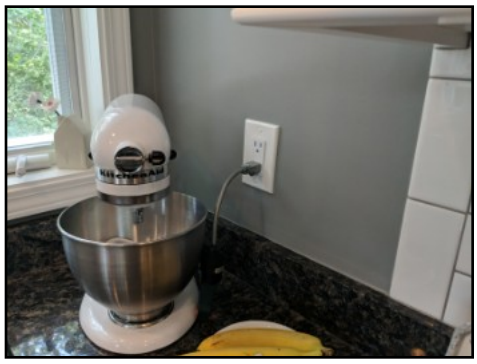
Bathroom

	Page 21 Item: 4	GFCI	• GFCI did not respond to test, suggest replacing for safety.

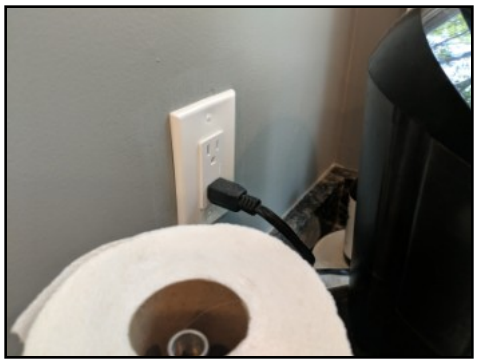


Failed trip test

Kitchen			
	Page 24 Item: 2	GFCI	• No GFCI - Electrical outlets in this kitchen appeared to be in serviceable condition at the time of the inspection but had no Ground Fault Circuit Interrupter (GFCI) protection. Although this condition may have been commonly considered safe or acceptable at the time the home was originally constructed, as general knowledge of safe building practices has improved with the passage of time, building standards have changed to reflect current understanding. Consider having GFCI protection installed as a safety precaution for outlets within 6 feet of a plumbing fixture. This can be achieved by: 1. Replacing the current standard outlets with GFCI outlets 2. Replacing the outlet in this bathroom circuit which is nearest the main electrical service panel with a GFCI outlet. 3. Replacing the breaker currently protecting the electrical circuit which contains these bathroom outlets with a GFCI breaker. • GFCI (Ground Fault Circuit Interrupter) Operation. A GFCI outlet or breaker measures the current differential between the hot hot and neutral sides of the circuit. If it detects a differential of 5 milliamps or more it automatically trips the circuit open. This occurs in less than 1/10th of a second. Current is always looking for the least resistive path back to the neutral side of the transformer. Electrocution can occur when a person provides the path of least resistance. This is a special concern when a conductor such as water is in contact with that person. It only takes 100 milliamps to begin ventricular fibrillation. Standard circuit breakers and fuses are designed to trip during overcurrent conditions that far exceed this 100 milliamp flow.

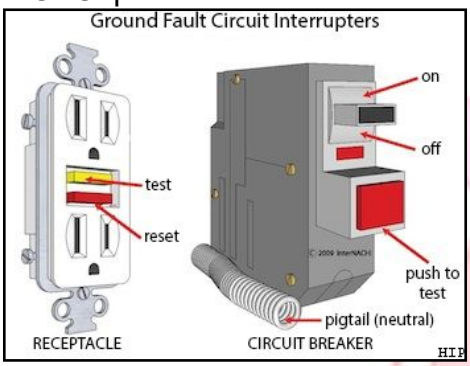


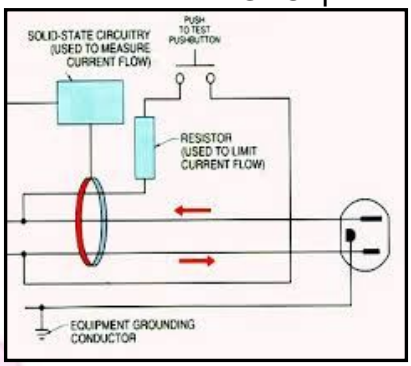
No GFCI protection



No GFCI protection

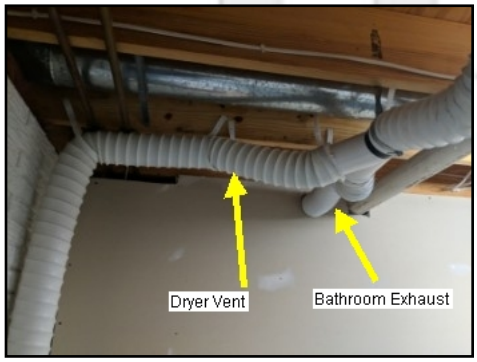
No GFCI protection





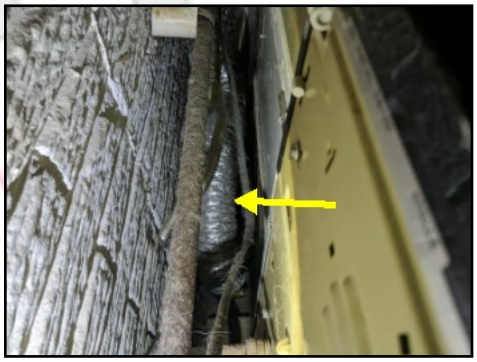
Laundry

	Page 28 Item: 6	Dryer Vent	• The dryer was vented using a flexible, ribbed plastic exhaust duct that is not approved by the Underwriter's Laboratory (UL). This type of duct is more likely to accumulate lint than a smooth metal duct, creating a potential fire hazard. Excessive lint accumulation can also increase drying time and shorten the dryer's lifespan. The Inspector recommends replacing this plastic vent with a properly-installed, UL-approved dryer vent.

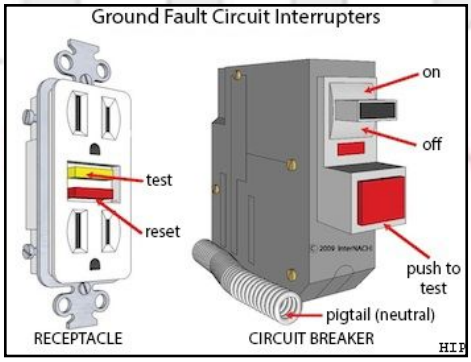


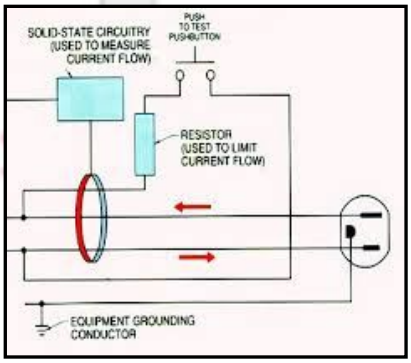
Dryer vent should a metal duct and separate from the bathroom exhaust.

Plastic dryer vent hose is spliced into a metal duct connected to the dryer.



	Page 29 Item: 8	GFCI	• No GFCI - Electrical outlets in the laundry appeared to be in serviceable condition at the time of the inspection but had no Ground Fault Circuit Interrupter (GFCI) protection. Although this condition may have been commonly considered safe or acceptable at the time the home was originally constructed, as general knowledge of safe building practices has improved with the passage of time, building standards have changed to reflect current understanding. Consider having GFCI protection installed as a safety precaution for outlets within 6 feet of a plumbing fixture. This can be achieved by: 1. Replacing the current standard outlets with GFCI outlets 2. Replacing the outlet in this bathroom circuit which is nearest the main electrical service panel with a GFCI outlet. 3. Replacing the breaker currently protecting the electrical circuit which contains these bathroom outlets with a GFCI breaker. • GFCI (Ground Fault Circuit Interrupter). A GFCI outlet or breaker measures the current differential flowing from the hot to the neutral side. If the there is a differential of 5 milli amps (,005 amps) or more, the circuit is opened and current stops flowing in as little as 1/10th of a second. This is designed to prevent electrocution caused by current looking for a path through a person (path of least resistance) back to the neutral side of the transformer. A standard breaker or fuse looks at a much higher overcurrent condition and does not respond to these conditions. 100 milliamps has been designated as the amount of current required to begin ventricular fibrillation.

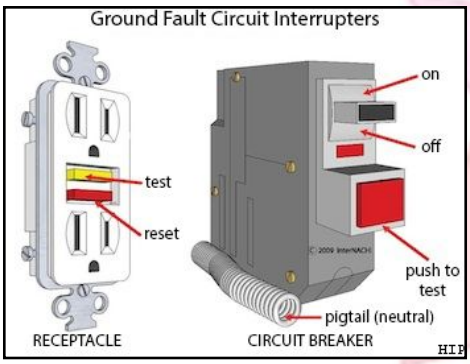


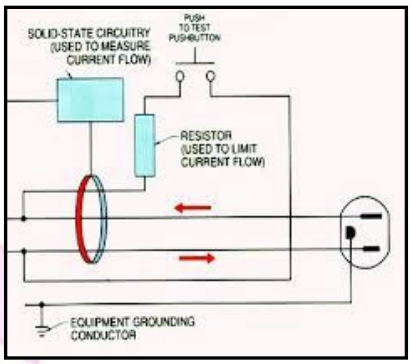


Failed trip test

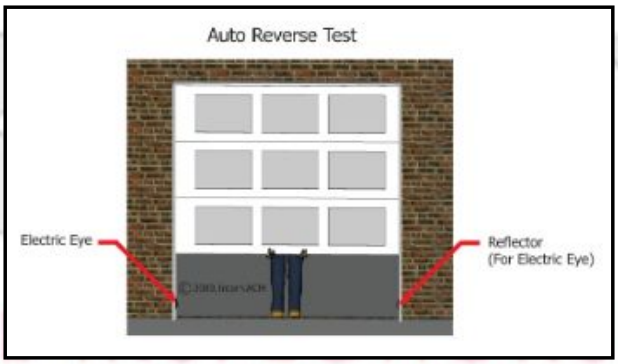
Garage

	Page 35 Item: 7	GFCI	• No GFCI protection present, suggest installing GFCI protected receptacles for safety. • GFCI (Ground Fault Circuit Interrupter). A GFCI outlet or breaker measures the current differential flowing from the hot to the neutral side. If the there is a differential of 5 milli amps (,005 amps) or more, the circuit is opened and current stops flowing in as little as 1/10th of a second. This is designed to prevent electrocution caused by current looking for a path through a person (path of least resistance) back to the neutral side of the transformer. A standard breaker or fuse looks at a much higher overcurrent condition and does not respond to these conditions. 100 milliamps has been designated as the amount of current required to begin ventricular fibrillation.





	Page 36 Item: 13	Garage Door's Reverse Status	• Garage vehicle door auto-reverse is inoperable.



Electrical

	Page 37 Item: 1	Electrical Panel	• The sub panels are incorrectly wired to the main panel. All the neutrals and ground wire and terminal bars must be separated from each other, and the sub feed should be a 4-wire cable that has a separated insulated neutral wire and a separate ground wire. This panel has ground and neutral on the same bus and does not have a 4th wire for the ground bus. The panel is also incorrectly bonded. Bonding is only done on the main panel ground/neutral bus. Recommend a licensed electrician evaluate and correct these defects. • Bonding questionable at panel box. • Double tapped breaker main lug inside panel box (more than one electrical conductor attached). This is not standard practice, and may cause overheating or even an electrical fire. Recommend evaluation by an electrician. Double tapping and lugging can create hot spots on breakers and neutral bars because they are not tightened to the correct torque--especially if two different size conductors are used. Because the hot [black] and neutral [white]wires are both current carrying conductors, the chance is then greater for potential hot spots. If the double tap or lug becomes loose, it begins to arc. As it arcs it builds up carbon. Carbon is then resistance and with more carbon buildup the more difficult it is for the conductor to make contact, thus increasing the current. The end result can be the breaker tripping because of the loose connection [current exceeding the rating of the breaker], or signs of overheating such as discolored wires, melted wires, etc, or even fire.

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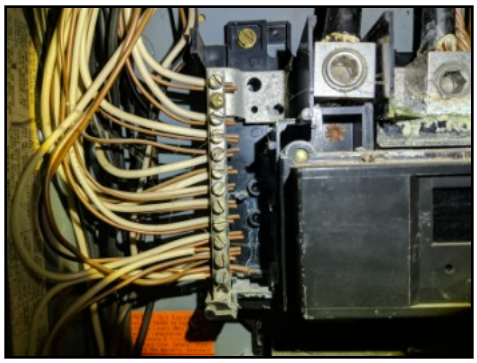
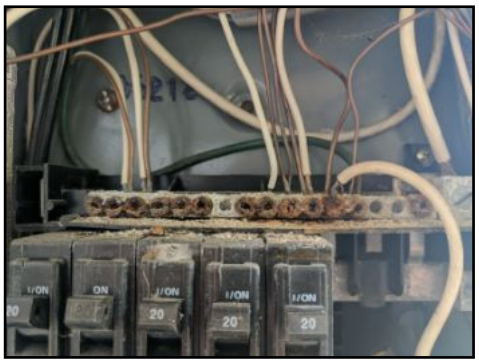
Ground bar has significant corrosion. Continuity may be affected.

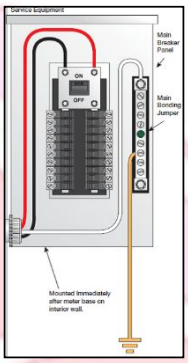


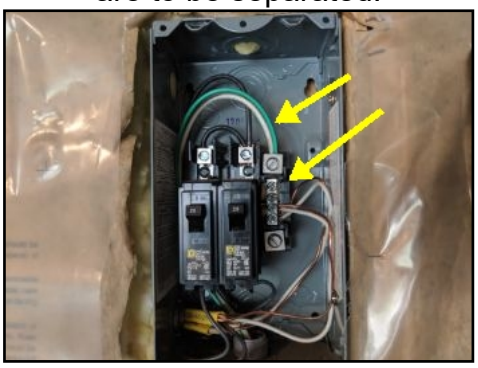
Main panel does not appear to be bonded.

Basement sub panel incorrectly uses a single floating ground bar for neutral and ground. These are to be separated.



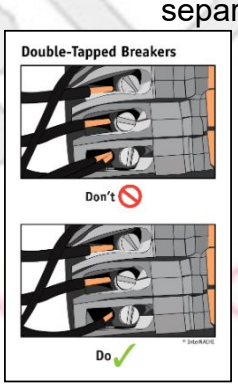
Sub panel on dock. Dock sub panel incorrectly uses a single floating ground bar for neutral and ground. These are to be separated.





Garage sub panel. Garage sub panel incorrectly uses a single floating ground bar for neutral and ground. These are to be separated.

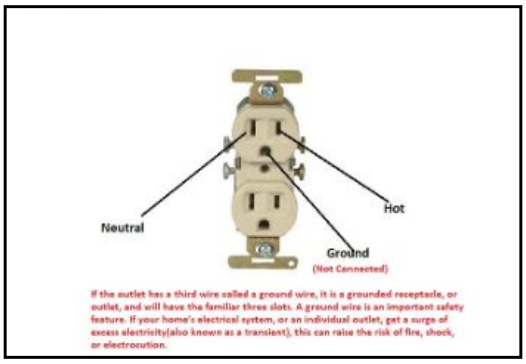
Double tap on main lug. Wire feed from main panel appears to be 10 ga. This is undersized for a potential 40 amp demand from the two 20 amp breakers. 10 ga is only rated for a maximum 30 amps.



Grounds

	Page 46 Item: 4	Grounds Electrical	• Open ground (or 2-wire) outlet present. This means that the 3rd (round) part of an appliance plug is not getting ground protection. The 3rd wire (ground) is designed to ground the case of an appliance so that no electricity is present on the surface of the appliance. Absence of this wire can lead to a shock hazard or even electrocution.

Weatherproof cover is upside down. Water can penetrate this outlet.

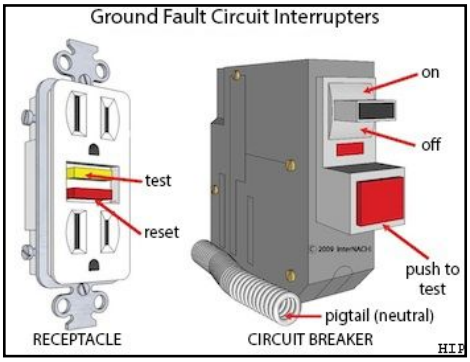


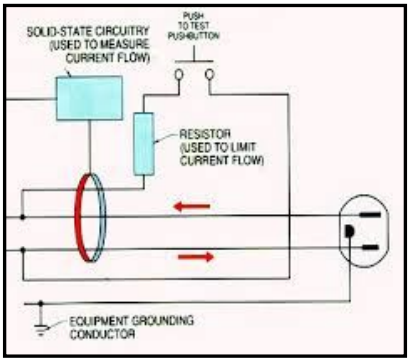
	Page 47 Item: 5	GFCI	• There is no GFCI protection on the several of the exterior receptacles. The exterior of a home is considered a wet location. • GFCI (Ground Fault Circuit Interrupter). A GFCI outlet or breaker measures the current differential flowing from the hot to the neutral side. If the there is a differential of 5 milli amps (,005 amps) or more, the circuit is opened and current stops flowing in as little as 1/10th of a second. This is designed to prevent electrocution caused by current looking for a path through a person (path of least resistance) back to the neutral side of the transformer. A standard breaker or fuse looks at a much higher overcurrent condition and does not respond to these conditions. 100 milliamps has been designated as the amount of current required to begin ventricular fibrillation.

No GFCI protection

No GFCI protection, Open ground.

No GFCI protection





	Page 48 Item: 7	Patio and Porch Deck	• No Lag Bolts Visible: The deck ledger board is nailed or screwed to the house, or is covered and not visible. Consider installing lag screws to securely attach ledger board to house, if they have not been used. • Tall 4x4 posts twist under load, and 4x4 posts, even when treated, decay below grade too quickly. In all but the lowest of decks, deck posts should be at least 6x6. • Spaces between deck guardrails balusters, beneath the guardrails or at the sides of the guardrails were too wide. Safe building practices dictate that a 4 inch sphere may not pass through the handrail at any point. This condition is hazardous to small children. The Inspector recommends that this condition be updated to meet generally-accepted modern safety standards by a qualified contractor. • Decks greater than 6 feet above grade should have diagonal bracing from posts to girder, and from posts to joists.

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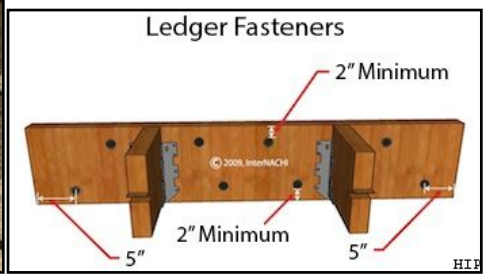
Cross bracing is recommended

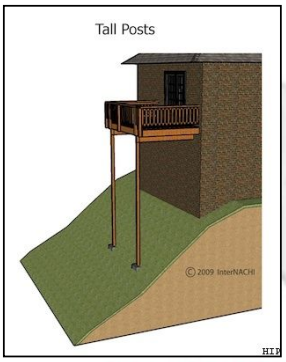
Ledger board is attached with nails. Lag bolts are recommended

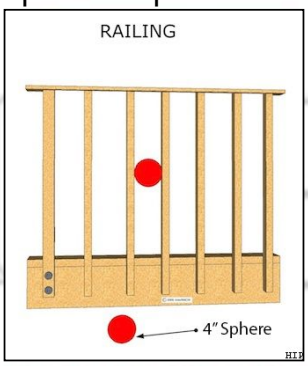
Open railings

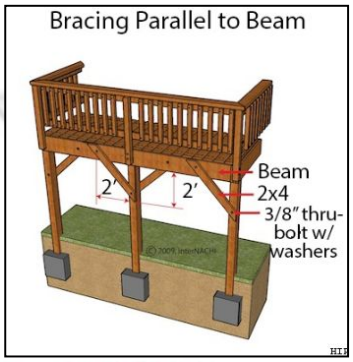
Loose plank. Potential trip hazard

Deteriorated deck plank could pose a trip hazard.





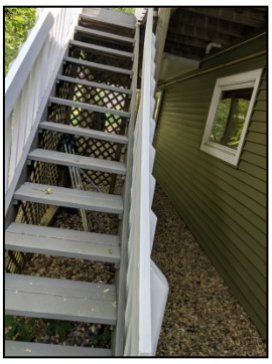




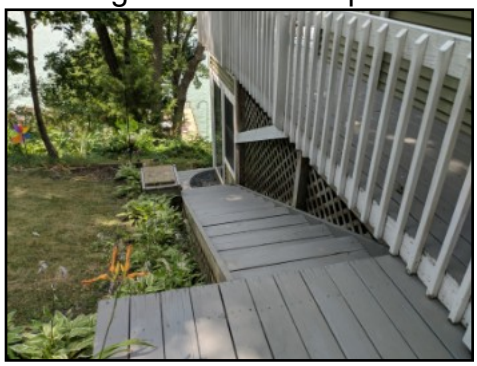
	Page 49 Item: 8	Stairs & Handrail	• No graspable railing. • Spindle spacing exceeds the 4 inch spacing which is considered safe by today's child safety standards. • Stair risers are open. This is considered a child safety hazard. Risers should allow no more than a 4" sphere to pass.

Missing hand rail and spindles.

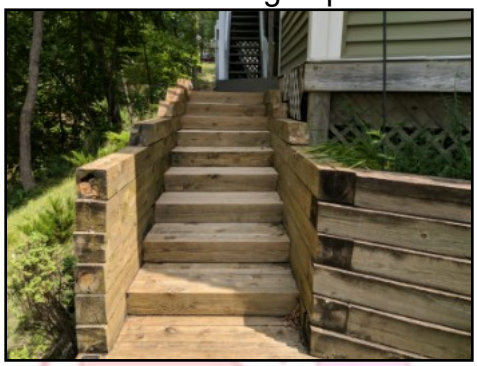
Hand rail not graspable



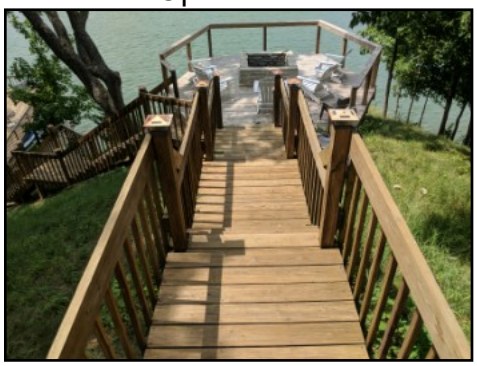
Open risers



Missing handrail

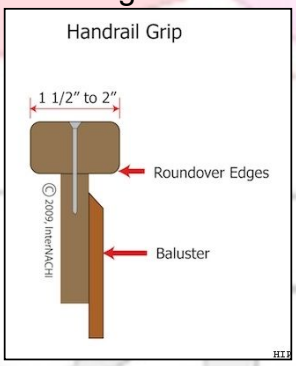


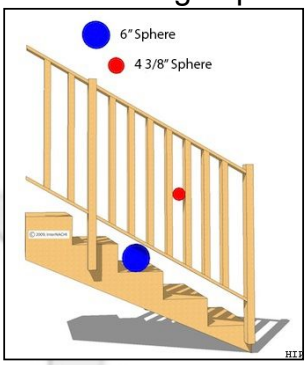
Missing handrail.

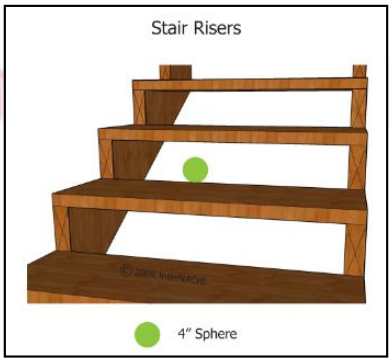


Handrail not graspable

Hand rail not graspable







Inspection Details

INTRODUCTION:

We appreciate the opportunity to conduct this inspection for you! Please carefully read your entire Inspection Report. Call us after you have reviewed your report, so we can go over any questions you may have. Remember, when the inspection is completed and the report is delivered, we are still available to you for any questions you may have, throughout the entire closing process.

Properties being inspected do not "Pass" or "Fail." - The following report is based on an inspection of the visible portion of the structure; inspection may be limited by vegetation and possessions. Depending upon the age of the property, some items like GFCI outlets may not be installed; this report will focus on safety and function, not current code. This report identifies specific non-code, non-cosmetic concerns that the inspector feels may need further investigation or repair.

For your safety and liability purposes, we recommend that licensed contractors evaluate and repair any critical concerns and defects. Note that this report is a snapshot in time. We recommend that you or your representative carry out a final walk-through inspection immediately before closing to check the condition of the property, using this report as a guide.

1. Attendance

In Attendance: Client present • Buyer Agent present

2. Home Type

Home Type: Detached Garage • Split Foyer Style - Two Levels

3. Occupancy

Occupancy: Occupied - Furnished

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Interior Areas

The Interior section covers areas of the house that are not considered part of the Bathrooms, Bedrooms, Kitchen or areas covered elsewhere in the report. Interior areas usually consist of hallways, foyer, and other open areas. Within these areas the inspector is performing a visual inspection and will report visible damage, wear and tear, and moisture problems if seen. Personal items in the structure may prevent the inspector from viewing all areas on the interior.

The inspector does not usually test for mold or other hazardous materials. A qualified expert should be consulted if you would like further testing.

1. Electrical

2. Ceiling Fans

Observations:
• Operated normally when tested, at time of inspection.

3. Smoke Detectors

Observations:
• SAFETY CONCERN: There are no visible smoke detectors. You need to be alarmed in case of a fire. Recommend installing at least one smoke detector on each level of the home.

Only Carbon Monoxide detector located in the furnace closet. Recommend adding to living areas.

No smoke detectors

4. Window Condition

5. Ceiling Condition

6. Wall Condition

7. Floor Condition

8. Doors

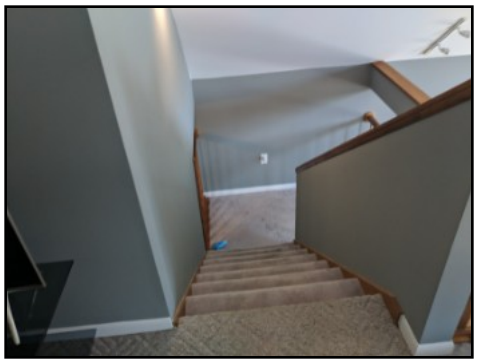
9. Closets

10. Door Bell

Observations:
• Operated normally when tested.

11. Stairs & Handrail

Observations:
• A handrail is MISSING.



No handrail

12. Patio Doors

13. Screen Doors

14. Fireplace

Materials: Living Room • Family Room
Observations:
• Level II inspection—The National Fire Protection Association (www.nfpa.org) advises that each chimney receive a Level II inspection each time a residence is sold. Inspection levels are explained at www.csia.org/pressroom/press-inspection-levels-explained.htm. It is also advised that this inspection be conducted by a chimney sweep certified by the Chimney Safety Institute of America (www.csia.org).
• Damper was opened and closed several times.

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Bedrooms

The main area of inspection in the bedrooms is the structural system. This means that all walls, ceilings and floors will be inspected. Doors and windows will also be investigated for damage and normal operation. Personal items in the bedroom may prevent all areas to be inspected as the inspector will not move personal items.

1. Locations

Locations: Master second floor • Main floor 2 bedrooms • Basement 2 bedrooms

2. Electrical

Observations:

• No Arc-Fault Circuit Interrupter (AFCI) protection was installed to protect electrical circuits in bedrooms.

Building codes with which new homes must comply require the installation of AFCI protection of all bedroom outlets. This type of protection is designed to detect electrical arcing, which is a potential fire hazard.

Although AFCI protection was not required at the time the home was originally constructed, as general knowledge of safe building practices has improved with the passage of time, building standards have changed to reflect current understanding. Consider updating the existing electrical to provide AFCI protection.

Arc-fault protection can be provided using either of two methods:

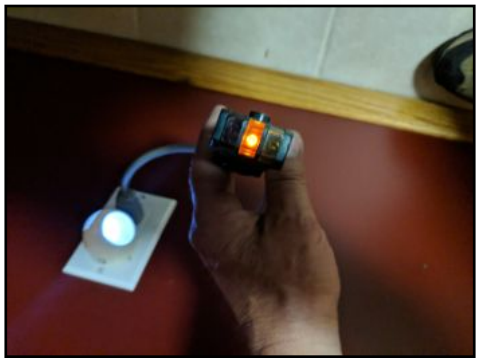
1. Arc Fault Circuit Interrupters (AFCI's) electrical outlets which have this capability built in.
2. AFCI circuit breakers installed at the main electrical panel which provide this protection to all non-AFCI outlets on the circuit controlled by that AFCI breaker.

• AFCI's protect circuits from fire.

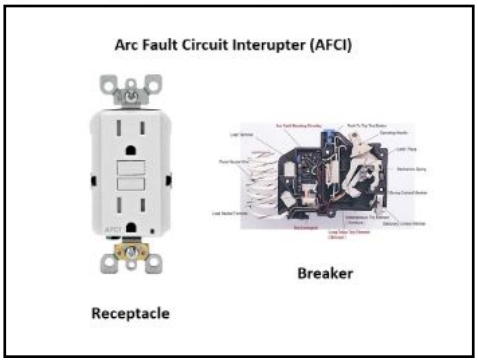
The parallel arc fault arises, when the current flows through damaged insulation from one conductor to another conductor, producing a short circuit that is too weak to be detected by the circuit breaker.

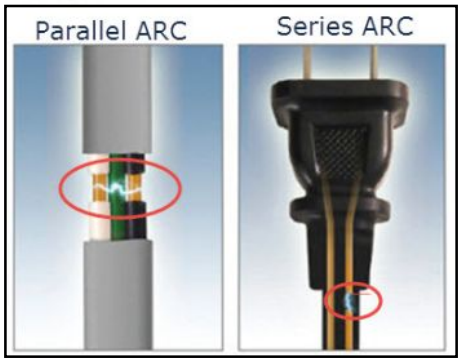
A Series arc fault arises, when a single wire damaged and cannot tolerate the current, causing the current to arc from the conductor into the insulation. This leakage current can burn and eventually burn the insulation.

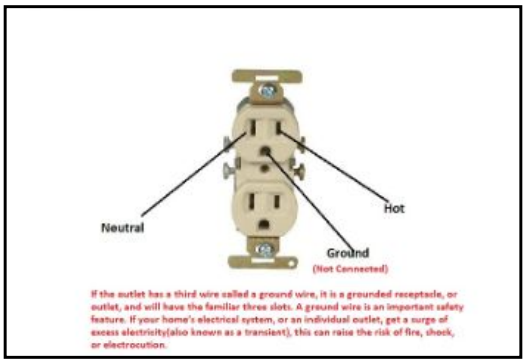
• Open ground (or 2-wire) outlets present. This means that the 3rd (round) part of an appliance plug is not getting ground protection. The 3rd wire (ground) is designed to ground the case of an appliance so that no electricity is present on the surface of the appliance. Absence of this wire can lead to a shock hazard or even electrocution.



Basement bedroom. Open ground.



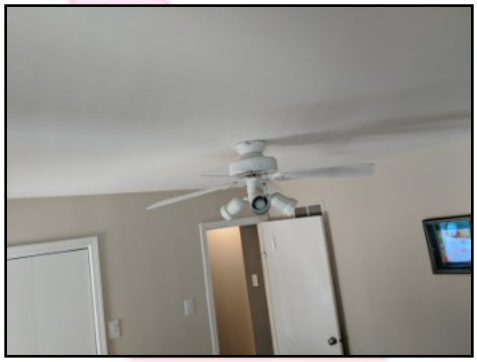




3. Smoke Detectors

Observations:
• There were no smoke detectors present in the bedroom(s).

No smoke detector in bedrooms

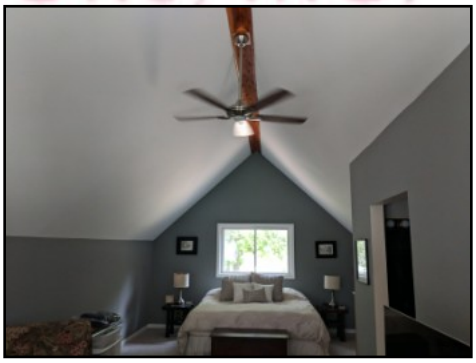

No smoke detector in bedrooms

Only smoke detector in home found in basement bedroom.

4. Closets

5. Ceiling Fans

Observations:
• Operated normally when tested, at time of inspection.



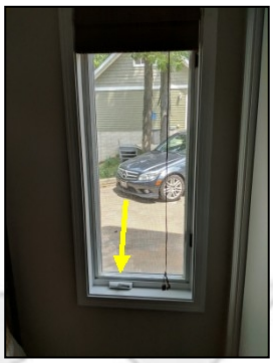
6. Doors

7. Floor Condition

8. Wall Condition

9. Window Condition

Damaged screen



Damaged screen

10. Ceiling Condition

RUBY HOME INSPECTIONS, INC.

Bathroom

Bathrooms can consist of many features from jacuzzi tubs and showers to toilets and bidets. Because of all the plumbing involved it is an important area of the house to look over. Moisture in the air and leaks can cause mildew, wallpaper and paint to peel, and other problems. The home inspector will identify as many issues as possible but some problems may be undetectable due to problems within the walls or under the flooring..

1. Locations

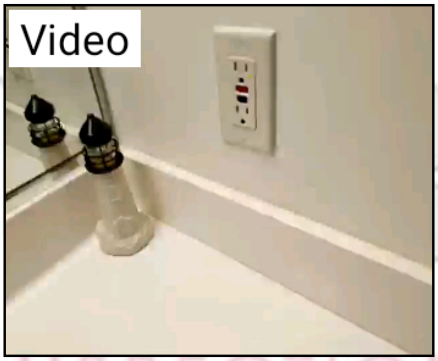
Locations: Master Bathroom • Main Floor Bathroom • Basement Bathroom

2. Counters

3. Electrical

4. GFCI

Observations:
• GFCI did not respond to test, suggest replacing for safety.



Failed trip test

5. Exhaust Fan

First floor bathroom exhaust vent

6. Floor Condition

7. Heating

Observations:
• Central heating and cooling noted in this room. At the time of the inspection, all appeared to be functioning and in serviceable condition.

8. Mirrors

9. Plumbing

10. Showers

11. Shower Walls

12. Bath Tubs

13. Enclosure

14. Sinks

15. Toilets

Observations:
• Operated when tested. No deficiencies noted.

16. Doors

17. Cabinets

18. Ceiling Condition

19. Window Condition

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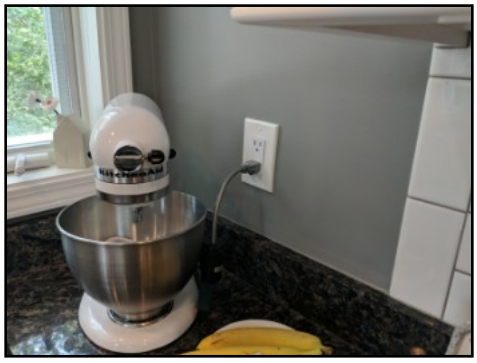
Kitchen

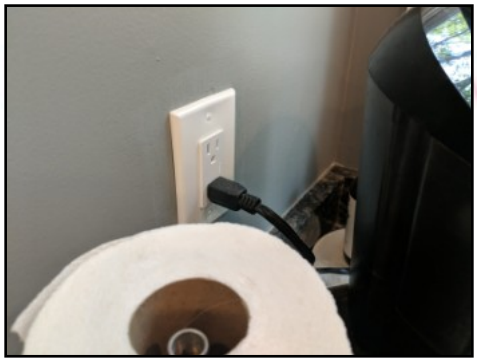
The kitchen is used for food preparation and often for entertainment. Kitchens typically include a stove, dishwasher, sink and other appliances.

1. Electrical

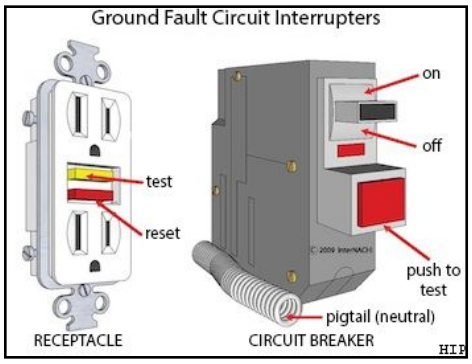
2. GFCI

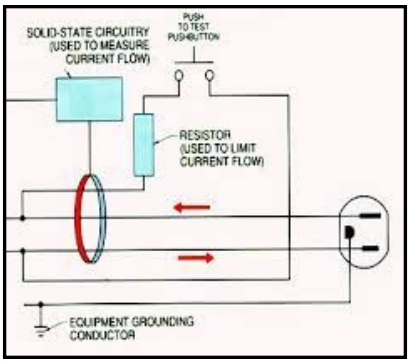
Observations:
• No GFCI -
Electrical outlets in this kitchen appeared to be in serviceable condition at the time of the inspection but had no Ground Fault Circuit Interrupter (GFCI) protection.
Although this condition may have been commonly considered safe or acceptable at the time the home was originally constructed, as general knowledge of safe building practices has improved with the passage of time, building standards have changed to reflect current understanding.
Consider having GFCI protection installed as a safety precaution for outlets within 6 feet of a plumbing fixture.
This can be achieved by:
1. Replacing the current standard outlets with GFCI outlets
2. Replacing the outlet in this bathroom circuit which is nearest the main electrical service panel with a GFCI outlet.
3. Replacing the breaker currently protecting the electrical circuit which contains these bathroom outlets with a GFCI breaker.
• GFCI (Ground Fault Circuit Interrupter) Operation. A GFCI outlet or breaker measures the current differential between the hot hot and neutral sides of the circuit. If it detects a differential of 5 milliamps or more it automatically trips the circuit open. This occurs in less than 1/10th of a second. Current is always looking for the least resistive path back to the neutral side of the transformer. Electrocution can occur when a person provides the path of least resistance. This is a special concern when a conductor such as water is in contact with that person. It only takes 100 milliamps to begin ventricular fibrillation. Standard circuit breakers and fuses are designed to trip during overcurrent conditions that far exceed this 100 milliamp flow.


No GFCI protection

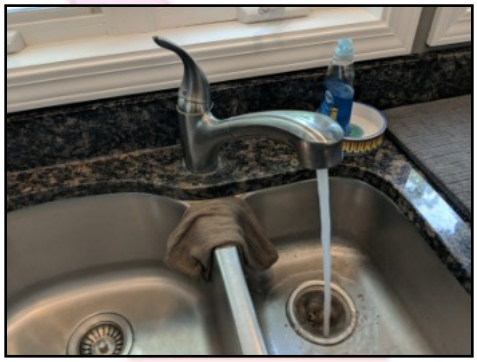

No GFCI protection

No GFCI protection





3. Sinks



4. Drinking Fountain

Observations:
• There was no drinking fountain present in this kitchen.

5. Spray Wand

Observations:
• The spray wand was operated and was functional.

6. Plumbing

Observations:
• Flex drain observed, these are subject to frequent clogging.

Flex lines can lead to dbris buildup and frequent clogging

7. Cook top condition

Observations:
• Gas cook top noted.

8. Oven & Range

Observations:
• Oven: gas burners
• All heating elements operated when tested.

9. Dishwasher

10. Cabinets

11. Counters

12. Floor Condition

13. Ceiling Condition

14. Wall Condition

15. Window Condition

16. Patio Doors

17. Screen Doors

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Laundry

1. Locations

Locations: Basement

2. Wash Machine Condition

Materials: Front Load Wash Machine

3. Plumbing

4. Dryer Condition

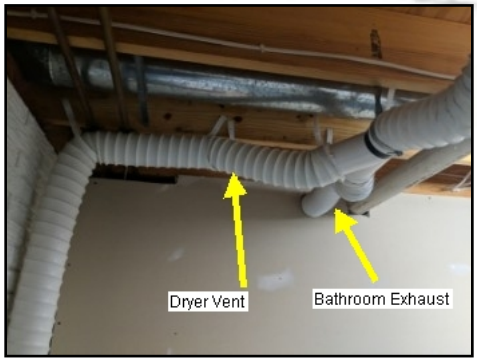
Materials: Gas Dryer

5. Gas Valves

6. Dryer Vent

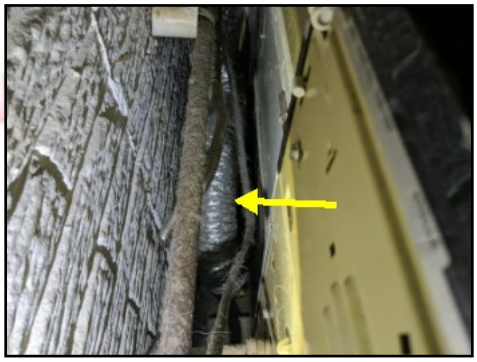
Observations:

• The dryer was vented using a flexible, ribbed plastic exhaust duct that is not approved by the Underwriter's Laboratory (UL). This type of duct is more likely to accumulate lint than a smooth metal duct, creating a potential fire hazard. Excessive lint accumulation can also increase drying time and shorten the dryer's lifespan. The Inspector recommends replacing this plastic vent with a properly-installed, UL-approved dryer vent.



Dryer vent should a metal duct and separate from the bathroom exhaust.

Plastic dryer vent hose is spliced into a metal duct connected to the dryer.



7. Electrical

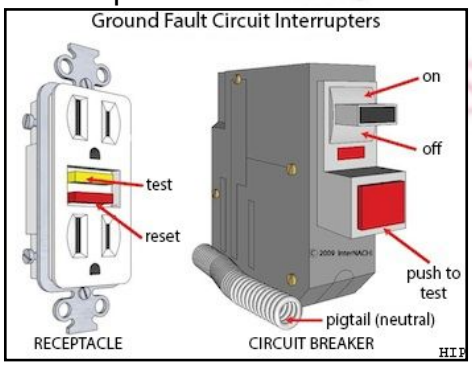
8. GFCI

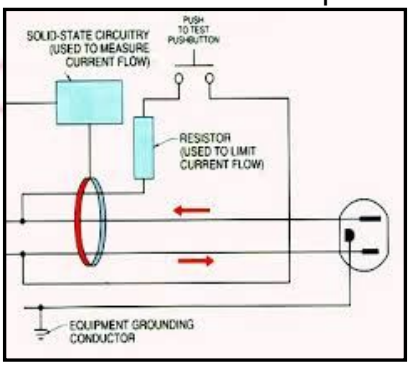
Observations:
• No GFCI -
Electrical outlets in the laundry appeared to be in serviceable condition at the time of the inspection but had no Ground Fault Circuit Interrupter (GFCI) protection.
Although this condition may have been commonly considered safe or acceptable at the time the home was originally constructed, as general knowledge of safe building practices has improved with the passage of time, building standards have changed to reflect current understanding.
Consider having GFCI protection installed as a safety precaution for outlets within 6 feet of a plumbing fixture.
This can be achieved by:
1. Replacing the current standard outlets with GFCI outlets
2. Replacing the outlet in this bathroom circuit which is nearest the main electrical service panel with a GFCI outlet.
3. Replacing the breaker currently protecting the electrical circuit which contains these bathroom outlets with a GFCI breaker.
• GFCI (Ground Fault Circuit Interrupter). A GFCI outlet or breaker measures the current differential flowing from the hot to the neutral side. If the there is a differential of 5 milli amps (,005 amps) or more, the circuit is opened and current stops flowing in as little as 1/10th of a second. This is designed to prevent electrocution caused by current looking for a path through a person (path of least resistance) back to the neutral side of the transformer. A standard breaker or fuse looks at a much higher overcurrent condition and does not respond to these conditions. 100 milliamps has been designated as the amount of current required to begin ventricular fibrillation.

No GFCI protection

Failed trip test

No GFCI protection





9. Doors

10. Wall Condition

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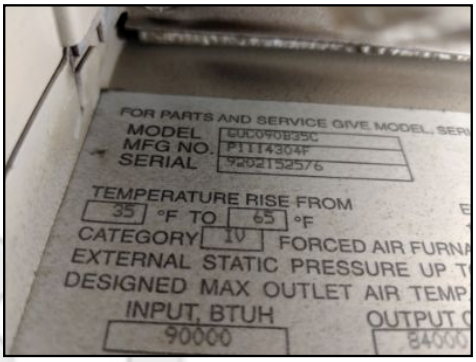
Heat/AC

The heating, ventilation, and air conditioning and cooling system (often referred to as HVAC) is the climate control system for the structure. The goal of these systems is to keep the occupants at a comfortable level while maintaining indoor air quality, ventilation while keeping maintenance costs at a minimum. The HVAC system is usually powered by electricity and natural gas, but can also be powered by other sources such as butane, oil, propane, solar panels, or wood.

The inspector will usually test the heating and air conditioner using the thermostat or other controls. For a more thorough investigation of the system please contact a licensed HVAC service person.

1. Heater Condition

Materials: The furnace is located in the basement
Materials: Gas fired forced hot air.
Observations:
• Fuel Furnace: Last service date is over one year ago, or is unable to be determined. Although this unit appears to be operating properly from controls, there are areas which cannot be seen without specialized equipment and training. One such area is the combustion chamber / heat exchanger where cold air blows across the "fire box", becoming the hot air that circulates throughout your home. During the life span of any furnace, this metal wall may develop a crack or a broken weld, allowing carbon monoxide to circulate throughout the home. This is why furnace specialists recommend a complete inspection annually; consider having unit inspected by certified HVAC technician.



Manufactured February 1992

2. Venting

Observations:
• Plastic - PVC vent noted.

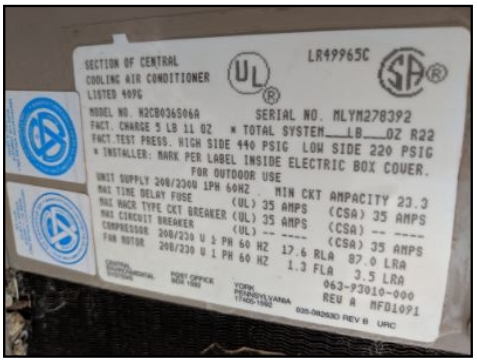
3. Gas Valves

Observations:
• Gas shut off valves were present and functional.

4. Refrigerant Lines

Observations:
• No defects found.

5. AC Compress Condition



Manufactured October 1990. 3 Ton capacity

6. Air Supply

7. Registers

8. Filters

Location: Located below heater in a slot cut into the ductwork.

9. Thermostats

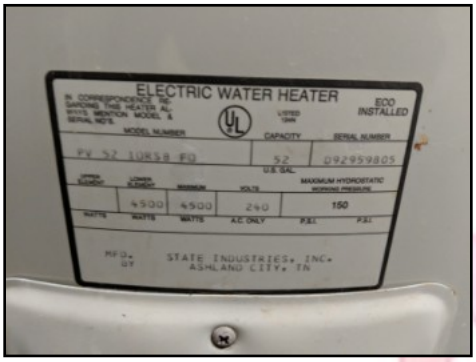
Observations:
• Digital - programmable type.

RUBY HOME INSPECTIONS, INC.

Water Heater

1. Water Heater Condition

Heater Type: Electric
Location: The heater is located in the basement.



Manufactured July 2009

2. TPRV

3. TRPV Pipe Condition

Materials: Copper

4. Number Of Gallons

Observations:
• 52 gallons

5. Plumbing

Materials: Copper

Garage

1. Roof Condition

Materials: Architectural style fiberglass composite shingles noted.

2. Walls

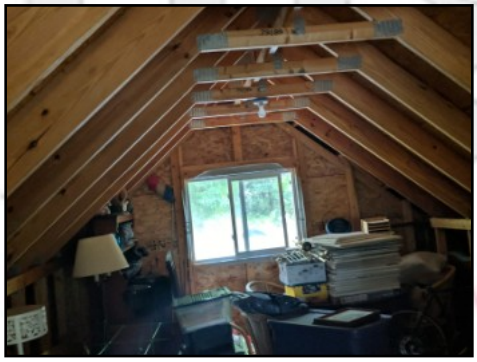
3. Anchor Bolts

4. Floor Condition

Materials: Bare concrete floors noted.

5. Rafters & Ceiling

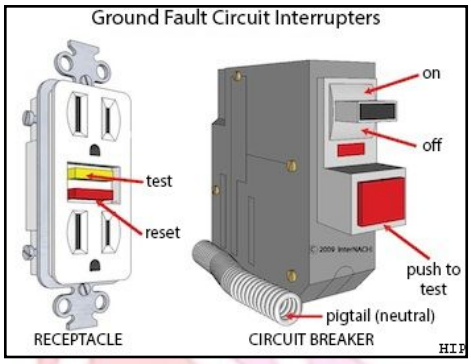
Observations:
• Dimensional lumber wood ceiling joists with collar ties.

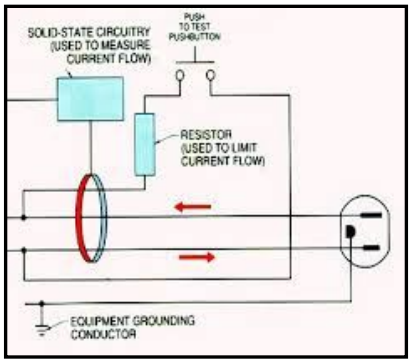


6. Electrical

7. GFCI

Observations:
• No GFCI protection present, suggest installing GFCI protected receptacles for safety.
• GFCI (Ground Fault Circuit Interrupter). A GFCI outlet or breaker measures the current differential flowing from the hot to the neutral side. If the there is a differential of 5 milli amps (,005 amps) or more, the circuit is opened and current stops flowing in as little as 1/10th of a second. This is designed to prevent electrocution caused by current looking for a path through a person (path of least resistance) back to the neutral side of the transformer. A standard breaker or fuse looks at a much higher overcurrent condition and does not respond to these conditions. 100 milliamps has been designated as the amount of current required to begin ventricular fibrillation.





No GFCI protection

8. 240 Volt

Observations:
• There are no 240 volt outlets visible in this room.

9. Door Condition

10. Garage Door Condition

Materials: One 16' upgraded insulated steel door
Observations:
• No deficiencies observed.

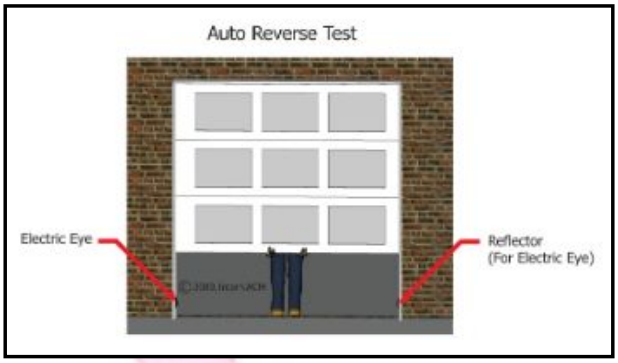
11. Garage Door Parts

12. Garage Opener Status

Observations:
• Chain drive opener noted.

13. Garage Door's Reverse Status

Observations:
- Garage vehicle door auto-reverse is inoperable.



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Electrical

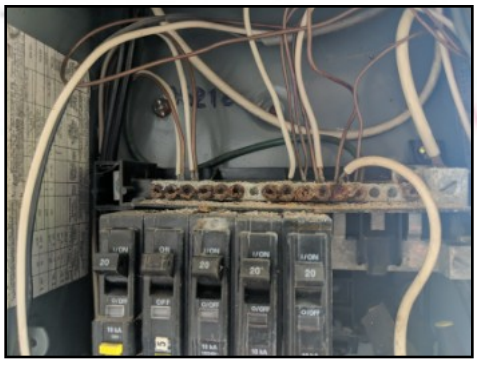
This report describes the amperage and voltage rating of the service, the location of the main disconnect and any sub panel(s), the presence of solid conductor aluminum branch circuit wiring, the presence or absence of smoke detectors and wiring methods. Inspectors are required to inspect the viewable portions of the service drop from the utility to the house, the service entrance conductors, cables and raceways, the service equipment and main disconnects, the service grounding, the interior components of the service panels and sub panels, the conductors, the over-current protection devices (fuses or breakers), ground fault circuit interrupters and a representative number of installed lighting fixtures, switches and receptacles. All issues or concerns listed in this Electrical section should be construed as current and a potential personal safety or fire hazard. Repairs should be a priority, and should be made by a qualified, licensed electrician.

1. Electrical Panel

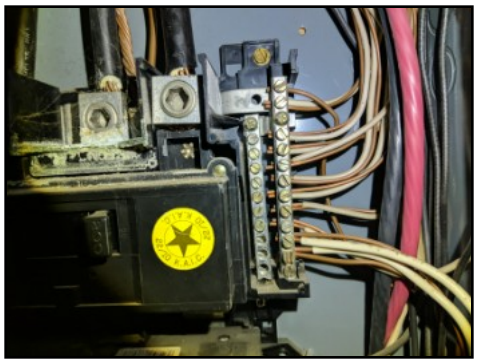
Location: Panel box located in basement.
Location: There are 3 sub panels located in the basement, boat dock and the garage.
Observations:

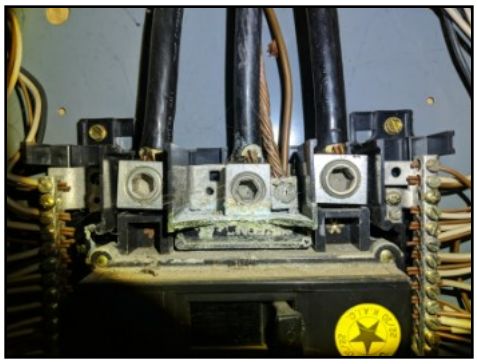
- The sub panels are incorrectly wired to the main panel. All the neutrals and ground wire and terminal bars must be separated from each other, and the sub feed should be a 4-wire cable that has a separated insulated neutral wire and a separate ground wire. This panel has ground and neutral on the same bus and does not have a 4th wire for the ground bus. The panel is also incorrectly bonded. Bonding is only done on the main panel ground/neutral bus. Recommend a licensed electrician evaluate and correct these defects.
- Bonding questionable at panel box.
- Double tapped breaker main lug inside panel box (more than one electrical conductor attached). This is not standard practice, and may cause overheating or even an electrical fire. Recommend evaluation by an electrician. Double tapping and lugging can create hot spots on breakers and neutral bars because they are not tightened to the correct torque--especially if two different size conductors are used. Because the hot [black] and neutral [white]wires are both current carrying conductors, the chance is then greater for potential hot spots. If the double tap or lug becomes loose, it begins to arc. As it arcs it builds up carbon. Carbon is then resistance and with more carbon buildup the more difficult it is for the conductor to make contact, thus increasing the current. The end result can be the breaker tripping because of the loose connection [current exceeding the rating of the breaker], or signs of overheating such as discolored wires, melted wires, etc, or even fire.

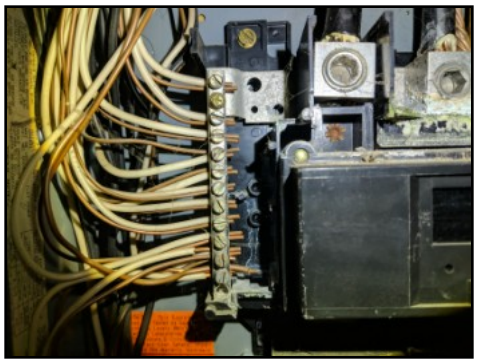
Sub panel at the dock



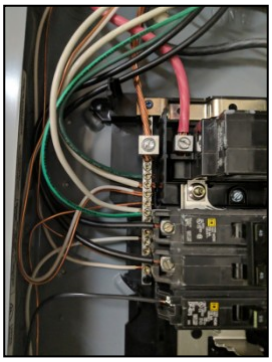
Ground bar has significant corrosion. Continuity may be affected.



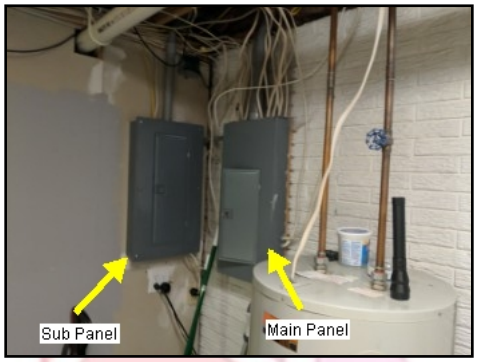


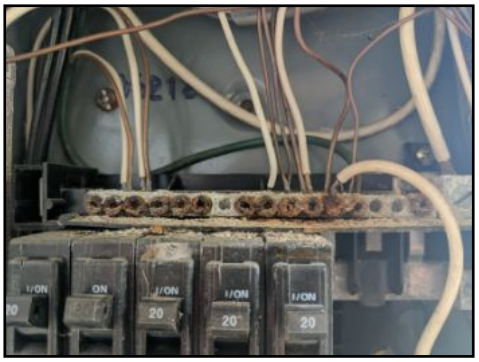


Main panel does not appear to be bonded.



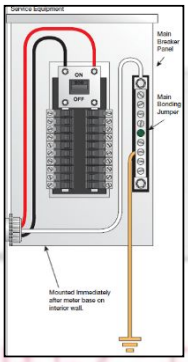
Basement sub panel incorrectly uses a single floating ground bar for neutral and ground. These are to be separated.

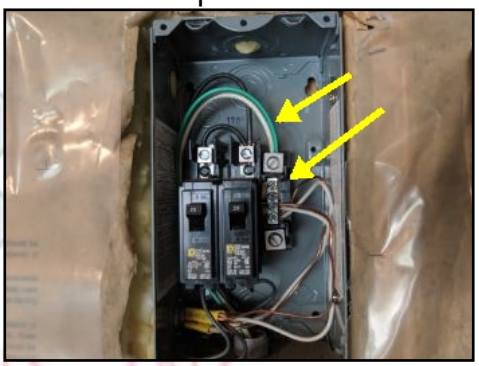




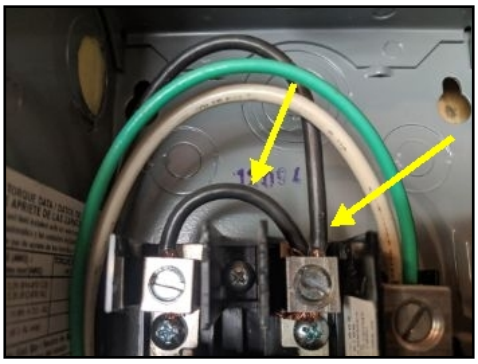
Sub panel on dock. Dock sub panel incorrectly uses a single floating ground bar for neutral and ground. These are to be separated.

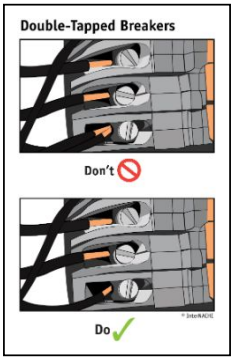
Basement sub panel breakers





Garage sub panel. Garage sub panel incorrectly uses a single floating ground bar for neutral and ground. These are to be separated.

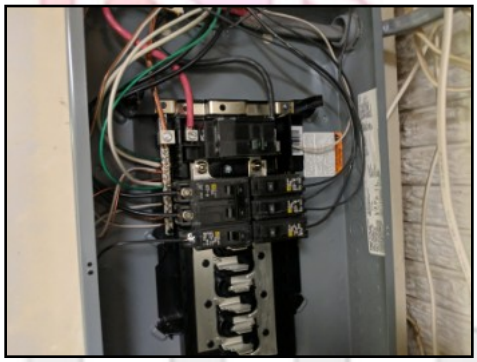




Double tap on main lug. Wire feed from main panel appears to be 10 ga. This is undersized for a potential 40 amp demand from the two 20 amp breakers. 10 ga is only rated for a maximum 30 amps.

2. Breakers

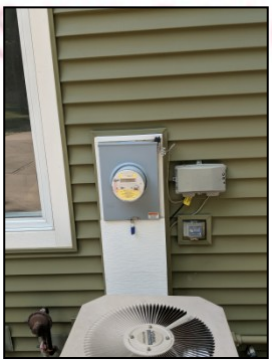
Materials: Copper non-metallic sheathed cable noted. • Copper armor sheathed cable noted.
Observations:
• All of the circuit breakers appeared serviceable.



Basement sub panel

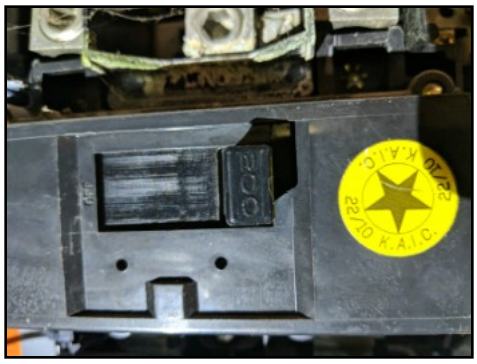
3. Cable Feeds

Observations:
• There is an underground service lateral noted.



4. Main Amp Breaker

Observations:
• 200 amp



5. Breakers in off position

Observations:
- 0

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Roof

As with all areas of the house, we recommend that you carefully examine the roof immediately prior to closing the deal. Note that walking on a roof voids some manufacturer's warranties. Adequate attic ventilation, solar / wind exposure, and organic debris all affect the life expectancy of a roof. Always ask the seller about the age and history of the roof. On any home that is over 3 years old, experts recommend that you obtain a roof certification from an established local roofing company to determine its serviceability and the number of layers on the roof. We certainly recommend this for any roof over 5 years of age. Metal roofs in snow areas often do not have gutters and downspouts, as there is a concern that snow or ice cascading off the roof may tear gutters from the house. Likewise, be advised that such cascading may cause personal injury or even death. If this house has a metal roof, consult with qualified roofers or contractors regarding the advisability of installing a damming feature which may limit the size and amount of snow / ice sliding from the roof.

1. Roof Condition

Materials: Visually accessible from ground. Not mounted due to height and pitch making mounting of roof dangerous.
Materials: Architectural style fiberglass composite shingles noted.
Observations:
• No major system safety or function concerns noted at time of inspection.

2. Gutter

Organic debris in gutter is supporting plant life. Clean gutters to maintain proper perimeter drainage.

3. Flashing

4. Chimney

5. Spark Arrestor

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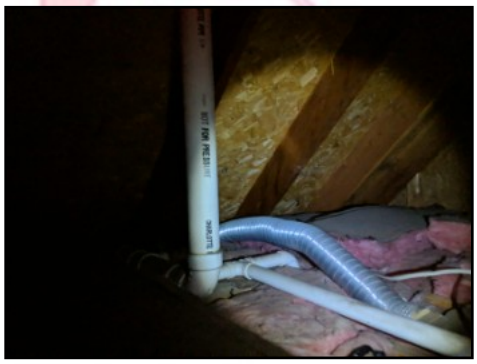
Attic

This report describes the method used to inspect any accessible attics; and describes the insulation and vapor retarders used in unfinished spaces when readily accessible and the absence of insulation in unfinished spaces at conditioned surfaces. Inspectors are required to inspect insulation and vapor retarders in unfinished spaces when accessible and passive/mechanical ventilation of attic areas, if present.

1. Access

Observations:
• Bedroom Closet.

2. Structure



3. Ventilation

Observations:
• Fixed, roof-field exhaust vent noted.

4. Vent Screens

5. Electrical

Observations:
• Most areas not accessible due to insulation.

6. Insulation Condition

Materials: Unfinished fiberglass batts noted.
Depth: Insulation averages about 8-10 inches in depth

7. Exhaust Vent

Observations:
• The bathroom exhaust fan correctly terminates at the exterior of the home

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Exterior Areas

This section describes the exterior wall coverings and trim. Inspectors are required to inspect the exterior wall coverings, flashing, trim, all exterior doors, the stoops, steps porches and their associated railings, any attached decks and balconies and eaves, soffits and fascias accessible from ground level.

1. Doors

2. Window Condition

3. Siding Condition

Materials: Vinyl siding, wood frame construction, concrete foundation

4. Eaves & Facia

5. Foundation Walls

Grounds

Inspectors shall inspect adjacent or entryway walkways, patios, and driveways; vegetation, grading, surface drainage, and retaining walls that are likely to adversely affect the building.

1. Driveway and Walkway Condition

Materials: Concrete driveway noted. • Concrete sidewalk noted.
Observations:
• The concrete driveway is showing wear. Common cracks and some spalling due to age.

2. Grading

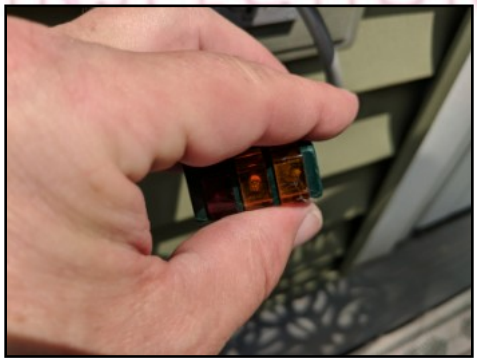
Observations:
• The exterior drainage is generally away from foundation

3. Vegetation Observations

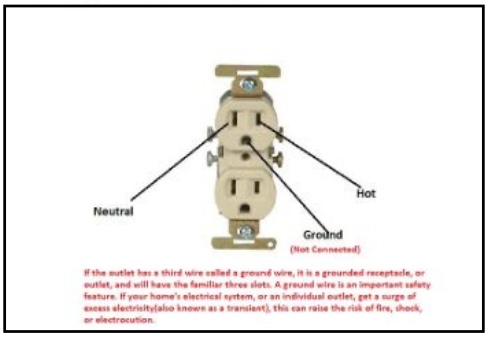
4. Grounds Electrical

Observations:
• Open ground (or 2-wire) outlet present. This means that the 3rd (round) part of an appliance plug is not getting ground protection. The 3rd wire (ground) is designed to ground the case of an appliance so that no electricity is present on the surface of the appliance. Absence of this wire can lead to a shock hazard or even electrocution.

Weatherproof cover is upside down. Water can penetrate this outlet.



Open ground



5. GFCI

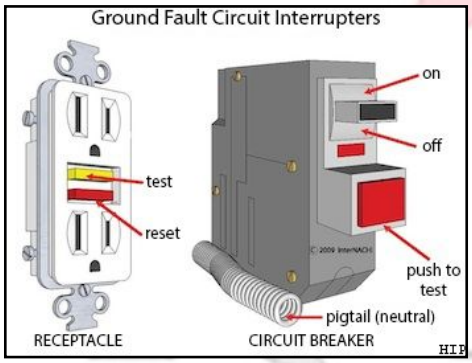
Observations:

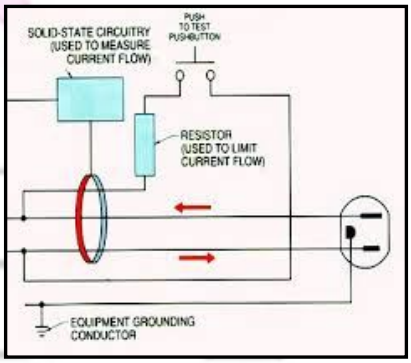
- There is no GFCI protection on the several of the exterior receptacles. The exterior of a home is considered a wet location.
- GFCI (Ground Fault Circuit Interrupter). A GFCI outlet or breaker measures the current differential flowing from the hot to the neutral side. If the there is a differential of 5 milli amps (,005 amps) or more, the circuit is opened and current stops flowing in as little as 1/10th of a second. This is designed to prevent electrocution caused by current looking for a path through a person (path of least resistance) back to the neutral side of the transformer. A standard breaker or fuse looks at a much higher overcurrent condition and does not respond to these conditions. 100 milliamps has been designated as the amount of current required to begin ventricular fibrillation.

No GFCI protection

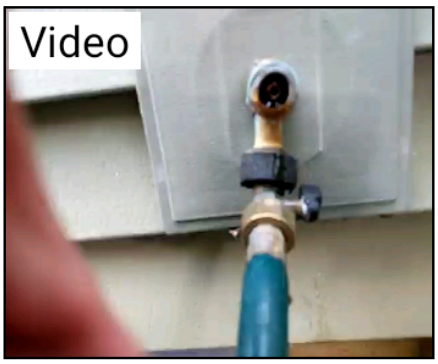
No GFCI protection, Open ground.

No GFCI protection





6. Exterior Faucet Condition



Leak at faucet packing

7. Patio and Porch Deck

Observations:

• No Lag Bolts Visible: The deck ledger board is nailed or screwed to the house, or is covered and not visible. Consider installing lag screws to securely attach ledger board to house, if they have not been used.

• Tall 4x4 posts twist under load, and 4x4 posts, even when treated, decay below grade too quickly. In all but the lowest of decks, deck posts should be at least 6x6.

• Spaces between deck guardrails balusters, beneath the guardrails or at the sides of the guardrails were too wide. Safe building practices dictate that a 4 inch sphere may not pass through the handrail at any point. This condition is hazardous to small children.
The Inspector recommends that this condition be updated to meet generally-accepted modern safety standards by a qualified contractor.

• Decks greater than 6 feet above grade should have diagonal bracing from posts to girder, and from posts to joists.

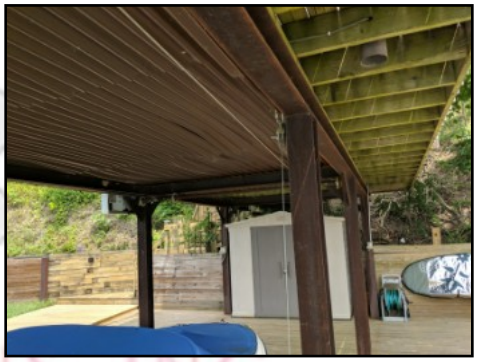
Cross bracing is recommended

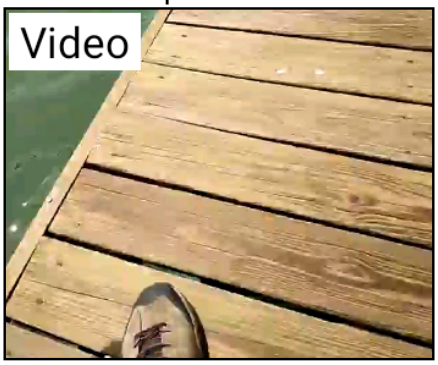
Ledger board is attached with nails. Lag bolts are recommended

Posts over 6 feet tall should 6"x6". Cross bracing is recommended.

Nail heads are pulling out in multiple locations

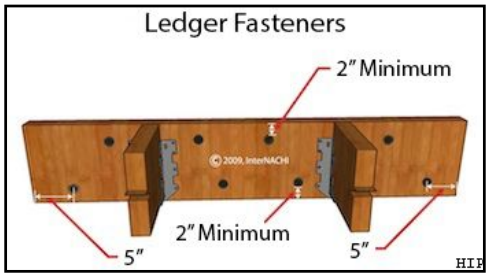
Open railings

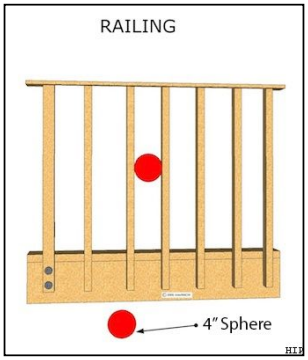


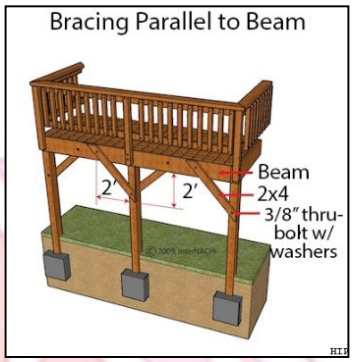


Loose plank. Potential trip hazard

Deteriorated deck plank could pose a trip hazard.





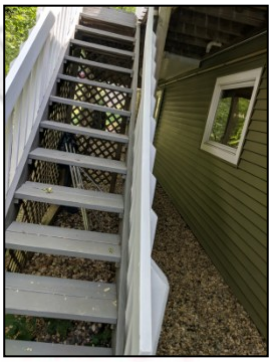


8. Stairs & Handrail

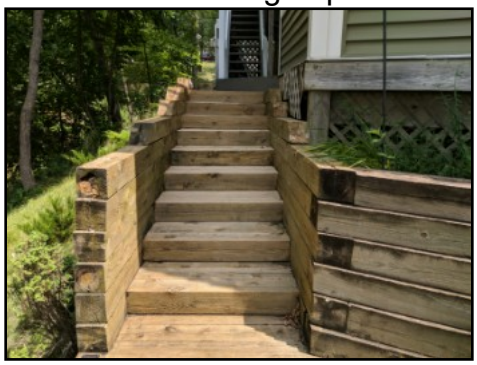
Observations:
- No graspable railing.
- Spindle spacing exceeds the 4 inch spacing which is considered safe by today's child safety standards.
- Stair risers are open. This is considered a child safety hazard. Risers should allow no more than a 4" sphere to pass.

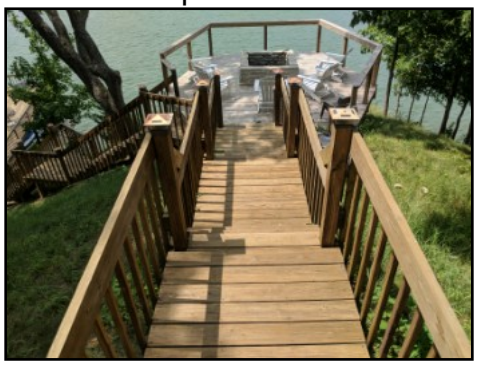
Missing hand rail and spindles.

Hand rail not graspable

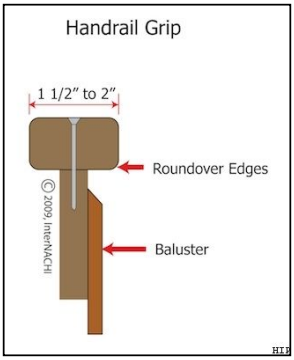

Open risers

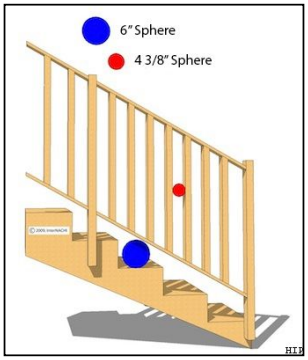
Missing handrail

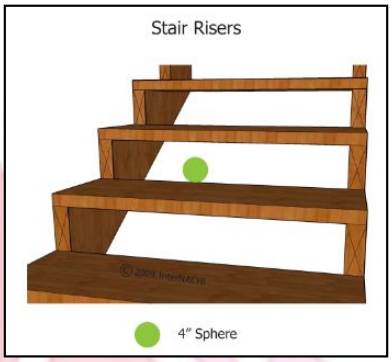

Missing handrail.


Handrail not graspable

Hand rail not graspable







9. Retaining Wall Condition

Materials: Wood (Pressure Treated)
Observations:
• Wood deterioration observed. Suggest repairs/replacement as needed.

Lower wall showing deterioration on several boards. Appeared to be holding at the time of the inspection.

Crack in wall appears to be settlement crack. Monitor for movement.

Basement/Crawlspace

1. Walls

Materials: Fully finished basement.

2. Slab Floor

3. Finished Floor

4. Windows

5. Stairs

6. Railings

7. Basement Electric

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8. GFCI

9. Plumbing Condition

Materials: PVC • Copper

10. Drainage

Observations:
• The home has an interior drainage system connected to the ejector pit.

11. Sump Pump

12. Ejector Pump Condition

Materials: The home had a sewage ejector pump installed in a pit in the basement floor. Sewage ejector pumps are designed to pump waste from lower-level drain/waste pipes up to the main sewer pipe, which is drained by gravity. Typical examples of situations requiring a sewage ejector pump are homes with finished basements and hillside homes.
Observations:
• At the time of the inspection, the Inspector observed no deficiencies in the condition and operation of the sewage ejector.

13. Framing

Observations:
• Some areas are not visible for inspection due to wall/ceilings covered which prevents review of structural members.

14. Subfloor

Observations:
• Not fully visible for inspection due to lack of access.

15. Columns

Observations:
• No deficiencies were observed at the visible portions of the structural components of the home.

16. Piers

17. Basement/Crawlspace Ductwork

18. Insulation

Observations:
• Full view of foundation insulation was not available due to lack of access.

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Glossary

Term	Definition
AFCI	AFCI's protect circuits from fire. The parallel arc fault arises, when the current flows through damaged insulation from one conductor to another conductor, producing a short circuit that is too weak to be detected by the circuit breaker. A Series arc fault arises, when a single wire damaged and cannot tolerate the current, causing the current to arc from the conductor into the insulation. This leakage current can burn and eventually burn the insulation.
Double Tap	A double tap occurs when two conductors are connected under one screw inside a panelboard. Most circuit breakers do not support double tapping, although some manufacturers, such as like Cutler Hammer, make hardware specially designed for this purpose. Double tapping is a defect when it is used on incompatible devices. If the conductors come loose, they cause overheating and electrical arcing, and the risk of fire is also present. A double tap can be accommodated by installing a new circuit board compatible with double tapping. It is also possible to add another circuit breaker or install a tandem breaker to the existing breaker box.
GFCI	GFCI (Ground Fault Circuit Interrupter). A GFCI outlet or breaker measures the current differential flowing from the hot to the neutral side. If the there is a differential of 5 milli amps (,005 amps) or more, the circuit is opened and current stops flowing in as little as 1/10th of a second. This is designed to prevent electrocution caused by current looking for a path through a person (path of least resistance) back to the neutral side of the transformer. A standard breaker or fuse looks at a much higher overcurrent condition and does not respond to these conditions. 100 milliamps has been designated as the amount of current required to begin ventricular fibrillation.
PVC	Polyvinyl chloride, which is used in the manufacture of white plastic pipe typically used for water supply lines.