



Inspection Report: Report ID# 12022015SI

Customer(s): Jane and John Doe

**Property Address: 1234 Inspection St
Wenatchee WA 98801**



NCW Home Inspections, LLC: Don Hester WA ST#647 WSDA#80050

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Date: 12/2/2015	Time: 08:45 AM	Report ID: 12022015SI
Property: 1234 Inspection St Wenatchee WA 98801	Customer: Jane and John Doe	Real Estate Professional:

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) = The item, component or unit was observed, either fully or partially, and if applicable operated using normal controls. If no other comments were made then it appeared to be functioning as intended allowing for normal wear and tear.

Not Inspected (NI)= This item, component or unit was not inspected, no representation or evaluation of whether or not it was functioning as intended.

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.

Maintenance/Monitor Item (M) = General commentary on an item or component that needs maintenance for normal wear and tear of that item or component or needs monitoring.

Comment (CM) = General or informational commentary on an item or component.

Standards of Practice: Washington State Standards of Practice, WSDA SPI Standards	In Attendance: Customer	Type of building: Single Family (2 Story), With basement
Occupancy: Vacant	Style of Home: Early 20th Century	Bedrooms: Three Bedroom
Bathrooms: One Bath, With 1/2 Bath	Approximate age of building: 1928	Approximate Square Footage: 1594 sq ft
Home Faces: South	Temperature: Over 70	Weather: Sunny
Ground/Soil surface condition: Dry	Rain/Snow in last 3 days: Light Rain	

1. General Information

A home inspection is a visual, and not an exhaustive or invasive inspection of a home by a trained, licensed and impartial inspector. This report is prepared from an inspection conducted by a Washington State licensed home inspector and a dual licensed Washington State Department of Agriculture Structural Pest Inspector in accordance with the state standards of practice for home inspection <http://apps.leg.wa.gov/WAC/default.aspx?cite=308-408C> and the Washington Administrative Code 16-228-2005 through 2045. Washington requires that a diagram be prepared for WDO inspections. A copy is available upon request.

Opinions contained herein are based on conditions visible and evident at the time of the inspection. This report does not warrant, represent, or guarantee that the structure reported on is free from evidence of WDO's, their damage, or conditions conducive to WDO's, nor does it represent or guarantee that the total damage, infestation, or infection is limited to that disclosed in this report

The inspection is, as dictated by the tight time-lines of real estate transactions, not technically exhaustive and the inspector spends limited time on premises. An inspector is looking for significant issues. Pointing out minor or cosmetic deficiencies, general information and items outside of the scope is at the discretion of the inspector. Never the less, please understand that some recommendations made on a home inspection report include enhancements that are optional and are, certainly, not "mandatory" repairs. Since the appearance of a home, especially interior decor, is a matter of personal taste, the client is responsible for ascertaining that finish surfaces, colors, cleanliness and design meet his or her expectations. In a related matter, any fog that might be inside thermal-pane windows is largely weather dependent and an inspector may not be able to identify glazing problems as a result of variations in temperature, humidity, weather and lighting conditions.

The inspector cannot see through or into walls, siding or wallpaper, concrete or floors, insulation, carpets, ceilings, under roofing materials, down into soil, tight-lines, drains, vent or waste pipes, toilet/floor/sink connections, ducting, gutters or downspouts full of debris or behind creosote or soot. Areas that are not accessible or the view is obscured as a result of furniture, appliances, storage or other belongings and coverings are excluded. Overflows at sinks and tubs are not tested -- doing so could cause water damage inside wall cavities. A home inspector doesn't guarantee that a roof will withstand a heavy windstorm nor ascertain that it has not leaked in the past nor that it will not leak at some time in the future. In a related matter, gutters may not withstand heavy snowfall or compacted ice. Roofing defects may be concealed by the roof covering. Solar roofing systems, including any components on the roof or in an attic, are excluded.

Procedures: Only normal controls will be operated (thermostats, light switches, faucets, etc). Wood stoves, fireplaces and pilot lights will not be lit. Devices that are not functional will not be plugged-in, nor will circuit breakers, or main shut-off valves be operated. Furniture, storage and appliances will not be moved or dis-assembled during the home inspection -- with the exception of (1) the "dead front" cover will usually be removed from the electric panel; (2) front panels may be removed at some HVAC appliances. Care is taken in removing fronts or covers, from electric panels or openings into attics, but sometimes the procedures can, unavoidably, leave minor cosmetic marks on finished surfaces.

A home inspector makes every effort to perform a thorough inspection, within reasonable time-lines and the limitations specified, but makes no warranties about the home other than reporting on the conditions that were noted and apparent at the time of the inspection. Some defects may have been concealed or intermittent so those problems might go unreported. It is not possible, in the course of an inspection, to check every component at a home or to identify every problem. The standards of practice for home inspection state that the inspector shall view, operate or test a representative number of components at the exterior and the interior: readily accessible siding and trim, windows, doors, walls, light switches, receptacles, etc. An inspector does not get on furniture to view or operate windows or other components. High exterior locations at the home, such as siding, trim or soffit areas below eaves, due to safety and typical access issues, may be viewed from the ground and not from a ladder. High electrical receptacles, under eaves, may not be evaluated. Complex mechanical devices, such as freezer icemakers or fresh water systems are excluded. Washing machines and dryers are excluded. Sewage related septic/private disposal systems including septic tanks, sewage grinders/ejector pumps are usually fully or partially concealed from view or below grade and the components and mechanisms are not opened or inspected for performance or function. The exclusion includes air pumps, ultraviolet systems and all related electronics, alarms and wiring. Remote electric distribution (sub) panels may be concealed from view and may not be apparent to the inspector. If such systems are known to be present, or are later found to be on premises, recommend that the tanks, pumps/grinders, panels and related components be, as required, further evaluated/serviced by qualified professionals.

An inspector is assessing systems or components to determine if they are functional. An inspector will not suggest that a new system or component be installed simply for the sake of updating if it appears that the old system is functional or would be operational if repaired or maintained. It is not reasonable to expect every system or component in every home to be in new or perfect condition. Systems and components age. Older systems are often serviceable -- they operate but they are typical of a home of a given age. In any home, systems and components require at least some ongoing maintenance. Comments or observations involving household appliances are at the discretion of the inspector. The state standards of practice do not require the inspector to report on the condition of household appliances -- exceptions being that the inspector will, when possible, report on the operation of most HVAC equipment and water heaters. Conditions at a home and with appliances can, and will, change from day to day. It is assumed that the buyer wishes to purchase the home and the seller wishes to sell. The inspector must act in an unbiased manner. It is not the role of the inspector to create unreasonable concerns in an effort to influence the negotiations.

When referenced- "qualified" I refer to a licensed, state certified (where applicable) and insured contractor or tradesman with a reasonable amount of experience. Qualified professional (contractors) conducting the repairs should provide written documentation in the form of a third party agreement, work order, or detailed invoice and preferably a warranty on their work. Additionally, I recommended that all qualified parties or specialists, when on-site, be asked to not only make essential repairs but to also further evaluate a system or component and to make recommendations as to other beneficial repairs, improvements or upgrades.

Buyers often allow sellers to make repairs, or the repairs may be deferred until after closing. Those options are at the discretion of the parties involved and any governmental agency that might oversee the process. If repairs are completed in a suitable manner, by qualified parties prior to closing, the client minimizes the chances of unexpected surprises after closing. Regarding buyer or homeowner repairs, it is not the intent of a report to specify the exact means of repair for any given problem. Again, consulting with a qualified professional is required. A client performs, or accepts the work of another non-professional, at his or her own risk. And, of course, all appropriate city, county or municipal building permits should be acquired when work is done.

A home inspection is a practical approach to evaluating visual deficiencies. With few exceptions, the inspector does not know, nor confirm, if prior remodeling or construction work was performed with, or without, building permits. A home inspector is not checking for compliance with codes or verifying compliance with manufacturer's specifications. In fact, codes evolve over the years. For example, in homes that are not of recent construction, escape routes and window sizing may not be in compliance with modern emergency egress requirements. An inspector does not count bolts in the sill plate at any home. It may be unfair, except in the matter of critical safety issues, to expect a home built under previous standards to

conform to recent codes. A professional or specialist, when performing service or making other repairs, is in a good position to determine if systems and components are installed per manufacturer's guidelines or the applicable building codes.

Mold, mildew and microbial growths are excluded substances per the standards of practice for home inspection. The inspector is searching for wood destroying organisms (rot) and conducive conditions. Fungus (or yeasts) are common and sometimes present in bathrooms, attics or crawl spaces. However, the report will not identify species of fungus other than wood decay fungi or rot. Microbial growths are the result of excess moisture or a lack of ventilation. Therefore, any fungal issues reported, with the exception of rot, will be referred to as conducive conditions. A client who wishes to have a mold or mildew inspection should, in addition to the standard home inspection, contract with a firm that specializes in locating and/or identifying microbial growths and mold. If remodeling is done, where walls and ceilings are opened, wallpaper removed, homeowners might find concealed issues, related to moisture that will have to be addressed during the remodel.

A home Inspection is NOT an environmental survey; therefore, a qualified specialist or environmental testing firm should be hired by the client if he or she wishes to have further evaluation/testing for any excluded substances such as asbestos, radon, lead, urea formaldehyde, odors; noise, toxic or flammable chemicals, water or air quality, PCB's or other toxins, electro-magnetic fields, underground storage tanks, proximity to toxic waste sites, carbon monoxide, vermin, pet urine. The inspector will not attempt to detect, identify, disclose, or report on the presence of Chinese Drywall products or any ramifications of said products. Outdoor retaining walls are excluded per the state standards of practice. Any comments, related to excluded substances, systems or components, if offered in the report, are provided as a professional courtesy and they do not alter the limitations that are established in the state standards of practice and the executed home inspection contract.

This report confines itself to conditions apparent at the time of the inspection. The inspector is not an arborist and is not assessing the condition of trees on the property. Seasonally there may be more ground or runoff water than at other times of the year. It is usually not possible to predict flooding. Therefore, if seasonal moisture problems develop, recommend consultation with a drainage professional. When mechanical means is utilized to control runoff water, the inspector will attempt to locate and view the pump(s) and, if possible, operate them. Inspector does not guarantee the adequacy or performance of any drainage system that might be in place to control flooding or runoff water. It is possible that the inspector will not locate all pumps (sump or ejector) on premises if they are partially covered, submerged and not readily apparent.

Inspection reports by nature focus on defects and concerns and may seem very negative in tone, and can at times seem almost overwhelming or redundant. I try very hard to provide my clients with a fair and accurate inspection and not to overstate or understate potential issues/ concerns and/or present them to our clients in an 'alarmist' fashion

Some features of this property are/may be in excellent condition and of high quality but have not been mentioned. This Report is not meant to downplay the properties assets, but to focus on alerting you to potentially expensive, habitability/safety issues, and/or adverse conditions that would warrant further evaluation/repair by a specialist. However, this inspection is not intended to document the type of cosmetic deficiencies that would be apparent to the average person, and certainly not intended to identify insignificant deficiencies.

It should be noted that all structures, regardless of age, may have some number of issues/defects, and some things may remain hidden or become defective after inspection. It is not possible to detect every possible defect within a building during the course of a general inspection.

Home inspectors have no official authority to demand repairs, changes or upgrades. The inspection is not an inspection such as a 'municipal inspector/authority have jurisdiction' operating in their official capacity would perform. (They have the authority to mandate or demand changes be made).

I can only make suggestions and recommendations for the reported information. My hope you will evaluate the recommendations made and make appropriate decisions in the implementation of those comments.

NOTE: Only the individuals who hired the inspector may rely on the inspector's findings and that anyone else who relies on this report does so at their own peril. It is a violation of the State of Washington home inspection/real estate laws to disclose any information contained in this inspection report to a third party without written permission from the PERSON/CLIENTS who ARE contracted with NCW Home Inspections, LLC. [Statutory Authority: RCW 18.280.050 and 18.280.060(6). 09-08-014, § 308-408C-020, filed 3/20/09, effective 4/20/09.]

Inspected (IN) Not Inspected (NI) Not Present (NP) Repair or Replace (RR) Maintenance/Monitor Item (M) Comment (CM)

Items

1.0 General Inspection Comments

Comments: Repair or Replace, Upgrades/Comments

(1) **Comment-** For the purpose of the reference in the report the home is facing south. The actual bearing maybe slightly different. This is to help identifying locations of comments within the report.

(2) **Repair Replace/Maint/Comment -** There is evidence of rodent activity in the building. Feces and nesting activities were observed crawlspace under bedroom. Rodent-proofing is changing the structure of buildings in order to prevent entry of rats and mice. In considering rodent-proofing, you must know that; Rats can squeeze through cracks ½ inch wide; mice, ¼ inch wide. Any place a pencil can be poked, a mouse can go. I recommend a qualified person or contractor should make repairs to seal openings in the structure(s), set traps and clean as necessary. I recommend contacting a pest control contractor to create a program for controlling rodent activity in the building.

Good guidelines from the CDC for rodent prevention and response-

http://www.cdc.gov/rodents/prevent_infestations/seal_up.html

http://www.cdc.gov/rodents/prevent_infestations/trap_up.html

http://www.cdc.gov/rodents/prevent_infestations/clean_up.html

(3) **Comment**- Each report is created to reflect the property inspected and comments are often modified to reflect that. Some typing and grammatical errors may be present. I try to ensure this is minimized but due to time restraints in producing the report in a timely manner they may not all be corrected.

Photos in the report may be representing conditions found on the home but may not include all instances of each condition. Though the report will try to practically describe the conditions present it must be understood if several items or conditions withing a component group (electrical, plumbing, HVAC etc...) further evaluation of the component system maybe warranted.

(4) **Comment** - I recommend that client check with the Building and Planning Department to see if there are any "open" or previous permits on a property they are considering purchasing. An "open" permit could prevent another permit from being issued for the property and there could be some outstanding issues that need to be addressed.

(5) **Comment**- Fungal growth, mildews and molds. There are over a 100,000 species of fungi that include molds. If in this report any fungal growth is found the client will have to decide on whether to test or not. There are many various opinions on this and to what extent testing should be performed depending on the severity of the situation. As with all molds (mould) and fungal growth correcting the condition that is causing the growth is paramount.

Generally, it is not necessary to identify the species of mold growing in a residence, and CDC does not recommend routine sampling for molds. There are no governmental standards for mold levels. Therefore, mold testing cannot be used to tell whether a building is in compliance with any standards for mold control. I recommend the client evaluate the information below as some guidance on dealing with this issue. If you decide to test, a professional that follows a protocol from the American Industrial Hygiene Association (www.aiha.org) or the American Conference of Governmental Industrial Hygienists (www.acgih.org) is recommended.

Informational Links-

<http://www.cdc.gov/mold/faqs.htm>

<http://www.epa.gov/mold/pdfs/moldguide.pdf>

<http://www.aiha.org/news-pubs/newsroom/Documents/Facts%20About%20Mold%20December%202011.pdf>

<http://inspectapedia.com/mold/sickhouse.htm>

[Is Testing for Moulds Necessary?](#)

[Health Effects of Moulds \(Molds\): State of Knowledge](#)

(6) **Comment-** Repairs that are being made as a contingency of the sale should be performed by a qualified trades person where required. Any working requiring a permit should be obtained. The client should obtain all receipts for the performed work.

(7) **Comment-** The attached performance guideline was developed to achieve a minimum standard or workmanship for construction. The client may want to use this document as a basis of evaluation for issues and conditions.

http://www.ncwhomeinspections.com/system/files/userfiles/performanceguidelines_4th_edition.pdf

(8) **Comment-** Often when trying to expedite the report to you there may be an item/comment (rarely more) that may have been omitted. These will typically be informational in nature or minor maintenance/monitor items. I try to be as thorough as possible but there may be on occasion a need to update the report to include this information.

(9) **Comment -** Older homes are inspected within the context of the time period during which they were built. I will look for system defects and safety issues just as in a modern home. By noting these safety issues, this report provides you, the client, with the information you need to make an informed decision on whether, for example, you are willing to live with the possible increased risk of a part of the home which might pose a hazard or be dangerous for you. While this inspection makes every effort to point out safety issues, standard practices and manufacturer recommendations, it does not and cannot inspect for all applicable codes and standards. Each building jurisdiction will have areas where they are not as stringent.

Per the Washington State Standards of Practice there will be some items in the report that are required to be reported regardless of age of home, such as GFCI/AFCI's, certain electrical panels, baluster spacing etc...

As with many homes of this age many repairs and improvements may either be needed or desirable. It is common to find these not built to current building standards and safety requirements. In practice, however, many homes of this age are improved only on an as needed basis. Any modification and remodeling may need to be brought up to current standards. I highly recommend that if any project is performed that you consult your local building authority having jurisdiction for guidance and information.

(10) **Comment** -This structure was built prior to 1979 and may contain lead paint. Laws were enacted in 1978 in the US preventing the use of lead paint in residential structures. Laws were enacted in 2010 regarding renovations where lead paint may be present. Links provided for information about renovations where lead paint may be present.

<http://www.epa.gov/lead/pubs/renovaterightbrochure.pdf>

<http://www.epa.gov/lead/pubs/renovation.htm>

(11) **Comment** - In homes built prior to 1975, asbestos is most commonly found as thermal insulation on basement boilers, pipes and ductwork. Unfortunately, it can also be found in a myriad of other household materials including:

Blown-in attic insulation, vermiculite, vinyl floor tiles, glue that attaches floor tiles to concrete or wood, some forms of linoleum, window caulking and glazing, roofing material (usually on flat roofs but occasionally on shingles), HVAC duct insulation (usually found in corrugated or flat paper form), siding material, plaster, fiber cement siding (usually 1/8 " thick and 8'x4' brittle), corrugated heavy duty 8'x4' panels and some forms of paint

Only houses built within the last 10 years or so should be free of insulating asbestos. The mere presence of asbestos in your home is not hazardous. Generally, material in good condition will not release asbestos fibers and disturbing it may create a health hazard where none existed before. The best thing to do with asbestos material in good condition is leave it alone. The danger comes from asbestos material that has been damaged over time. Asbestos that crumbles easily if handled, or that has been sawed, scraped, or sanded into a powder is likely to release asbestos fibers and create a health hazard.

Informational links-

<http://www.cpsc.gov/cpscpub/pubs/453.html>

<http://www.epa.gov/iaq/asbestos.html>

(12) **Comment**- The gas service wasn't turned on during the inspection. As a result, any gas appliances such as water heaters/furnaces etc.. weren't fully evaluated.

(13) **Comment** -Evidence of one or more possible abandoned underground oil tanks was found (vent pipe, metal supply lines, etc.).

Informational Link(s)-

<https://fortress.wa.gov/ecy/publications/publications/rtc92117.pdf>

1.1 General Home Condition

Comments: Upgrades/Comments

(1) **Comment-**The construction of the house is of average quality with typical liberties taken with good building practice and with the quality of materials employed.

(2) **Comment-** The home has many deferred maintenance issues. Many issues that may be minor at first can become more involved as work is being performed. Due diligence should be used when beginning repairs to correct those issues that could have a lasting effects on the home or necessary upgrades prior to what would be more cosmetic/finish work in nature.

2. WDO

This report is prepared from an inspection conducted by a Washington State Department of Agriculture licensed Structural Pest Inspector in accordance with Washington Administrative Code 16-228-2005 through 2045. Opinions contained herein are based on conditions visible and evident at the time of the inspection. This report does not warrant, represent, or guarantee that the structure reported on is free from evidence of WDO's, their damage, or conditions conducive to WDO's, nor does it represent or guarantee that the total damage, infestation, or infection is limited to that disclosed in this report.

In a WDO (Wood Destroying Insects and Organisms) inspection attics produce difficulties of performing an thorough inspection. Some of these difficulties are, unsafe travel, compression of insulation, obscured visibility, low or restrictive travel, damage to finish surface below etc... The inspector will make every effort to make some observations but this will be limited in scope.

Inspected (IN) Not Inspected (NI) Not Present (NP) Repair or Replace (RR) Maintenance/Monitor Item (M) Comment (CM)

Items

2.0 WDO (Wood destroying insects and organisms- Misc)

Comments: Upgrades/Comments

Comment-The Wood Destroying Organism Report (Insect/Rot Fungi) is not a warranty or guarantee to the absence of wood-destroying organisms; rather it is a report of the apparent or absence of these wood-destroying organisms at the time of inspection. Some species of wood destroying insect may only be apparent in right conditions, climate and time of season, such as carpenter ants that may be dormant till the right conditions. This is why conducive condition that can lead to infestation or rot should be addressed when appropriate.

2.1 CONDUCIVE CONDITIONS (Visible evidence of conditions conducive to wood destroying organisms with recommendations)

Comments: Upgrades/Comments

Comment-See report commentary and summary for items related to conditions and recommendations of WDO's.

2.2 INFECTION (Visible evidence of the presence of wood decay fungi with recommendations)

Comments: Not Present

(1) **Comment**-See report commentary and summary for items related to conditions and recommendations of WDO's.

(2) **Comment**- Any wood damaged by rot or insect activity should be removed and/or repaired. Hidden damage maybe present without repairs being made.

2.3 DAMAGE (Visible evidence of damage from wood destroying insects with recommendations)

Comments: Repair or Replace

Repair Replace- Subterranean termite activity in the form of mud tubes,scaling unique to subterranean termites, and dead swarmers in cobwebs on or in the structure was found approximately in the south side of the north crawlspace and on the north side of the basement. Evidence of old mud tubes was present on the east wall of the west crawlspace. Correct any conditions that conducive to damage from wood destroying insects.

I recommend treatment for the control of subterranean termites with an EPA approved material. Treatment is to be performed by a licensed pest control operator (PCO). The treatment should conform to current regulatory standards. The PCO should provide a one year written warranty against reinvestigation or per industry standards.

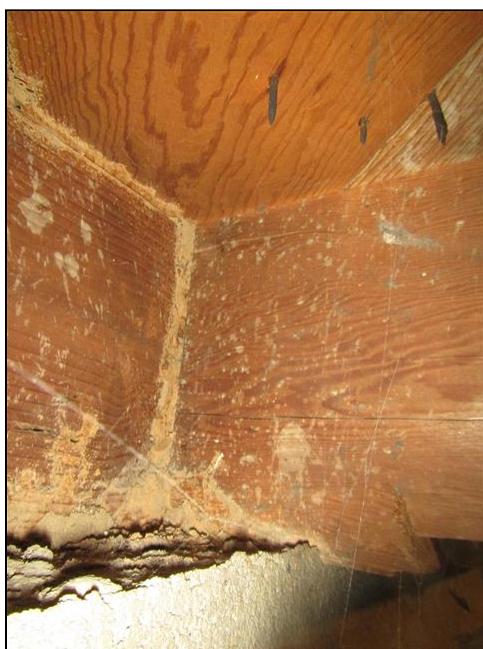
I recommend all damaged/infected wood to be removed and replaced by a qualified contractor.



2.3 Photo 1 -- Mud tubes and swarmers



2.3 Photo 2 -- Mud tube north crawlspace



2.3 Photo 3 -- Mud tube in basement



2.3 Photo 4 -- Old mud tube stains west crawl

3. Exterior

Inspected (IN) Not Inspected (NI) Not Present (NP) Repair or Replace (RR) Maintenance/Monitor Item (M) Comment (CM)

Component Styles & Materials

Siding Style: Lap	Siding Material: Wood	Trim Material: Wood
Facia Material: Wood	Soffit Material: Wood Plywood	Exterior Entry Doors: Wood Steel
Windows: Vinyl Wood Single Pane Double Pane	House Numbers: Present	Grade Around Home: Flat to Moderate Slope
Appurtenance: Patio	Porch/Stoop Material: Concrete	Patios: Concrete
Driveway: Concrete	Sidewalks / Walkways: Concrete	

Items

3.0 EAVES, SOFFITS AND FASCIAS

Comments: Maint/Monitor Item

Maint- There are areas where the soffit materials has gaps. Gaps can allow rodents/birds/insects to enter this area. I recommend installing some type of screening or sealing of these area to prevent entry.



3.0 Photo 1



3.0 Photo 2

3.1 WINDOWS

Comments: Repair or Replace, Maint/Monitor Item, Upgrades/Comments

(1) Repair Replace- Windows, in upper south bedroom are cracked and/or damaged. I recommend a qualified contractor repair as necessary.

(2) **Maint.**- The wood sills and trim has peeling paint at most windows. Further deterioration may occur if not corrected. Proper painting helps encapsulation the wood material and protects it from rot and deterioration. This is a maintenance item and will need to be performed from time to time. Damaged wood may need to be replaced. I recommend a qualified person or contractor repair, prep and paint as necessary.

Information links on prep and painting-

<http://www.do-it-yourself-help.com/exterior-painting-preparation.html>

<http://www.house-painting-info.com/exterior-painting.html>

(3) **Maint-** The window putty(glazing) is cracking in some areas. This is not unusual with older single pane windows. Putty may need to be repaired or replaced. This can lead to air bypass at the window. I recommend monitoring the glazing for further deterioration. Repair and replacement may be needed.

Informational Links-

<http://www.hereandthere.org/oldhouse/windows-glazing-steps.html>

<http://www.naturalhandyman.com/iip/infwindows/infbla.html>

(4) **Comment-** Window seal failure limitation. It is not always possible to fully evaluate the seals on Double/Triple Pane (thermopane) windows as conditions can change from time of day, season and lighting conditions. Internal fogging or purple hazing is the best indicator of seal problems and it can come and go or not be visible under all lighting conditions. Failed window mostly occur in areas of direct sunlight (such as southern, western window (and on occasion eastern sides of home depending on orientation) that cause thermal expansion of the windows. However if observed any fogging or broken glass during the inspection will be noted it in the report.

3.2 WALL CLADDING, FLASHING AND TRIM

Comments: Repair or Replace, Maint/Monitor Item

(1) **Repair Replace/Maint./Monitor-** The siding/trim of the home is in need of preparation and painting. Some areas on the exterior of the home have deteriorated, blistering and/or peeling paint to the siding and/or trim. Proper painting helps encapsulation the wood material and protects it from moisture absorption, swelling, rot and deterioration. Southern and western sides of the home tend to need more attention than other areas due to exposure. This is a maintenance item and will need to be performed from time to time and can have a substantial cost. I recommend that a qualified person or contractor prep, caulk and repaint where necessary after any essential repairs have been made.

Informational links on prep and painting-

http://www.painterclick.com/exterior_painting.htm

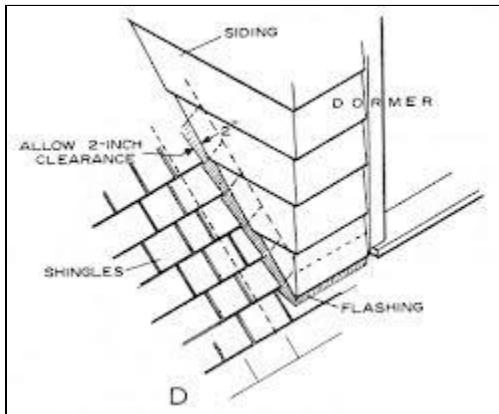
<http://www.do-it-yourself-help.com/exterior-painting-preparation.html>

<http://www.house-painting-info.com/exterior-painting.html>

http://www.fpl.fs.fed.us/documents/fplgtr/fpl_gtr169.pdf

Example Photos-

(2) Repair Replace/Maint/Monitor- The wall-roof intersection was not installed by normal building standards. Standards practice is to have the sidewall siding/cladding/trim have a clearance of up to 2" from the roof surface to allow water to shed properly. I advise the client monitor maintain these areas and repair if any deterioration is observed. I recommend trimming the siding to achieve these clearances. I recommend a qualified contractor evaluate and repair as necessary.



3.2 Photo 1



3.2 Photo 2



3.2 Photo 3

(3) Repair Replace/Maint- Earth (rock, soil, landscape materials) is against, or too close to, siding and trim in a few locations, mainly east side of home. This has been defined by the State of Washington as a conducive condition since soil against wood or any structure, except for the concrete foundation, is likely to lead to wood decay. I recommend removing soil from contact with structure and grading it at a slope ratio of 6" in 10 feet out from the building or to a swale, so water is directed away from the structure. It is not always attainable to

achieve 6" of clearance from earth that is recommended for wood siding/trim and 4" of clearance is recommended for cement-based or masonry materials. When work is done if any decay is discovered then repair the damage at that time. I recommend a qualified person or contractor evaluate and repair as necessary.

(4) **Maint/Monitor/Comment-** The siding/trim in front of the patio is in contact with the concrete surface. The siding/trim should have a 1" of clearance from the concrete to allow water/moisture to drain. I recommend monitoring and trim the siding in this area to allow for these clearances if any swelling or deterioration is observed.



3.2 Photo 4

(5) **Monitor/Comment-** Staining and evidence of moisture of wood siding and trim. Water staining could be from a past event or only occurring in certain circumstances. I am not able to confirm on one inspection. I recommend monitoring these areas for any intrusion and/or deterioration.

(6) **Maint.-** Penetrations and gaps in the siding are in need of caulking/sealing (examples- around low voltage lines, HVAC lines, electrical/plumbing penetration, transitions of materials etc...). This can allow moisture and insect/rodent entry. These areas will need to monitored and caulked as needed. This is a normal maintenance item.

Informational link on caulking

http://www.fpl.fs.fed.us/documents/fplgtr/fpl_gtr169.pdf

<http://www.wbdg.org/design/079200.php>

<http://www.sashco.com/hi/caulking101.html>

http://www.toolbase.org/PDF/DesignGuides/FPL_Caulking_Ins_Outs.pdf

Example photos-

(7) **Maint-** There are no separate metal drip cap flashings over the windows, doors or any associated horizontal wood trim. Installation of such flashings are commonly omitted on homes. Often no problem is created by the lack of flashings, depending on any integral flashings that are built into the windows or doors and how well the horizontal surface is installed and sealed. I recommend that any such surfaces be kept well-caulked and maintained as is required.

3.3 DOORS (Exterior)

Comments: Maint/Monitor Item

Maint- Door seals damaged/improper. This can allow air passage by the door I recommend replacing/repairing as necessary.

3.4 DRIVEWAYS, PATIO FLOOR AND WALKWAYS (With respect to their effect on the condition of the building)

Comments: Maint/Monitor Item

(1) **Maint-**The exterior concrete has some cracking of the slab from settlement/curing. I recommend installing some sealant such as an epoxy or polyurthane type sealants in the crack to help keep mitigate water intrusion of the slab.

Informational links for concrete repair-

<http://www.homedepot.com/buy/building-materials/concrete-cement-masonry/latex-ite/30-ft-clamshell-plastix-permanent-asphaltconcrete-crack-filler-20665.html>

http://www.simpsonanchors.com/catalog/adhesives/crackrepair/crack_pac.html

http://www.edisoncoatings.com/html/Flexible_Epoxy_Masonry_and_Con/flexible_epoxy_masonry_and_con.htm

http://www.askthebuilder.com/B123_Long_Lasting_Concrete_Repair.shtml

(2) **Maint/Comment-** Exterior concrete in any region subject to freeze-thaw cycles should be sealed. Concrete is a porous material that readily absorbs liquids. In freeze-thaw climates, the expansion of frozen liquids can destroy the surface of unsealed concrete. Oil, salt, fertilizer, and other household chemicals can discolor and damage unsealed concrete. Sealing can help protect the concrete from some of the climatic conditions. To repel water and deicing salts you should use an acrylic-resin type sealer or reactive penetrating sealers. If you also want to repel oil stains, use a silicate (a type of reactive penetrating chemical sealer). Many sealers can be applied by a do-it-yourselfer using simple tools, such as a paint roller or pump-up sprayer. Some upper end sealers will need to be professionally applied.

Informational Links-

<http://www.concretenetwork.com/products-sealer/frequently-asked-questions.html>

<http://www.concretenetwork.com/products-sealer/comparison.html>

3.5 DECKS, BALCONIES, STOOPS, STEPS, AREAWAYS, PORCHES, PATIO/ COVER AND APPLICABLE RAILINGS

Comments: Repair or Replace, Maint/Monitor Item

(1) **Repair-Replace-** Guardrail loose on front stairs. Concrete is broken at attachment point. Guardrails must meet specific requirements as dictated by standard practices. The guardrails must be strong enough to withstand a concentrated 200 lb force anywhere along the top of the rail. To achieve rail posts should be properly anchored. recommend a qualified contractor evaluate and repair as necessary.

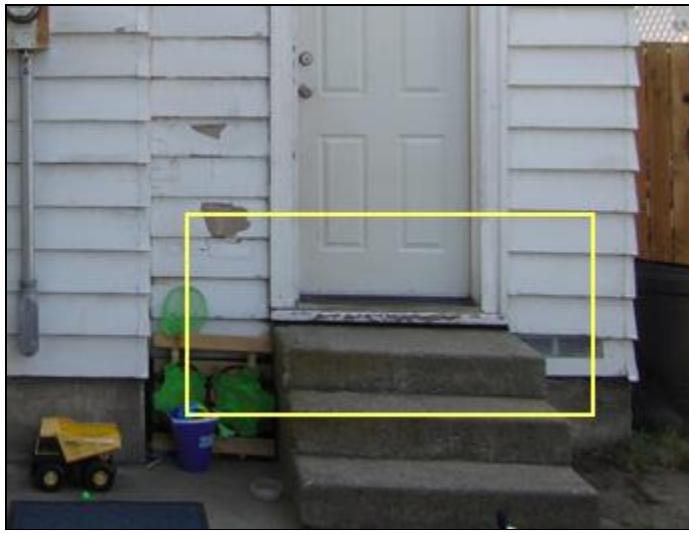
Informational Link-

<http://www.strongtie.com/ftp/bulletins/t-grdlpst10.pdf>

<http://www.awc.org/publications/dca/dca6/dca6-09.pdf>

<http://www.deck-lok.com/>

(2) **Repair Replace/Comment-** Missing landing at exterior door. Standard practice is that a 36" deep landing is required at exterior doors in the direction of travel when there are 3 or more stairs (risers). This is potential fall hazard. It is not uncommon in older homes that these requirements may have not been required. At a minimum the client should be aware of this condition and use caution. If concerned I recommend a qualified contractor evaluate and repair as necessary.



3.5 Photo 1

(3) **Maint/Comment-** Balusters have improper spacing. A variety of styles are allowed as long as the interior sections of the rail don't possess any openings large enough to pass a 4" diameter sphere through. In the case of guardrails for stairs there is an exception that allows up to a 6" diameter sphere through the triangle opening formed by the stair riser, stair tread, and bottom rail. The guardrails must be strong enough to withstand a

concentrated 200 lb force anywhere along the top of the rail. At a minimum the client should be aware of this condition. I recommend a qualified contractor evaluate and repair as necessary/installing a fill piece to meet this requirement..

Informational Link-

<http://www.strongtie.com/ftp/bulletins/t-grdrlpst10.pdf>

<http://www.awc.org/publications/dca/dca6/dca6-09.pdf>

<http://www.deck-lok.com/>

3.6 VEGITATION, GRADING AND DRAINAGE

Comments: Maint/Monitor Item

Maint. Poor/Negative grade at the east side of home. Flat or negative grade can cause or contribute to water intrusion and/or deterioration of foundations and or basements/crawlspaces. Recommended grading is 6 inches within the first 10 feet if possible or a slope of 5 percent and the water should be directed to drains or swales to ensure drainage away from the structure. I recommend correcting landscape to direct water away from home.



3.6 Photo 1

3.7 PLUMBING WATER FAUCETS (hose bibs)

Comments: Maint/Monitor Item

(1) **Maint-** Hose bibb on the west side of home is leaking at the handle this usually indicates a loose packing nut or worn packing washer. I recommend a qualified person evaluate and repair.

Information link on how to repair leaking hose bibs-

<http://video.bobvila.com/m/21291708/how-to-repair-a-dripping-outdoor-faucet.htm>

(2) **Maint/Comment-** Hose bibbs (sillcock) are not frost free or anti-siphon. I recommend that an anti-siphon device be installed. In addition care will need to be taken to winterize the hose babb to protect from freezing.

Note: the babb on the east side was not on and most likely was turned off in the basement. This should be checked to ensure it is not leaking.

(example- <http://www.amazon.com/Orbit-Irrigation-67750-Hose-Anti-Siphon/dp/B002R5ECCI>).

Informational Links-

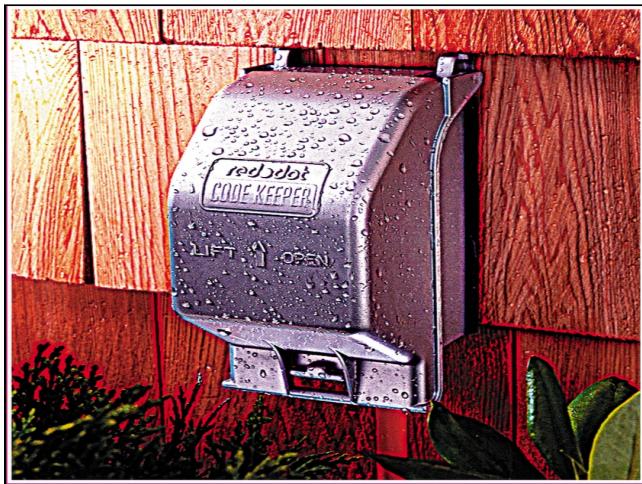
<http://www.ncwhomeinspections.com/Vacuum+Breakers+for+Hose+Bibbs>

<http://www.doh.wa.gov/portals/1/documents/4200/contamination.pdf>

3.8 OUTLETS (exterior- lights/receptacles)

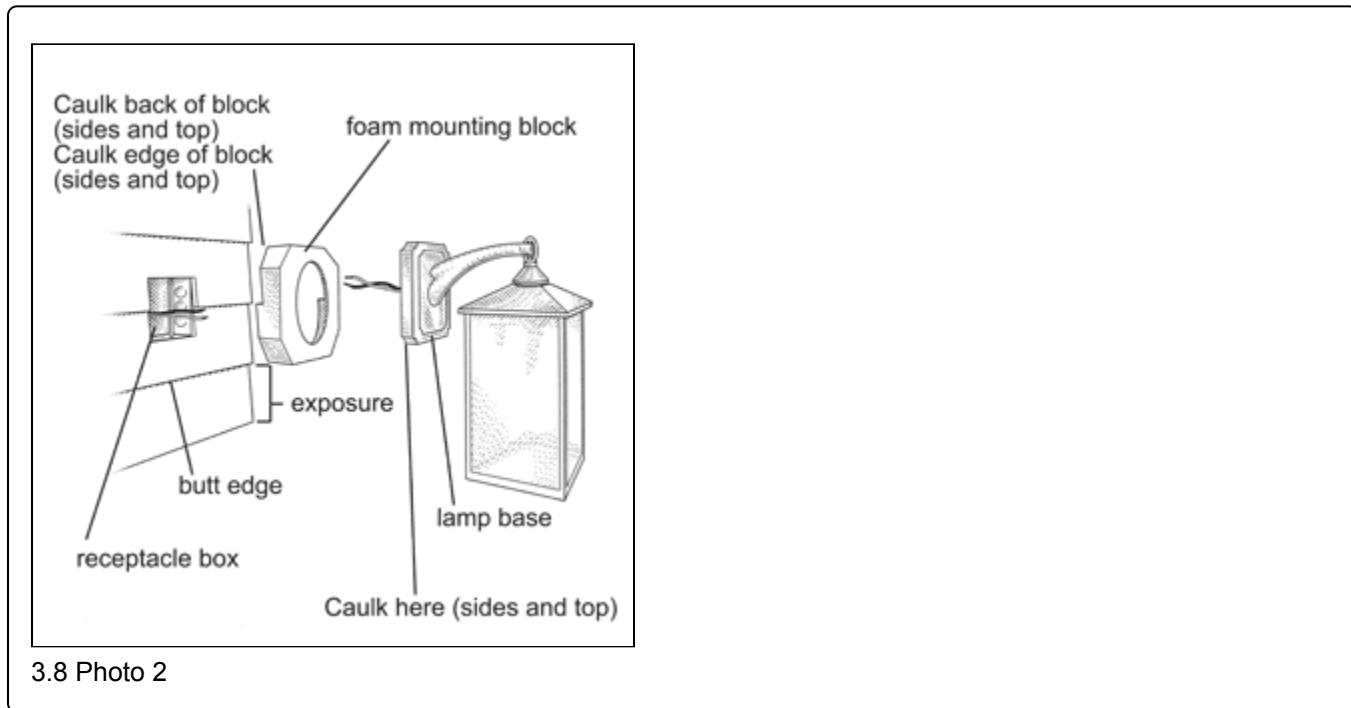
Comments: Maint/Monitor Item

(1) **Maint.-** Exterior outlets/receptacles should have a weatherproof hooded cover to protect the outlet from moisture intrusion during use where exposed to weather. Exterior GFCI's need to be weather resistant style. Where the cord-and-plug connection to receptacles is in a wet location, the enclosure is required to be weatherproof regardless of whether the plug is inserted. The cover needs to be identified as an "extra duty" type cover. I recommend having a proper outlet cover installed.



3.8 Photo 1

(2) **Maint./Comment-** Exterior sconces/lighting fixtures should rest tightly against the wall/siding without any gaps that might let in water. Installation of a mounting block would address the gap behind the lighting fixture to provide a proper seal and considered a best practice. At a minimum caulking is recommended at the top and sides of exterior electrical lighting fixtures, equipment and outlets in order to prevent moisture penetration into the home and/or moisture contact with energized electrical equipment. I recommend a qualified person or electrician evaluate and repair as necessary.



3.8 Photo 2

3.9 MISC ITEMS, GENERAL COMMENT, FENCES

Comments: Repair or Replace, Upgrades/Comments

(1) **Repair Replace/Comment-** Loose fitting and/or poorly designed covers to crawlspaces. Exterior crawlspace well covers/hatches are problematic when trying to exclude rodent/moisture entry. Often installing an interior door/hatch cover that can be sealed is recommended. I recommend a qualified person or contractor evaluate and correct as necessary to prevent rodent/pest entry.

(2) **Maint-** Dryer vent damper stuck open. Vent is not properly attached. This can allow rodent and insect entry into the home. The dryer vent hood needs cleaning. I recommend cleaning, repairing or replacing this vent cover as needed.

Note: I recommend moving the location of the dryer vent.



3.9 Photo 1

(3) **Comment-** Unknown accesses (may be to shut offs). I recommend having the owner provide you with information on these accesses.



3.9 Photo 2

4. Roofing / Chimneys

Inspected (IN) Not Inspected (NI) Not Present (NP) Repair or Replace (RR) Maintenance/Monitor Item (M) Comment (CM)

Component Styles & Materials

General Roof Condition:	Viewed roof covering from:	Roof-Type:
Roof Older- Roof on last third or life.	Ground	Gable
	Binoculars	Flat
	Partially Traversed	
	From Windows	
Roof Covering:	Layers of Roofing Materials:	Chimney (exterior):
3-Tab fiberglass	One	Brick
Roll/Selvage	Two	
Roof Ventilation:	Roof Pitch (approximate):	Gutters and Downspouts:
Gable vents	4/12	Present in some locations
Soffit Vents	7/12	
	10/12	
	less than 3/12	
Downspout Discharge:	Deicing Cables:	Items
Above ground	Not Present	

4.0 ROOF COVERINGS AND DECKING

Comments: Repair or Replace, Upgrades/Comments

- (1) **Repair Replace-** Shingles lifted/not laying flat. This can allow water and debris to collect under the shingles and potential damage to the shingle in a wind event.. I recommend a qualified roofing contractor evaluate and repair as necessary.



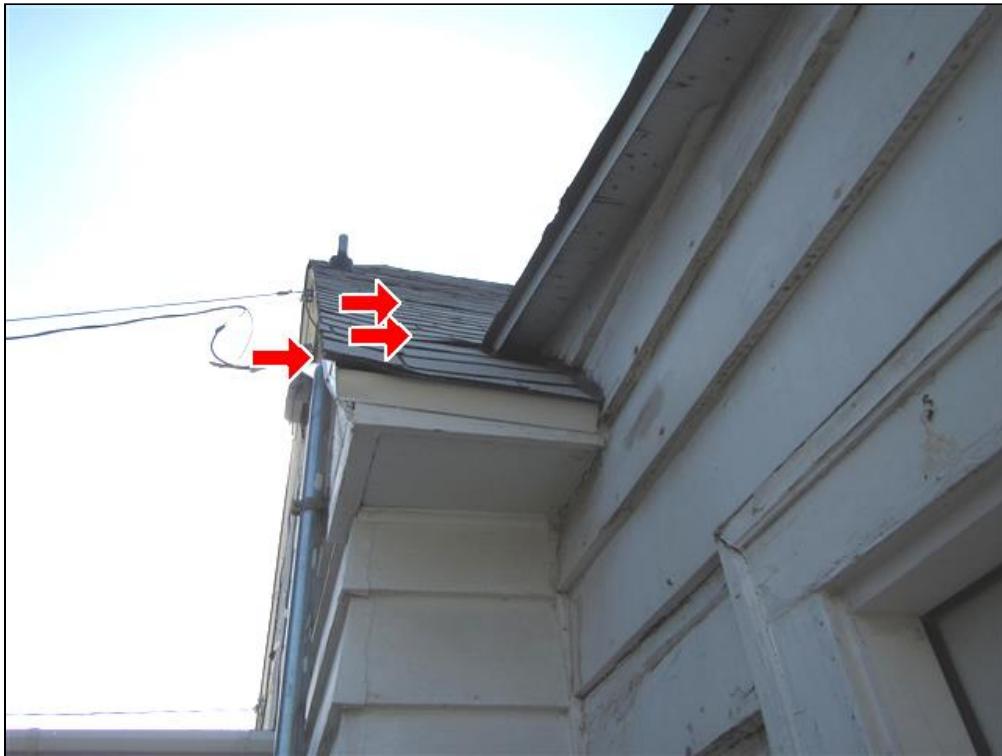
4.0 Photo 1



4.0 Photo 2 -- not properly adhered



4.0 Photo 3



4.0 Photo 4

(2) **Repair Replace-** Several roof shingles are missing/damaged. This can lead to leak of the roof. I recommend that a qualified roofing contractor evaluate and repair as necessary.



4.0 Photo 5

(3) **Maint-** Trees are overhanging roof and are within 10 feet of roof vertically. This is a conducive condition for wood destroying insects and organisms since organic debris such as leaves or needles are more likely to accumulate on the roof surface. Accumulated debris may cause water to enter gaps in the roof surface and leak into attic and/or interior spaces. Trees should be pruned so they are at least 10 feet above roof, or don't overhang the roof

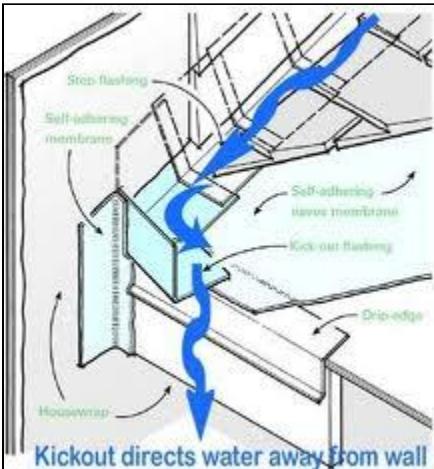
(4) **Comment-** Your roof has multiple layers of shingles at the front entry. Current roofing practices allow for two layers. This practice compromises the life span of the new roofing. When the current roof needs replacement I recommend that the roofing contractor use high wind nailing (6 nails versus 4).

(5) **Monitor/Comment-** Most roofs can last anywhere from 15 to 30 years depending on many factors, color(lighter roof last longer), environmental conditions, installation, materials used etc...The roof covering looks to be on it last third of useful life. The client should start to budget for a roof replacement. Regular maintenance and some essential repair may prolong the existing roof as well as repairs as noted in this section. I recommend a qualified contractor make roof repairs as necessary, monitoring of the roof yearly for any damaged shingles and maintenance should be performed.

4.1 FLASHINGS

Comments: Repair or Replace

(1) **Repair Replace/Monitor-** Missing kick out flashing. This directs the water from the sidewall into the gutter system or away from the wall. This is a very common installation issue. This flashing is a required flashing where water may go behind siding and trim. This can lead to moisture intrusion of the wall structure below this area. These areas will need to be well maintained due to the lack of this flashing (caulking and painting). I recommend when the roof covering is replaced that these flashings are installed. At a minimum the client will need to monitor these areas and maintain as necessary (Caulking and painting). If deterioration is observed I recommend a contractor evaluate, repair and install as necessary.



4.1 Photo 1



4.1 Photo 2



4.1 Photo 3

(2) **Repair Replace-** Sidewall and headwall flashing where not properly installed when roof was replaced. Even when a roof over has been performed the flashing should be re-installed correctly. I recommend that a qualified roofing contractor evaluate, repair and replace as necessary.

(3) **Monitor/Comment-** The flashing from the roof to the upper bedroom door and wall will be very susceptible to moisture intrusion. The client should monitor this area for any moisture issues and perform any maintenance as required to prevent moisture intrusion.



4.1 Photo 4



4.1 Photo 5

4.2 ROOF PENETRATIONS (vents and other)

Comments: Repair or Replace

Repair Replace- Plumbing vent boots where not properly installed. This can lead to leakage. The boot should be replaced and properly installed. I recommend a qualified roofing contractor evaluate, repair and replace as necessary.



4.2 Photo 1

4.3 CHIMNEYS

Comments: Repair or Replace

(1) **Repair Replace-** Cracking or deterioration of mortar on chimney. The crown is most likely deteriorated also though not visible. The mortar between the bricks/stones on your chimney can begin to crack and crumble over time because of the constant exposure to the outside elements. Damaged mortar can open areas between the bricks and allow moisture to invade the chimney. It is recommended to repair the joints between the bricks/stone and replace it with new mortar or masonry repair caulk in a procedure known as re-pointing. I recommend a qualified mason evaluate and repair as necessary.

Note: there was damage in the interior area as well by the fireplace.

Informational Links-

<http://www.quikrete.com/PDFs/Projects/TuckPointingMortarJoints.pdf>

<http://www.quikrete.com/PDFs/Projects/RepairingChimneys.pdf>



4.3 Photo 1



4.3 Photo 2

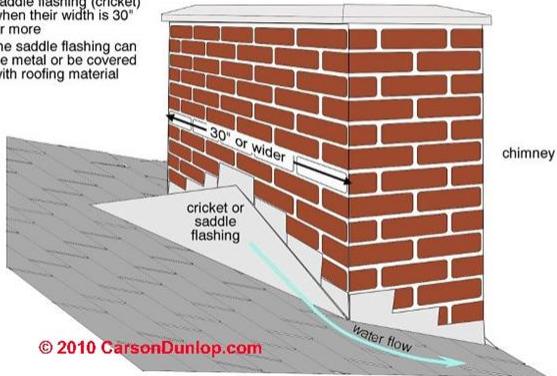


4.3 Photo 3 -- Damage in interior area

(2) Repair Replace- Chimneys/Chase should have a cricket if the chimney is greater than 30 inches. The cricket and the chimney should be flashed and counter-flashed in the same manner as normal roof-chimney intersections. Crickets help prevent debris collection and divert water around the chimney/chase. I recommend a qualified roofer evaluate and repair as necessary.

Chimney saddle flashings

chimneys require a saddle flashing (crocket) when their width is 30" or more
the saddle flashing can be metal or be covered with roofing material



4.3 Photo 4

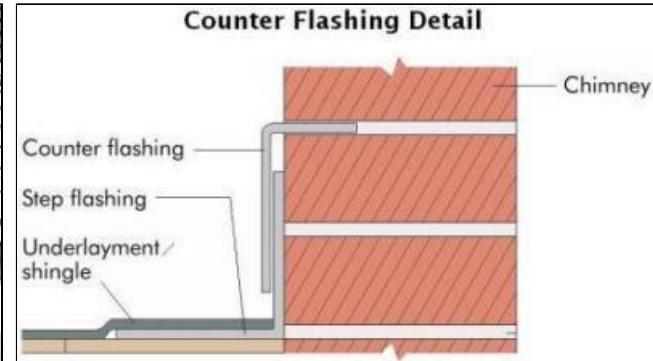


4.3 Photo 5

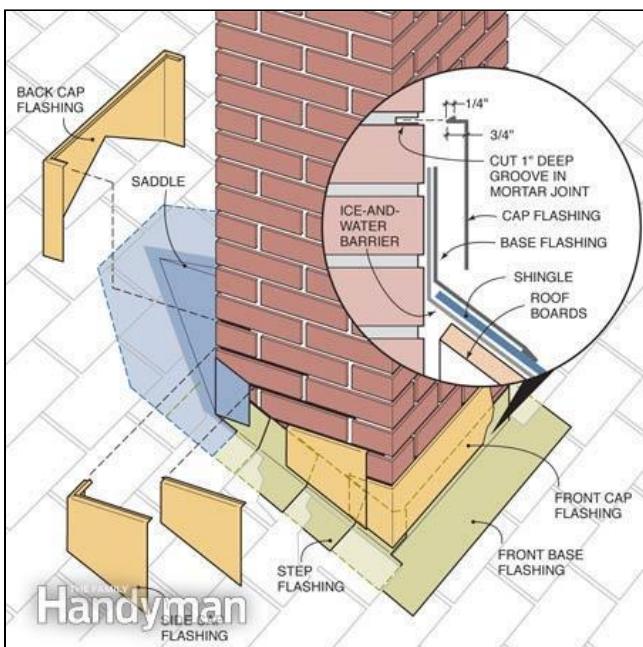
(3) **Repair Replace**- The flashing around the chimney was not performed in normal roofing practices and is very prone to leaking. Light was visible in the attic at this location. I recommend a qualified roofing contractor evaluate and repair as necessary.



4.3 Photo 6



4.3 Photo 7



4.3 Photo 8

4.4 ROOF VENTILATION

Comments: Inspected

4.5 ROOF DRAINAGE SYSTEMS (gutters and downspouts)

Comments: Maint/Monitor Item

Maint.- The gutters are full of debris in areas and needs to be cleaned. The debris in gutters can also conceal deterioration or leaks that are not visible until cleaned, and I am unable to determine if such conditions exist. This is a condition conducive to wood destroying insects and organisms. I recommend cleaning the gutters and evaluate for any deterioration.

Information on gutters-

<http://www.gutterworks.com/Gutterchecklist.htm>

5. Garage/Carport

Inspected (IN) Not Inspected (NI) Not Present (NP) Repair or Replace (RR) Maintenance/Monitor Item (M) Comment (CM)

Component Styles & Materials

Number of Garage/Carport Spaces:

One Car

Items

5.0 CARPORT

Comments: Maint/Monitor Item

Monitor- Carport post are in contact with rock/soil. Wood (even treated) in contact with any earth material (rock, soil, bark) is a condition that is conducive to wood destroying insects and organisms. I recommend monitoring of post. If any deterioration is observed the posts will need to be trimmed and have a concrete pier installed to correct this condition.

5.1 GARAGE/CARPORT FLOOR

Comments: Inspected

6. Electrical System

Inspected (IN) Not Inspected (NI) Not Present (NP) Repair or Replace (RR) Maintenance/Monitor Item (M) Comment (CM)

Component Styles & Materials

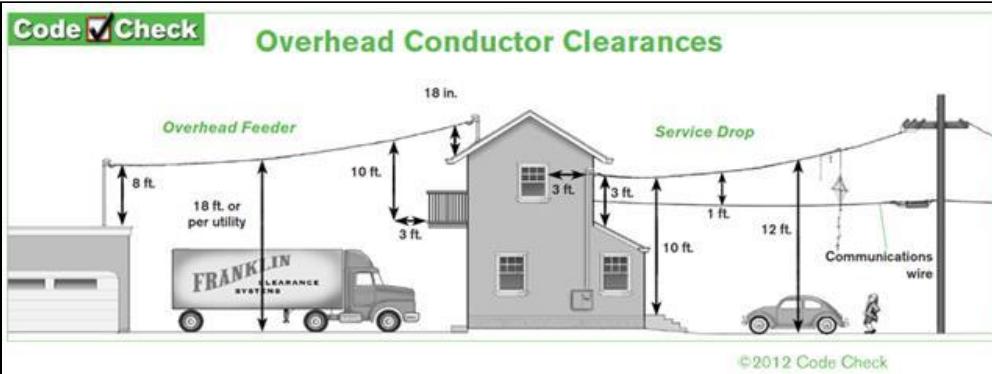
Electrical Service Conductors Entry:	Voltage: Overhead service 240/120 Single Phase	Total Service Capacity (aprox): 200 AMP
Inspection Sticker present:	Grounding: No Ground rods Water Pipe	Panel capacity (Main or #1): 200 AMP
Main (#1) Electrical Panel Location:	Service Conductor Type: Main Distribution Panel Aluminum Basement 4/0	Panel Type: Circuit breakers
Electric Panel Manufacturer:	Branch wire 15 and 20 AMP: SYLVANIA Copper	Wiring Methods: Knob and Tube Romex/NM (All or Some Pre-1984)
GFCI installation:	AFCI installation: Missing in some locations No AFCI's installed	Smoke Alarms/Detectors: Missing in some locations
CO Alarms/Detectors:		
Missing in some locations		

Items

6.0 SERVICE ENTRANCE CONDUCTORS

Comments: Repair or Replace

- (1) **Repair Replace-** Service entry conductor have improper clearance to flat roof. Overhead service conductors should maintain a minimum clearance of 8 ft above the surface of a roof or 10 feet if the roof is to be used for a deck. I recommend contacting the local PUD and/or qualified electrician to evaluate and correct as necessary.



6.0 Photo 1



6.0 Photo 2

(2) **Repair Replace-** The service drop wires were in contact with trees or vegetation. The limbs should be pruned to prevent straining or abrading the service conductors. I recommend a qualified arborist/tree trimming contractor trim trees as necessary. I recommend contacting the power company to disconnect the service prior to work performed.



6.0 Photo 3

6.1 METER, SERVICES, MAIN OVERCURRENT DEVICE, MAIN, DISTRIBUTION PANELS AND DISCONNECTS

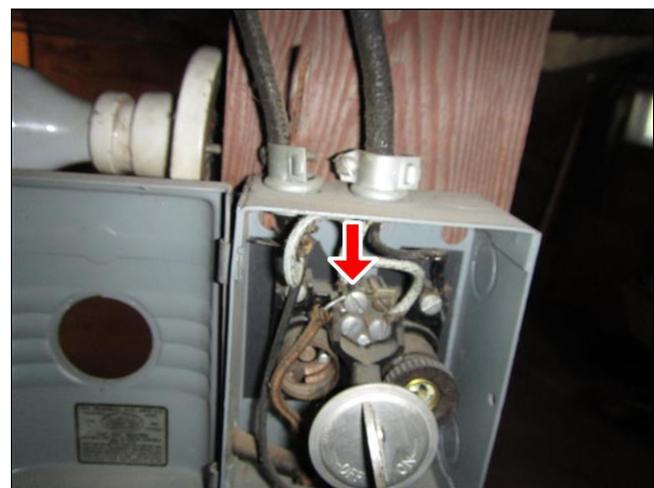
Comments: Repair or Replace, Upgrades/Comments

(1) **Repair Replace-** Double lugging (double tapping) on the terminal to the furnace disconnect switch.

Missing restraint on conductors to lights. Double-lug means there are two wires under a single screw. The lug has to be approved for this application. I recommend a qualified electrician evaluate and repair if necessary.



6.1 Photo 1

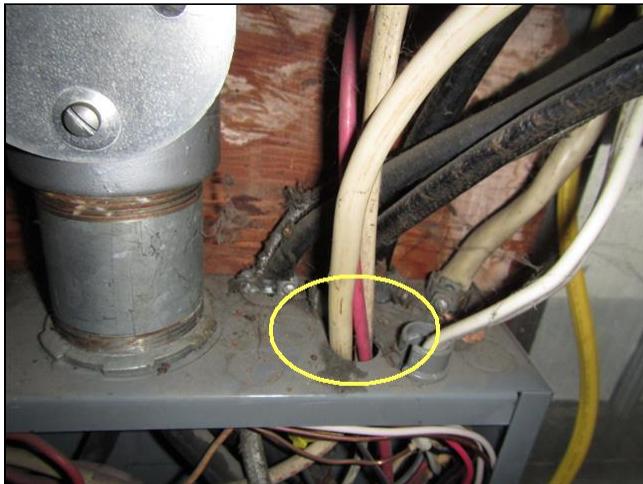


6.1 Photo 2



6.1 Photo 3 -- missing restraints

(2) **Repair Replace-** Missing restraints/bushings/cable connector in panel. Too many conductors in one knock out. This can lead to wear of wire. This is a condition for possible shock and /or fire. I recommend a qualified electrician evaluate and repair as necessary.



6.1 Photo 4

(3) **Comment**-The electrical panel legend is not filled out properly and may not be accurate. This can limit the evaluation of the panel by the inspector. This is also important in an emergency to know what circuit breaker to turn off. I recommend properly labeling your panel.

Information on mapping your circuits

<http://factoidz.com/a-guide-to-mapping-your-homes-electrical-system-how-to-create-an-accurate-legend-for-your-cb-panel/>

<http://www.highelectricbill.com/labeling.htm>

http://www.inspectapedia.com/electric/Electrical_Circuit_ID.htm

6.2 GROUNDING AND BONDING EQUIPMENT

Comments: Repair or Replace, Maint/Monitor Item

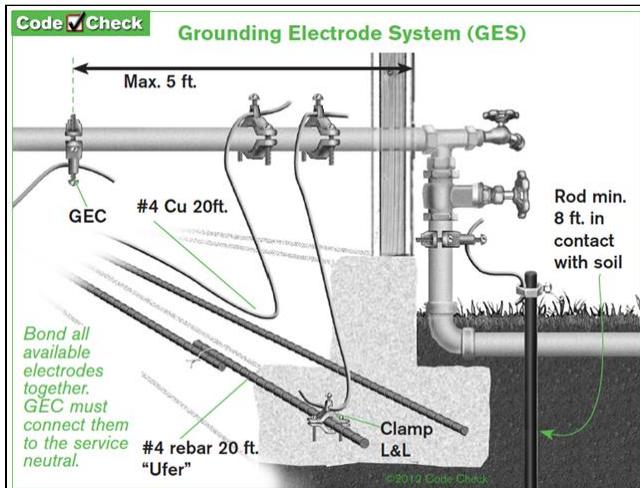
(1) **Repair Replace/Upgrade**- Improper grounding of outlets to plumbing. In older homes this may have been an acceptable practice. With homes usually having various areas of upgrade and repair the grounding paths may have been disrupted and/or the integrity of the bonding path may not be adequate. Ground wires should be run back to the panel, to a grounded branch circuit or other currently approved means. I recommend a qualified electrician evaluate and repair as necessary.

(2) **Repair Replace**- There is a ground wire to the main metal plumbing (but it is not within) 5 feet from where plumbing line enters home. The other water pipe (if it is 10 feet or longer in the soil) should also be part of the grounding electrode system. I recommend an electrical contractor install a ground wire and clamp on metal plumbing line within five feet from where plumbing line enters home, preferably right where it enters the foundation. Proper bonding should be performed on water systems that are all metal.

Note: Bonding must also occur across any dielectric union, pressure reducing valve and any valve or appurtenance that can be removed.

Information on grounding and bonding of water pipes

http://waterheatertimer.org/water_pipe_grounding.pdf



6.2 Photo 1



6.2 Photo 2



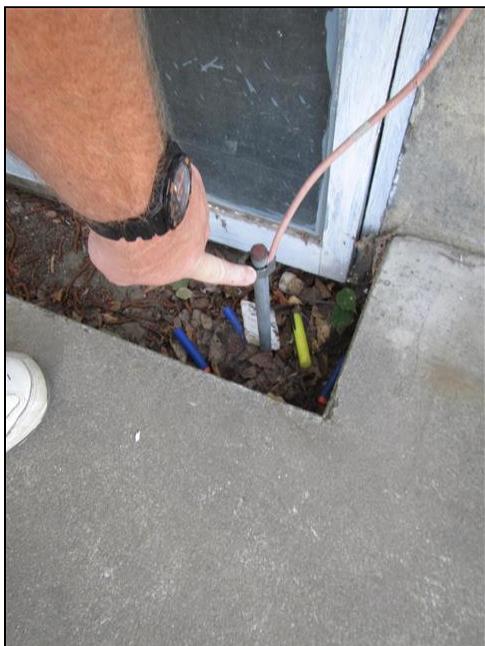
6.2 Photo 3 -- pipe should be bonded also

(3) **Repair Replace-** Improper bonding jumper. Bonding jumpers should be of an approved conductor (typically copper wire) or other listed jumpers. This is to ensure proper bonding of systems that could be energized. I recommend a qualified electrician evaluate repair and replace as necessary.



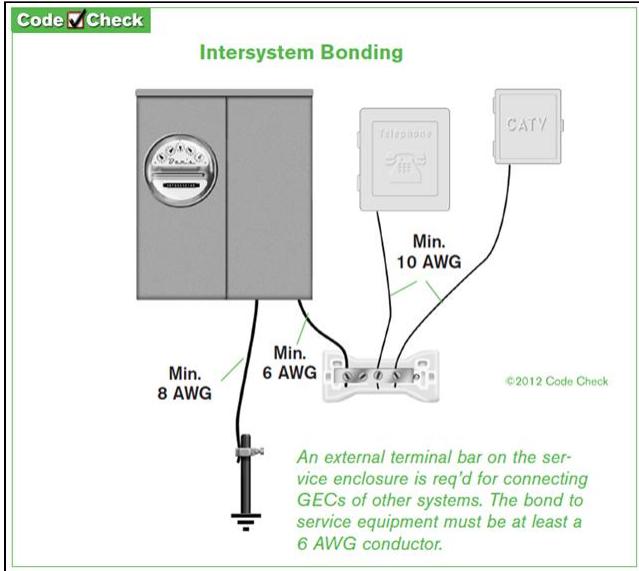
6.2 Photo 4

(4) **Maint./Comment-** Ground rod (electrode) not fully driven into earth or improperly installed. The ground electrodes should be installed so that at least 8 feet of length is in contact with the soil. They should be driven to a depth of not less than 8 feet except where rock bottom is encountered and can be driven at an angle not to exceed 45 degrees from the vertical or buried in a trench that is at least 30 inches deep. The upper end of the electrodes should be flush with or below ground level except where the above ground end and the grounding electrode conductor attachment are protected against physical damage. I recommend a qualified electrician evaluate and repair as necessary.



6.2 Photo 5

(5) **Repair Replace/Upgrade-** Proper grounding of communication circuits, CATV cables, TV and satellite masts, etc. are essential in preventing fires and electric shock from dangerous potential differences between the electrical systems. Grounding of all communications systems should be to the homes main grounding system. The best way is to bond them to a common point at the building grounding electrode system. I recommend a qualified contractor or electrician evaluate and repair as necessary.

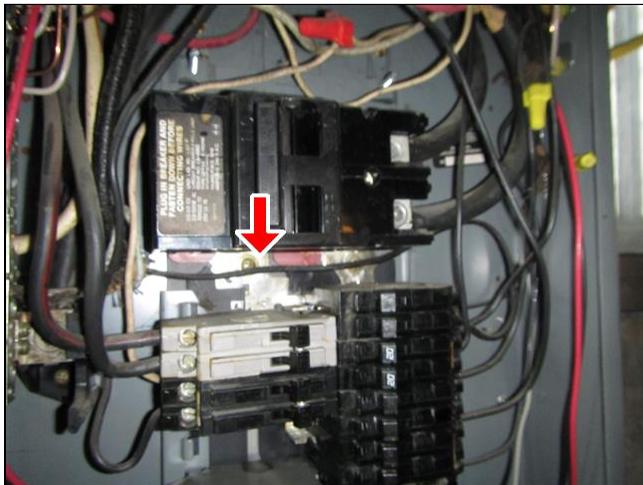


6.2 Photo 6

6.3 BRANCH CIRCUIT CONDUCTORS, OVERCURRENT DEVICES AND COMPATIBILITY OF THEIR AMPERAGE AND VOLTAGE

Comments: Repair or Replace

- (1) **Repair Replace-** Wires crossing bus bar. Wiring not installed in a neat and workman like manner. Wires should be arranged to run around the bus bar. I recommend a qualified electrician evaluate and repair as necessary.



6.3 Photo 1 -- Wire over bus bar



6.3 Photo 2

- (2) **Comment-** All white or grey wires being used as hot (ungrounded) conductors should be marked (re-identified) as such with black or other appropriate color. I recommend that when any work is performed by a qualified electrician that this is performed.

6.4 BRANCH WIRING AND CONDUITS

Comments: Repair or Replace, Upgrades/Comments

(1) **Repair Replace**-Wire splices exposed and not contained in a covered junction box. Electrical connections made without junction boxes, made with junction boxes not properly secured to framing members, wires not secured to the junction box or withing an appropriate distance, or open knock outs in junction box. All knock out in junction boxes need to be filled.

Where electrical connections are made with no junction boxes, the danger of electrical shock and fire is increased. With the exception of the early knob-and-tube wiring, all connections should be made in certified metal or plastic junction boxes. Junction boxes not only protect the connection itself, but secure the wires coming into the box and hold them in place.

I recommend a qualified electrician should evaluate and make repairs as necessary.

Areas observed- Wall behind main bathroom tub



6.4 Photo 1

(2) **Repair Replace/Comment**- This property has "knob and tube" wiring, which was commonly installed to the 1930's and possibly to 1950. It is ungrounded system and over time, the wire's insulation may become brittle and fall apart or wear thin. This wiring could be overloaded and/or have incorrect tapping of new wiring into it. It is often recommended that these circuits should not have more than a 15 amp breaker/fuse protecting them.

Some energized knob and tube wiring was found during the inspection. It is not within the scope of this inspection to determine what percentage of this property's wiring is of the knob and tube type, or to determine what percentage of the knob and tube wiring is energized vs. abandoned.

Replacement may be warranted over time, use of AFCI (see electrical AFCI comments) breakers is suggested on these circuits till replacement can be achieved.

A qualified electrician should evaluate this wiring system and make repairs or replace wiring as necessary

Note: Some insurance companies may be unwilling to offer homeowner's insurance or higher rates for properties with knob and tube wiring. I recommend that the client(s) consult with their insurance carrier regarding this.

Informational Link-

http://www.creia.org/assets/docs/knob_tube_locked.pdf

(3) **Repair Replace**- Wire cable sheathing stripped to far back leaving conductors exposed outside of box and not protected from damage at clamp. Standard practice is to have the cable sheathing should extend a minimum of about 1/4 in. inside the box. I recommend a qualified electrician evaluate an repair as necessary.



6.4 Photo 2 -- upstairs hall storage

(4) **Repair Replace**- Potential mechanical damage of exposed wiring. Where wiring is run on the surface of walls, baseboards or other interior finishes it should be protected from mechanical damage with a rigid covering (conduit, framing etc...). Alternatively, flexible metal or rigid metal cables can be used. Several junction boxes are missing proper wire restraints. I recommend a qualified electrician evaluate wiring and repair as necessary.

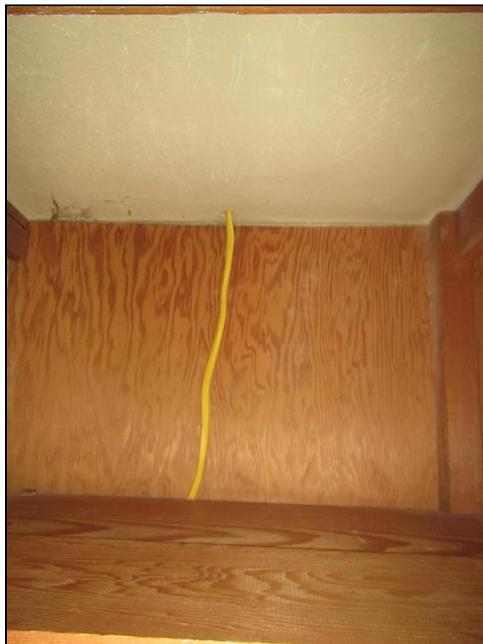
Areas Observed- basement, kitchen above range area and in cabinet, main bathroom south wall, hall storage cabinet upstair



6.4 Photo 3



6.4 Photo 4



6.4 Photo 5



6.4 Photo 6

(5) **Repair Replace/Comment-** Use of NM wiring (Romex) on the exterior of home. Standard practices is that NM wiring should not be used on the exterior of the home (damp or wet locations). Some jurisdictions may allow the use under patio covers and porches. Ideally the use of UF wire or other approved conductors should be used which is designed for wet locations. The wiring should be properly protected from mechanical damage. I recommend that a qualified electrician evaluate, repair and replace as necessary.



6.4 Photo 7

(6) **Repair Replace/Comment-** Use of extension cords for permanent wiring in shop to light. Extension cords should be used only on a temporary basis. If permanent use is needed a receptacle should be installed at the desired location. I recommend a qualified electrician evaluate and repair as necessary.

Areas observed-

Informational Link-

http://www.inspectapedia.com/electric/Electrical_Outlet_Installation.htm

(7) **Repair Replace-** Missing nail plates for electrical wires. This is risk for damage to the wire, shock and or fire. Nail plates should be installed over electrical cables (and plumbing) if hole in framing is less than 1-1/4 in. from face of framing member. I recommend a qualified contractor or electrician install proper nail plate protection as necessary



6.4 Photo 8

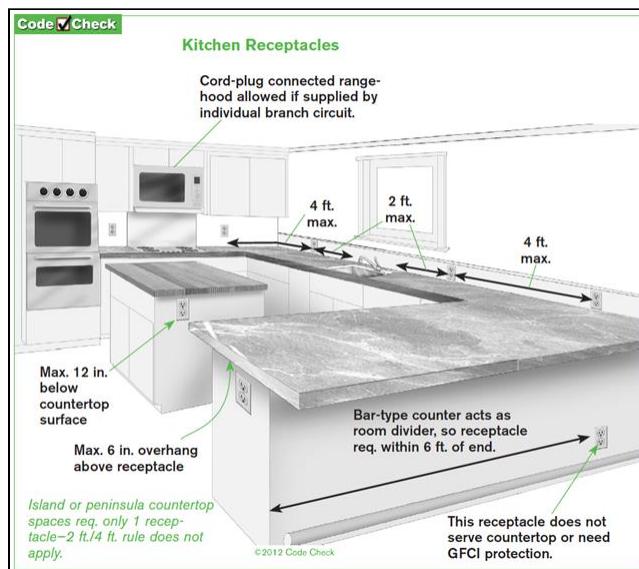
(8) **Repair Replace/Maint.** Wires not properly secured by panel. Romex (NM) wires should be properly supported, secured and installed so as not to damage the cable, within 12 in.of panel (and every outlet box, junction box, cabinet, or fitting). I recommend properly securing the wiring as necessary.

(9) **Comment-** The home is wired pre-1984. Some or all of the wiring is pre-1984 nonmetallic sheathed cable (NM/Romex) contained conductors (wires) with insulation rated 60°C (140° F). When installed in a hot attic, the ampacity of this old wire is easily exceeded. Precautions must also be taken to isolate this old low-temperature wiring from lighting (luminaires) that require high-temperature rated connections. Much of this old wire was used in houses with problematic electrical equipment. Replacement circuit breakers for some older panels can be very expensive, providing one more incentives to replace such systems.

6.5 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)

Comments: Repair or Replace, Upgrades/Comments

(1) **Repair Replace/Upgrade/Comment-** Kitchen has no circuits supplying power to the countertops. Common modern practice is that a minimum of two circuits should be provided to the kitchen counter areas for small appliances (SABC- since the early 1960's) and using what is referred to as the 2 and 4 rule for receptacle placement. Standard practice is that these circuits that service the Kitchen counter tops should not serve any other receptacles or outlets that are not located in the kitchen/cooking area or other appliances (other than the refrigerator). The client should be aware of this. I recommend that a qualified electrician evaluate, repair and replace as necessary if concerned.



6.5 Photo 1

(2) **Repair Replace-** Several "three-prong" outlets are not grounded. It is common in older home that these have been replaced with improper outlets. These need to either be replaced with a two prong outlet or a GFCI outlet marked "no ground". I recommend a qualified electrical contractor repair and replace as necessary. Further evaluation of any receptacles that was obstructed by belongings and storage should be performed.

Note: Current standards are when repairs are performed to these receptacles AFCI upgrade may be required.

Areas where they are located- Old garage/shop, front room, kitchen (refrigerator and over range), main floor bedroom,

(3) **Repair Replace-** Old light fixture on porcelain base (on knob and tube system). These old fixture have exposed electrical connections which could lead to accidental contact with live wires. I recommend a qualified electrician evaluate repair and replace as necessary.



6.5 Photo 2

(4) **Repair Replace-** The three way switch for the kitchen light is not working properly. It only works in certain position indicating it may have not been properly wired. I recommend a qualified electrician repair as necessary.

(5) **Repair Replace-** Wires may exceed junction box capacity. This is a safety issue. I recommend a qualified electrician evaluate and repair as necessary.



6.5 Photo 3

(6) **Repair Replace-** Junction box not properly secured on shelf above kitchen sink. This can lead to loose connection and/or wire damage. I recommend a qualified electrician repair as necessary.



6.5 Photo 4

(7) **Maint.**- Several loose receptacles where found. Loose receptacles can cause fatigue of the wires over time. I recommend a qualified person or electrician tighten or replace the receptacles as necessary. Further evaluation of any receptacles that was obstructed by belongings and storage should be performed.

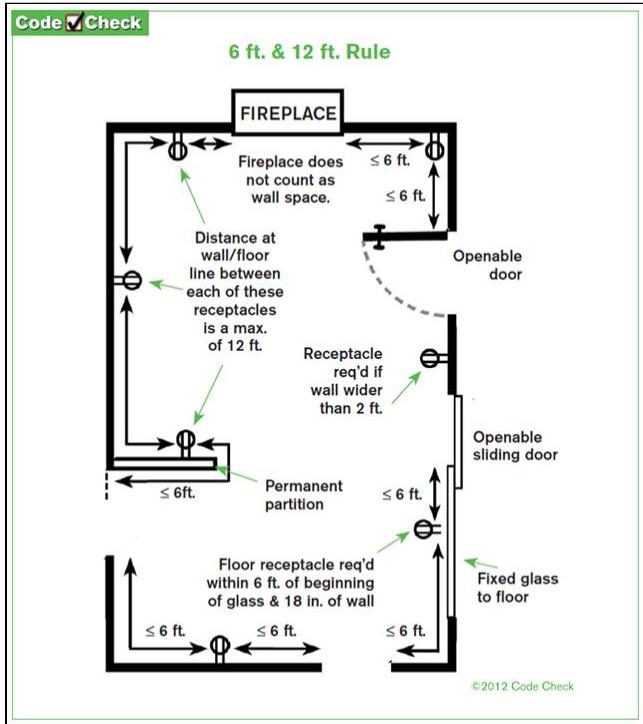


6.5 Photo 5 -- In kitchen

(8) **Upgrade/Comment**- Older home range outlet is 3 prong outlet. Standard practice for homes built after the year 1996 is to have 4-prong outlets. Standard practices prohibit changing a 4-prong to a 3-prong outlet (unless properly wired for a 4 wire circuit), but does allow changing the cord to match the existing outlet regardless of whether the cord is 3-prong or 4-prong. If you prefer to update your outlet from 3-prong to 4-prong, I recommend that a qualified electrician evaluate and make the repair.

(9) **Maint-** Missing or damaged covers for outlets/switches. This can leave the wiring exposed and a potential for shock. This is especially true where it is in the reach of children. I recommend replacing any missing covers as necessary.

(10) **Comment-** Common with older homes that they do not have the number of receptacles and circuits of current homes. Current standards are to have a maximum distance to a receptacle be no more than 6 feet along any wall section 2 feet or greater (or 12 feet spacing between receptacles on large wall runs) and 2 feet on kitchen counter tops. This is so lamp cords or such (normally 6 feet long) can be connected without the use of any extension cords. The client may want to have an electrician evaluate the home and your needs and make suggestions and upgrades based on that assessment.



6.5 Photo 6

(11) **Comment-** The lights did not respond to their switches. This is most likely from burnt out bulbs. I recommend replacing the bulb and checking to ensure that the light fixtures are functioning properly. If that does not correct the issue there may be problems with switch mechanism, the connections of the wire in the box at the switch, a flaw in the wire between the panel and the switch (including boxes upstream of the switch), a problem downstream in the circuit from the switch which makes it seem like the switch is faulty, a blown fuse or tripped breaker in the panel, a damaged or poorly connected wire at the panel.

If they do not work after the bulbs have been replaced I recommend a qualified electrician evaluate and repair as necessary.

Areas observed- front room, over kitchen sink

(12) **Comment-** Three way, four way switches etc... These are lights controlled by more than one switch. During a home inspection I try to evaluate if they have been properly wired and working in all positions. In some cases during a home inspection this may not be possible or practical to verify they are working in all positions. The client should be aware of this limitation.

(13) **Comment-** Over-lamping of light fixtures. This is when a light fixture is fitted with a light bulb that has a too-high wattage. Every fixture has a wattage rating that is recommended by the manufacturer. Example: Putting a 100-watt bulb in a 60-watt fixture could cause intense heat, melting the light socket and the insulation on the fixture's wires. Even after you pull the offending bulb out, you could still have lasting damage to your fixture. Most modern fixtures should disclose/identify their wattage rating. Do not go above that with your bulbs and you'll be safe. If your fixture is older, and without a wattage recommendation, it is best to go the safe route and use 60-watt bulbs (or lower).

(14) **Comment-** With the new electrical standards when replacing any receptacles around the home they need to be tamper resistant. AFCI, GFCI and weather resistant style of receptacles in locations requiring them. I recommend consulting a qualified electrician when any replacements are performed.

Informational Link-

<http://www.ncwhomeinspections.com/Receptacle+replacement+per+the+2014+NEC>

6.6 OPERATION OF GFCI AND AFCI (GROUND FAULT CIRCUIT/ARC FAULT CIRCUIT INTERRUPTERS)

Comments: Repair or Replace

(1) **Repair Replace/Upgrade-** GFCI (ground fault circuit interrupt) are not installed in several areas as required per current standards (e.g. bathrooms, garages etc...). There are some areas with the age they were not required but I highly recommend their installation. These devices protect you from shock due to grounding issues. State law mandates that an inspector must recommend upgrading GFCI protection to current standards. The areas of protection have recently expanded to include areas not previously required, such as laundry, dishwasher, 6 feet from all sinks and all fixed electrical equipment with exposed grounded metal parts within an enclosed shower area or within five feet of the top inside edge of a bathtub must have ground fault circuit interrupter protection. etc...

I recommend a qualified electrical contractor evaluate and install GFCI protection where appropriate.

Areas Observed: some shop receptacles, front exterior receptacle, laundry area, main bathroom receptacle and grounded metal within 5 feet of tub, basement receptacles

Below is a list, not necessarily conclusive as to all GFCI protection requirements:

All outdoor receptacles, except those designated for ice melting equipment (must be dedicated circuit), Receptacles in garages and outbuildings, All receptacles (120V), no exceptions, installed in bathrooms and laundry, All receptacles installed to service kitchen countertop areas (Including islands, desk etc..), Circuits (Outlets) to dishwashers, All receptacles within 6 ft of the outside edge of any sink (kitchen sink included), Receptacles located in crawl spaces, unfinished basements, shops or mechanical rooms, Receptacles/Outlets supplying power to jetted tub motors, Receptacle for pool circulation and sanitation equipment. Receptacles and outlets serving pool equipment, motorized covers and pumps.

Exterior GFCI's need to be weather resistant style. All GFCI's need to be readily accessible. Shelving, appliances, cabinets and storage should not be placed in front of GFCI receptacles.

Link on GFCI and how they work-

<http://www.cpsc.gov//PageFiles/118853/099.pdf>

(2) Upgrade/Comment- No AFCI's installed. You may want to consider adding AFCI (Arc Fault Circuit Interrupt) protection from arcing issues that can lead to fire. Like smoke detectors and GFCI these are installed for added safety. Older homes with ordinary circuit breakers especially may benefit from the added protection against the arcing faults that can occur in aging wiring systems. I recommend having a qualified electrician evaluate and install AFCIs per current standards.

Per the National Fire Protection Agency (NFPA)- Older homes are statistically more vulnerable to electrical fires. Extra protection for older homes is provided by the gradual replacement, over time, of non-AFCI-protected receptacles with new AFCI-protected ones.

Note: With older systems there always needs to be an evaluation these type of upgrades to existing systems. As with any functional system replacement may be necessary as the system ages. You will need to install AFCI protection for any receptacle replacement in areas that require their protection.

For more information about AFCIs see provided link-

<http://www.afcisafety.org/qa.html>

(3) Comment- Washington State has adopted 2014 NEC as of July 2014, there is provisions about AFCI and GFCI requirements for branch circuits that will effect all homeowners.

Any 15- and 20-ampere branch circuits; if a receptacle(s) is replaced or where branch-circuit wiring is modified, replaced, or extended that affected circuit may have to be AFCI protected if required by location. AFCI protection is not be required where the extension of the existing conductors is not more than 6 ft and does not include any additional outlets or devices. If receptacles are to be replaced in areas requiring AFCI protection you are required to upgrade to AFCI protection. I recommend if any alterations of existing circuits or receptacles are to be replaced that you consult a qualified electrician.

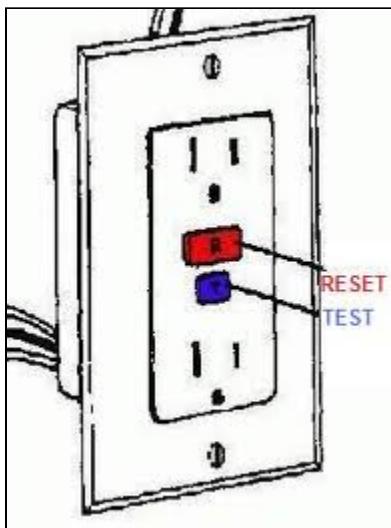
Basically per the 2014 NEC AFCIs are required in all homes (dwelling units) for all 15 and 20 amp 120v circuits except those receptacles and circuits in bathrooms and attached garages.

Per the National Fire Protection Agency (NFPA)- Older homes are statistically more vulnerable to electrical fires. Extra protection for older homes is provided by the gradual replacement, over time, of non-AFCI-protected receptacles with new AFCI-protected ones.

Informational Link-

<http://www.ncwhomeinspections.com/New+AFCI+rules+for+2014>

(4) **Comment-** All GFCI (ground fault circuit interrupter) and AFCI (arc fault circuit interrupter) devices should be tested on a monthly basis. The test consists of pushing the test button on the receptacle (mainly GFCI) or circuit breaker at the electrical panel (mainly AFCI, but there are also GFCI circuit breakers). If during the test the device does not reset it may be time to replace the device. These devices are safety items and should function as intended.



6.6 Photo 1



6.6 Photo 2

6.7 SMOKE ALARMS (OR DETECTORS)

Comments: Repair or Replace

Repair Replace/Comment- Due to the age of home smoke alarms (or detectors) not in all locations per current standards. Some smoke alarms are missing or disabled. I recommend installing smoke alarms in all location per current standards and the testing of all smoke alarms present. It is recommended that smoke alarms be checked monthly and batteries changed yearly.

Smoke alarms should not remain in service longer than **10 years** from the date of manufacture and should be replaced thereafter. Vacuum the dust off smoke alarms every six months.

There are two main types of smoke alarms-

Ionization smoke detection: is generally more responsive to flaming fires.(Most common type in homes and more prone to nuisance tripping)

Photoelectric smoke detection: is generally more responsive to fires that begin with a long period of smoldering (smoke).

Note: I recommend installing photoelectric smoke alarms due to the fact that most fatalities are attributed to smoke inhalation. If your home is equipped with Ionization detectors at a minimum you should supplement them with photoelectric type of detector.

Informational Links-

<http://www.ncwhomeinspections.com/Smoke+Alarms+Usage+and+Placement>

There is now available wireless interconnected alarms available for use in older homes where wiring is not present.

Informational Links-

<http://www.ncwhomeinspections.com/Smoke+Alarms+Usage+and+Placement>

State recommendations for locations. <http://apps.leg.wa.gov/wac/default.aspx?cite=170-296-0580>

NFPA Information- [Link](#)

My building permit tip sheet- http://www.mybuildingpermit.com/Constuction%20Tip%20Sheets/2012%20Tip%20Sheets/MBP%20Tip%20Sheet%2004_2012.pdf

6.8 CARBON MONOXIDE DETECTORS

Comments: Repair or Replace

Repair Replace/Comment- There is no carbon monoxide detector found in home or by a bedroom/or missing on one of the floors/levels. Carbon monoxide (CO) is a by-product of combustion, present whenever fuel is burned. The State of Washington requires that a CO detector be installed outside of each separate sleeping area in the immediate vicinity of the bedroom and each level in all new construction or any home sold after July, 26, 2009. All existing homes will be required to have a CO detector installed by January of 2013. Carbon Monoxide is an odorless and highly poisonous gas. I recommended that one be installed in each required location according to the manufacturer's instructions.

If you are installing only one carbon monoxide detector, the Consumer Product Safety Commission (CPSC) recommends it be located near the sleeping area, where it can wake you if you are asleep. Additional detectors in every bedroom of a home provides extra protection against carbon monoxide poisoning.

Many manufacturers recommend replacement every 5 to 7 years

[First Alert Manual](#)

The US Consumer Product Safety Commission information on CO-

<http://www.cpsc.gov/cpscpub/pubs/466.html>

6.9 OTHER ELECTRICAL (general information, low voltage and misc.)

Comments: Upgrades/Comments

(1) **Comment-** During an inspection many areas may be obstructed and can not be fully evaluated. If several electrical issues are observed the client should be aware there could be other issues hidden by stored items

and belongings, as well as in wall cavities and areas that can not be seen. In some cases it may not be practical to list every issue in the report or may be part of a system that needs attention. The report will give a general sense of the condition of the overall system. Quite often the electrician will find other items that need to be addressed when performing their evaluation. Due diligence should be used in the evaluation of the electrical system.

(2) **Comment-** Understanding your homes electrical system and functionality is good for all homeowners. Safety should always be the foremost concern for anyone who is working on or around electricity. It is critical to recognize and distinguish between those repairs that you are qualified to undertake and those that only a professional electrician should handle. I have included this information to you to help you understand many of the homes electrical components.

Informational Link-

<http://www.fnl.gov/pub/takefive/documents/Elec%20Safety%20Workbook.pdf>

7. Plumbing System

Inspected (IN) Not Inspected (NI) Not Present (NP) Repair or Replace (RR) Maintenance/Monitor Item (M) Comment (CM)

Component Styles & Materials		
Water Source: Public	Water Pressure (normal 40 to 80 psi): Between 40 and 80 psi	Plumbing Water Supply (into home): Galvanized (old)
Water Shut off Location (In home shut off): Basement	Plumbing Water Distribution (inside home): Galvanized	Washer Drain Size: Using Sink
Plumbing Waste Line: Cast iron ABS Lead waste (old)	Main Cleanout Location: In basement	Water Temperature: Not able to Verify
Water Heater Power Source: Gas (quick recovery)	Water Heater Capacity: 40 Gallon	Water Heater Manufacturer: RUUD Model/Serial # : P2-40F1 / RULN0608Z08068
Water Heater Age: Month/Year - : 06 / 2008	Water Heater Location: Basement	Water Heater straps/secure: No
TPR (Temp./Pressure/Relief) Valve: Present	TPR Piping Material (discharge): Missing	

Items

7.0 PLUMBING WATER SUPPLY AND DISTRIBUTION SYSTEMS AND FIXTURES

Comments: Repair or Replace, Upgrades/Comments

(1) **Repair Replace-** Several shut off valves are leaking. This can lead to damage of materials and is a conducive condition for wood destroying insects and organisms. I recommend that a qualified plumber evaluate and repair as necessary.

Areas Observed- By water heater, by main shut off

(2) **Repair Replace/Comment-** Water supply service entrance pipe is made of galvanized steel. Based on the age of this structure, these pipes may be nearing or may have exceeded their estimated useful life of 40 to 60 years. Some external rusting of the pipe was observed. Internal corrosion and rust can reduce the inside diameter of these pipes over time, resulting in reduced flow and eventually, leaks. The inspector performed a "functional flow test" during the inspection where multiple fixtures were run simultaneously, and found the flow to be adequate. For example, the shower flow didn't decrease substantially when the toilet was flushed. Despite this, and because of their apparent age, these pipes may need replacing at any time. I recommend that a qualified plumber evaluate, repair and replace as necessary.

(3) **Comment-**Water supply valve is a piercing valve style called a saddle valve. I recommend monitoring of this valve because corrosion to this valve can cause them to leak. When work is performed on the plumbing system I recommend having this replaced with a permanent shut off valve.

Informational link below.

<http://www.naturalhandyman.com/iip/infextra/lnfsad.html>



7.0 Photo 1

(4) Repair Replace/Comment- Some, most, or all of the water supply pipes in this structure are made of galvanized steel. Based on the age of this structure, these pipes may be nearing or may have exceeded their estimated useful life of 40 to 60 years. Internal corrosion and rust can reduce the inside diameter of these pipes over time, resulting in reduced flow and eventually, leaks. The inspector performed a "functional flow test" during the inspection where multiple fixtures were run simultaneously, and found the flow to be adequate. For example, the shower flow didn't decrease substantially when the toilet was flushed. Despite this, and because of their apparent age, these pipes may need replacing at any time.

(5) Maint/Comment- Per Washington State all hot water pipe should be insulated at all area where insulation is not present. Such as at water heaters feeds, in non-insulated wall, any exposed areas etc... Insulation for hot water pipe should have a minimum thermal resistance of R-3. An SBCC interpretation states that insulation can be discontinuous where passing through framing members or where necessary to pass another pipe in a stud space. I recommend installing insulation where missing

7.1 PLUMBING DRAIN, WASTE AND VENT SYSTEMS

Comments: Repair or Replace, Upgrades/Comments

(1) Repair Replace- Cleanout cap damaged in basement west wall area. This can allow sewer gases into the home and debris into the waste lines. I recommend installing a proper cap on the clean out.



7.1 Photo 1

(2) **Comment-** In older homes main drains (such as cast iron, Orangeburg (bituminous fiber), clay etc...) may be more problematic as they age. This is especially true were tree roots could effect the drain line. It is recommended that you ask the sellers if they have ever experienced any drainage problems, or even better you may wish to have the main waste line video inspected.

(3) **Comment-** The basement has several floor drains (these are outside of the scope of this inspection and such are excluded). These drains may become dry over time leading to sewer gasses infiltrating the home. Floor drain traps should be cleaned and filled with water to ensure that they are not broken and that the traps are primed (have water in them) which creates a seal from sewer gasses. I would recommend running water in each drain (such as using a garden hose) over a period of time to ensure the proper functioning of these drains. If any issues are found I would recommend having a qualified plumber evaluate and repair as necessary.

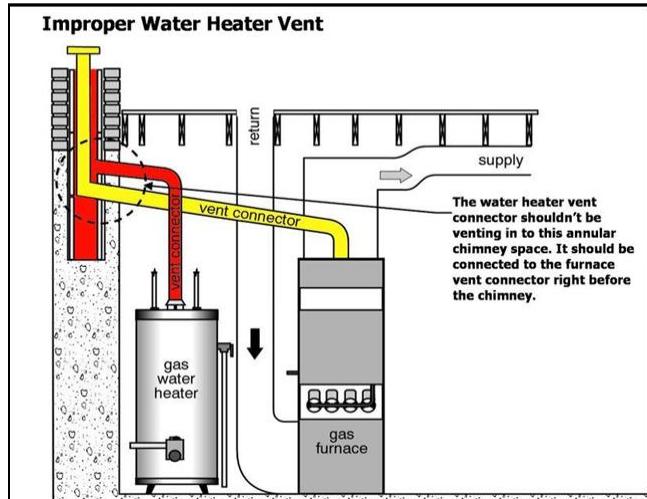
Comment- The client may want to evaluate having a trap primer installed to ensure the trap is properly sealed.

(4) **Comment-** Interior sewer/waste line clean out. The client should be aware of this in case of any clogging or the line needs to be snaked.

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

Comments: Repair or Replace, Upgrades/Comments

(1) **Repair Replace-** Improper vent connector pitch. This can lead to improper draft. A water heater vent connector, often called a 'flue', is required to pitch upwards towards the chimney or vent at a minimum slope of one quarter inch per foot. The steeper the pitch, the better the draft. I recommend a qualified plumber or contractor evaluate, repair and replace as necessary.



7.2 Photo 1



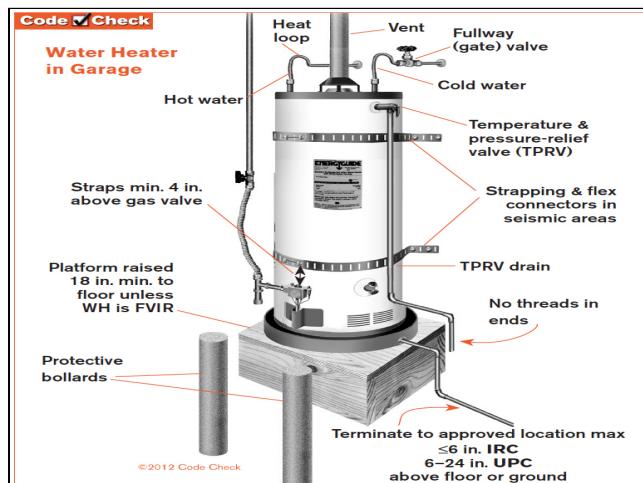
7.2 Photo 2

(2) Repair Replace/Comment- The water heater restraint straps are missing/not attached. It was not uncommon that these straps were not installed on older homes or enforced by local municipal inspectors. The upper strap should be placed in the top one third of the water heater and the lower strap should be placed near the bottom third while at the same time keeping it above the water heater controls. The client may want to have these installed. I recommend a qualified person or contractor repair/install as necessary.

Note: Some appraisers are now requiring these be installed.

Informational Link-

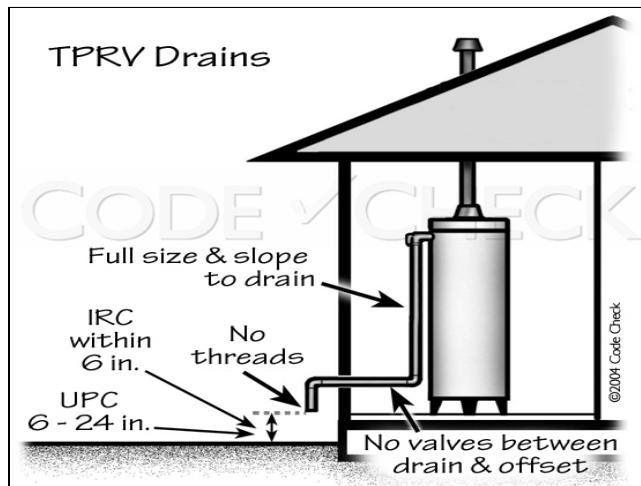
<http://www.doh.wa.gov/Emergencies/EmergencyPreparednessandResponse/Factsheets/WaterHeatersHowtosecurethem>



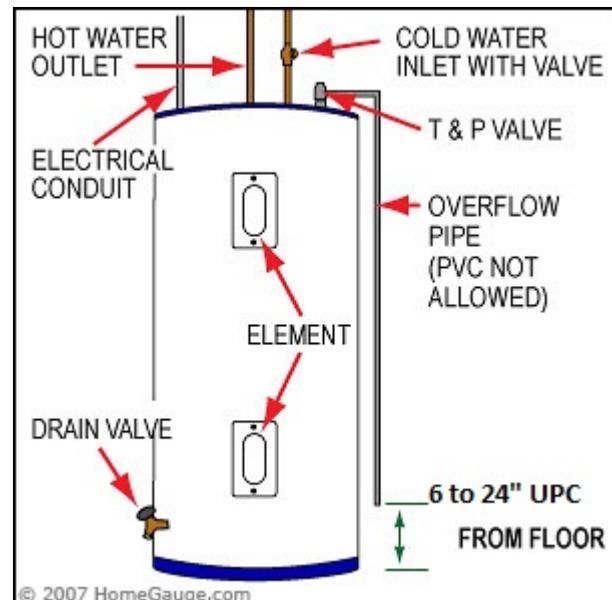
7.2 Photo 3

(3) Repair Replace- The TPR valve on water heater needs an approved (copper, CPVC, PEX) 3/4 pipe to extend within 6 to 24 inches of floor (older installations) for safety or properly terminated at a drain or to the

exterior of home. The temperature pressure relief (TPR) valve is a safety device that is designed to: prevent the water in the tank from exceeding 212 ° F, and prevent the water pressure in the tank from exceeding 150 pounds/square inch (psi). The piping can not reduce the pipe size or have a threaded end. I recommend repair by a qualified person or plumber repair as necessary.



7.2 Photo 4



7.2 Photo 5

(4) **Comment-** Water heater TPR (Temperature, Reassure/Relief) valve should be reinspected at least once every three years by a licensed plumbing to ensure that the water ways are clear. Some TPR valve manufacturers recommend that the lever be lifted at least once a year to ensure that the waterways are clear. By lifting the valve, water is allowed to flow through the safety valve and should flush out the discharge pipe. In certain areas naturally occurring mineral deposits may adhere to the valve, rendering it inoperative. If the handle does not lift easily do not operate or If water does not flow through the valve or fails to shut off when reset, immediately turn off the power or gas to the water heater, a qualified plumber should replace the device immediately.

WARNING- When manually operating the lever, water will discharge and precautions must be taken to avoid contact with hot water and to avoid water damage if valve becomes stuck. The inspector does not operate this valve.



7.2 Photo 6

7.3 HOME MAIN WATER SHUT-OFF DEVICE/SHUT-OFFS

Comments: Upgrades/Comments

- (1) **Comment-** The main water shut off is located in basement.



7.3 Photo 1

- (2) **Comment-** Shut-off valve exclusions: Water shutoff valves, including the "main" and any such valves at sinks, toilets, dishwashers, washing machines, water heaters are never routinely operated by a home inspector. Only normal controls are tested for functionality. It is recommended that client(s) verify, prior to moving in large amounts of storage or belongings, that all shutoffs are fully functional, properly located and easily accessible at standard and critical areas.

- (3) **Maint./Comment-** It is very common as the plumbing system ages that the older shut-off valves may become frozen and or not functioning properly. You should also check each plumbing appliance (sinks, toilets, etc.) for their own shutoff valves and verify they work. If the valves fail to turn off water to the appliance or begins to leak, you should repair them or have them fixed by a qualified plumber. These valves come in handy

when the need arises to repair individual appliances. If an appliance has no valves, you will need to shut off your water at the main valve to repair it. I recommend replacing all gate or compression valves with ball or 1/4 turn valves.

Informational Link-

<http://www.biggerpockets.com/forums/67/topics/73472-replace-those-compression-valves-with-1-4-turn-angle-valves>

7.4 WATER PRESSURE/PRESSURE REDUCING- BACKFLOW PREVENTION DEVICES

Comments: Upgrades/Comments

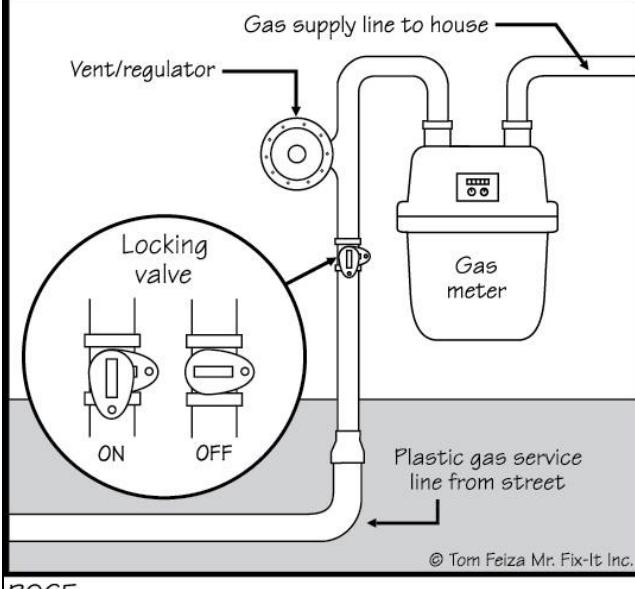
Comment-The water pressure to the home was about 52 psi. Water pressure can vary from times of day and when other fixture are in use.

7.5 MAIN FUEL SHUT OFF (Describe Location)

Comments: Upgrades/Comments

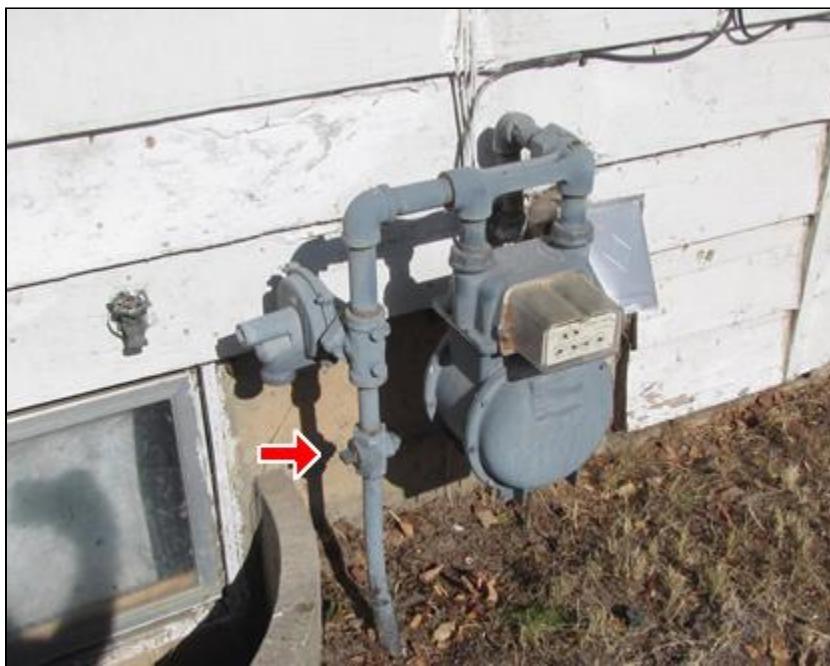
Comment- The main fuel shut off is at gas meter outside

Exterior Gas Meter and Lockable Valve



P065

7.5 Photo 1



7.5 Photo 2

7.6 FUEL STORAGE AND DISTRIBUTION SYSTEMS (Interior fuel storage, piping, venting, supports, leaks)

Comments: Repair or Replace

- (1) **Repair Replace-** Missing or improper placement of sediment trap for furnace. Standard practices require that a sediment trap shall be installed downstream of the equipment shutoff valve as close to the inlet of the equipment as practical. The sediment trap shall be either a tee fitting with a capped nipple in the bottom opening of the run of the tee or other device approved as an effective sediment trap. I recommend a qualified plumber evaluate and repair as necessary.

(2) **Repair Replace-** Improper clearances to gas meter and/or regulator vent. Standard practices is that gas meter regulator vent clearance distance should be three feet in any direction to clothes dryer intake or exhaust vent opening. I recommend a qualified plumber evaluate and move the vent to a proper location or moving the dryer vent to an appropriate location.



7.6 Photo 1

7.7 MISC ITEMS AND COMMENTS

Comments: Upgrades/Comments

Comment- During an inspection many areas of the plumbing system may be obstructed and can not be fully evaluated. If several issues are observed with the plumbing waste and supply systems the client should be aware there could be other issues hidden in wall cavities and areas that can not be seen. Many times the inspector will not run enough water from supply lines and/or in waste lines to replicate a slow or intermittent leak. Slow leaks over long periods of time can lead to structural damage and is a condition conducive to wood destroying insects and organisms. Many times water stains and deterioration can be from previous leaks that have been repaired. This is especially true in older homes. Due diligence should be used in the evaluation of the plumbing systems. Further evaluation of the plumbing systems may be warranted.

8. Heating / Air Conditioning

Inspected (IN) Not Inspected (NI) Not Present (NP) Repair or Replace (RR) Maintenance/Monitor Item (M) Comment (CM)

Component Styles & Materials

Heat Type: Forced Air(Gas)	Furnace/Air Handler(s) Location: Basement	Heat System Brand (Furnaces/Air Handler): LENNOX Model/Serial # : G26Q3-75-3 / 5898A01738
Furnace/Air Handler Age: Year - : 1998	Gas Furnace: BTU's INPUT / OUTPUT : 75,000 / ?	Ductwork: Insulated and Non-insulated
Filter Type: Disposable	Filter Size: 16x20 X 2	Solid Fuel Fireplaces: Solid Fuel
Operable Fireplaces/Stoves: One	Cooling Equipment Type: Air conditioner unit	Exterior Temp for AC: Over 60 degrees
Heat Pump/AC Location: South side of home	Cooling Equipment Energy Source: Electricity	Central Air Manufacturer: LENNOX Model / Serial # : HS29-311-3P / 5897F 05578
AC/Heat Pump- Refrigerant: R-22	AC/Heat Pump Age: Age (< 15 YO) Year (Note: year may be based on Serial #) : 1997	AC/Heat Pump Tonnage: 2-1/2 ton

AC/Heat Pump Min/Max Breaker/Fuse

Required:

25 amp

Breaker/Fuse Installed : 25 amp fuse in disconnect

Items

8.0 HEATING EQUIPMENT

Comments: Maint/Monitor Item, Upgrades/Comments

(1) **Maint./Comment-** Staining of air handler housing. This may indicate that the vent, condensate tray and/or line is clogged. This can lead to premature deterioration of the fan and housing.

System not serviced. Most heating and air conditioning (HVAC) systems manufacturers suggest yearly or bi-yearly maintenance. Scheduled maintenance may be required to maintain warranty compliance. As systems age yearly maintenance and evaluation becomes more critical. During a home inspection the system may not be run long enough or in conditions that may replicate an issue. I recommend that a qualified heating and air conditioning (HVAC) contractor evaluate and repair as necessary. The contractor needs to perform routine maintenance and inspection. They should ensure the condensate lines/trays, housing, fans, dampers and coils are clean and functioning properly.

Note: I highly recommend that the HVAC contractor put a service label on the unit to record date, servicing/maintenance and repairs.

Informational Link-

<http://www.grayfurnaceman.com/for-the-homeowner.html>

(2) **Comment-** The average life expectancy of gas furnaces in homes today is between 16 and 20 years (sometimes longer if well maintained). If your furnace is close to this age or older, you should start budgeting for replacement. Until replacement is performed proper maintenance will be critical. If a heat exchanger develops a leak (through rust perforation or by cracking due to metal fatigue) the heating system is most likely unsafe and needs repair or replacement.

8.1 NORMAL OPERATING CONTROLS

Comments: Not Inspected

8.2 AUTOMATIC SAFETY CONTROLS

Comments: Inspected

8.3 DISTRIBUTION SYSTEMS (including fans, pumps, ducts and piping, with supports, insulation, air filters, registers, radiators, fan coil units and convectors)

Comments: Maint/Monitor Item, Upgrades/Comments

(1) **Maint.-** The air filter is dirty and needs replacing. One of the most important things that you can do to keep your air conditioner and/or furnace working at maximum efficiency , is change the filter every one to six months depending on type of filter. If you use a very efficient air filter, it may need to be changed every month. The 4" (thick) pleated type you may only need to replace it every six months.

Air filters have a standard rating. This rating, minimum efficiency reporting value (MERV), is a number from 1-16. Simply put, as the number goes up the unit will stop more and smaller particles.

Every house is different and there are many factors that determine how often your heating and air conditioning filters should be replaced. If you wait too long operating efficiency begins to decline, as efficiency drops operating costs increase.

Some Cautions About Using Inefficient Filters

Cheap inefficient panel filters can cause problems with air conditioners over time and are best avoided. The dust that does not get collected by your filter gets redistributed back into your home. A concern with this is the dust that collects on the fan, blower motor and evaporator coil of your air conditioner and furnace. This can cause maintenance problems and impact equipment performance. It is best to use a filter in the middle of the road, MERV 5-8. When your furnace is serviced you should consult your HVAC technician and what may be best for your specific system.

(2) **Maint.**- The ductwork appears to need some cleaning. The client may want to clean or have the duct work cleaned. Periodic cleaning every few years will help minimize dust and debris in the ducts and helps prevent fungal growth. Changing of the air filter regularly will usually take care of any build up of dust.

Informational Link-

<http://www.epa.gov/iaq/pubs/airduct.html>

(3) **Comment**- What appears to be asbestos is visible on some ductwork. However, some of it appears to be intact and not significantly deteriorated. The client may wish to have this material tested at a qualified lab. If the material is found to contain asbestos, and the client wants this removed I recommend consulting with a qualified asbestos abatement contractor or industrial hygienist.

If the material is good shape usually the best thing is to leave asbestos material alone. Generally, material in good condition will not release asbestos fibers. THERE IS NO DANGER unless fibers are released and inhaled into the lungs.

For information on asbestos hazards in the home, visit:

<http://www.cpsc.gov/CPSCPUB/PUBS/453.html>



8.3 Photo 1

(4) **Comment**- Ducts attached with (duct tape) non-approved tape for ducts. Instead of using duct tape, it is recommended sealing ducts with mastics, gooey sealants that are painted on and allowed to harden or foil tapes that have metal foil backing and an acrylic adhesive approved fasteners such as nylon ties. (Mastics and tapes should be UL 181 approved.) I recommend replacing this tape with an approved duct tape, mastic and/or fastener.

8.4 PRESENCE OF INSTALLED HEAT SOURCE IN EACH ROOM

Comments: Inspected

8.5 CHIMNEYS, FLUES AND VENTS (for fireplaces or heat systems)

Comments: Upgrades/Comments

Comment- The liners for furnace or fireplaces were not inspected due to height of chimney. I recommend a qualified chimney sweep inspect for safety.

8.6 SOLID FUEL HEATING DEVICES (Fireplaces, Woodstove)

Comments: Repair or Replace, Upgrades/Comments

(1) **Repair Replace-** Fireplace fireproof bricks lining the fireplace are cracked and/or the mortar is failing.

These are specialized devices so recommend contracting with a chimney sweep to repair/further evaluate the wood burning device and associated chimney and components. The National Fire Protection Association has stated that an in-depth Level 2 chimney inspection should be part of every sale or transfer of property with a wood burning device. Such an inspection may reveal defects that are not apparent to the home inspector who is a generalist.

For additional information, and to evaluate if you wish to have such an inspection, please visit:

<http://www.csia.org/HomeownerResources/ChimneySafetyHotTopics/ChimneyInspections/tabcid/116/Default.aspx>



8.6 Photo 1

(2) **Maint./Comment-** The fireplace is in need of cleaning. It is advised that proper cleaning of the chimney to remove creosote deposits, and regular inspection of the installation. Creosote is an inevitable by-product of burning wood. Periodically clean out the deposits formed on the chimney walls to ensure good performance of the stove and reduce any safety hazards created by the creosote deposits. Cleaning chimneys at least once a year is recommended. A more specific rule to follow is to clean the chimney whenever there is a 1/4 inch or more creosote buildup on the chimney walls.

I recommend a qualified chimney sweep clean and inspect the woodstove/fireplace and chimney.

Woodstove information-

[Proper Installation, Operation and Maintenance of a Wood Stove](#)

The National Fire Protection Association has stated that an in-depth Level 2 chimney inspection should be part of every sale or transfer of property with a wood burning device. Such an inspection may reveal defects that are not apparent to the home inspector who is a generalist.

For additional information, and to evaluate if you wish to have such an inspection, please visit:

<http://www.csia.org/HomeownerResources/ChimneySafetyHotTopics/ChimneyInspections/tabcid/116/Default.aspx>

8.7 COOLING AND AIR HANDLER EQUIPMENT

Comments: Upgrades/Comments

(1) **Maint-** Condensate line missing a cap. The primary purpose of a condensate trap is to prevent air from moving in or out of the coil box or air handler during operation. Most manufactures require a condensate trap installed as the line leaves the the furnace unit. Manufactures often recommend a drop from the pan at a minimum of 2 inches and then a minimum of a 2-inch trap seal. I recommend installing a cap as necessary.

Note: If a new trap is installed the client may want to consider having a clear trap installed with clean outs that allows access to clean the trap.



8.7 Photo 1

(2) **Maint./ Comment-** Cooling systems generally are not run for a long enough period of time during an inspection to ensure that system will preform adequately during hot time and ensure that the condensate lines are free of debris and clogging. This will be especially true as the unit ages. I recommend that a qualified heating and air conditioning (HVAC) contractor perform routine maintenance and inspection.

(3) **Comment** - The ambient air test was performed by using thermometers on the air handler to determine if the difference in temperatures of the supply and return air are between 14 degrees and 22 degrees which indicates that the unit is cooling as intended. This is a rough estimate and there may be variables involved due to the test methodology. The supply air temperature on your system read 57 degrees at the closest supply duct, and the return air temperature was 77 degrees.

(4) **Comment**- The condenser outside (AC/Heat Pump unit) is older and may last a few years more, but maybe not. These units can fail shortly after a home inspection during the seasonal change from mild to hot weather. These systems typically have a life span of 15 to 20 years. Heat pumps are generally on the lower end of the life span. I cannot determine how long your AC/Heat Pump will last before a replacement is necessary. Thorough maintenance should be performed. The client should account for replacement cost at some point.

(5) **Comment**- The air conditioning/heat pump system currently uses R-22 type of refrigerant. If your air conditioning fails it might be subject to the following.

On January 1, 2010, the Environmental Protection Agency placed into effect a ban on the manufacture of new HVAC systems using R-22 refrigerant. General phase out of R-22 refrigerant is currently estimated to be complete by the year 2020, at which time chemical manufacturers will no longer be able to produce R-22 to service existing air conditioners and heat pumps. Existing units using R-22 can continue to be serviced with R-22 but it is expected to gradually become expensive and difficult to obtain. New, high-energy efficient systems, will utilize new non-ozone-depleting refrigerants such as 410-A. Unfortunately, 410-A cannot be utilized in some older systems which previously used R-22 without making some substantial and costly changes to system components.

Informational link-

<http://www.epa.gov/ozone/title6/phaseout/22phaseout.html>

8.8 NORMAL OPERATING CONTROLS

Comments: Inspected

8.9 PRESENCE OF INSTALLED COOLING SOURCE IN EACH ROOM

Comments: Inspected

8.10 HVAC OTHER/MISC

Comments: Upgrades/Comments

(1) **Comment**- Spot ventilation is exhaust fans located in areas of the home that will produce the most moisture and odors, such as kitchen, bathroom and laundry areas. Proper use of these fans will help with the overall indoor air quality and reduce moisture in the home. I recommend the client review the provided link on spot ventilation.

Informational Link-

[Spot Ventilation](#)

(2) **Comment-** Bathroom ventilation and moisture. It is a good idea to properly ventilate the bathrooms after showering and bathing to remove any moisture from the bathrooms. As we construct tighter homes this will help with creating and maintaining a good indoor air quality environment. A good strategy is to warm the bathroom and ventilate for an hour afterwards shower/bathing. All of this will be dependent on time of year and relative humidity. I recommend installing timers on bathroom fans to help manage proper ventilation. As with any electrical installation this should be performed by a qualified person or electrician.

9. Kitchen Components and Appliances

Component Styles & Materials

Exhaust/Range hood: NONE	Range/Oven: NONE	Built in Microwave: NONE
Refrigerator: NONE	Ceiling Materials: Plaster	Wall Material: Plaster
Floor Covering(s): Vinyl/Linoleum	Window Types: Single-hung	Cabinetry: Wood
Countertop: Laminate		

Items

9.0 WALL, CEILINGS, FLOORS

Comments: Repair or Replace

Repair Replace/Comment- The vinyl flooring is lifting from air from the register and was not properly adhered. The client may want to repair this to prevent further lifting. I recommend a qualified person or contractor evaluate and repair as necessary.

Informational Link-

<http://www.diynetwork.com/how-to/how-to-fix-vinyl-floors/index.html>



9.0 Photo 1 - floor lifting

9.1 WINDOWS

Comments: Inspected

9.2 COUNTERS AND A REPRESENTATIVE NUMBER OF CABINETS

Comments: Inspected

9.3 GROUT AND CAULKING

Comments: Inspected

9.4 PLUMBING DRAIN AND VENT SYSTEMS

Comments: Upgrades/Comments

Comment- The use of a flexible tailpiece on the sink may not a good practice and may not be an approved method. I recommend when any other plumbing work is performed that this be evaluated and repaired as necessary.



9.4 Photo 1

9.5 PLUMBING WATER SUPPLY FAUCETS AND FIXTURES

Comments: Inspected

Repair Replace- Several shut off valves are leaking. This can lead to damage of materials and is a conducive condition for wood destroying insects and organisms. I recommend that a qualified plumber evaluate and repair as necessary.

Areas Observed- By water heater,

9.6 OUTLETS WALL SWITCHES and FIXTURES

Comments: Inspected

9.7 DISHWASHER

Comments: Not Present

9.8 RANGES/OVENS/COOKTOPS

Comments: Not Present

9.9 REFRIGERATOR

Comments: Not Present

9.10 RANGE HOOD/EXHAUST FAN

Comments: Upgrades/Comments

Comment- No range hood/exhaust. Proper ventilation is important for air quality and moisture control. The client may want to evaluate install over the stove exhaust hood and ducting.

9.11 FOOD WASTE DISPOSER

Comments: Not Present

9.12 MICROWAVE COOKING EQUIPMENT

Comments: Not Present

9.13 MISC. INFORMATION

Comments: Upgrades/Comments

Comment- The national home builders association study found that kitchen appliances have these average life-spans- Dishwasher: 9 years, Disposer: 12 years, Microwave Oven: 9 years, Range, Electric: 13 years, Range, Gas: 15 years, Refrigerator: 13 years and Compactor: 6 years

Appliance Age Check-

<http://www.appliance411.com/service/date-code.php>

10. Laundry

Inspected (IN) Not Inspected (NI) Not Present (NP) Repair or Replace (RR) Maintenance/Monitor Item (M) Comment (CM)

Component Styles & Materials

Ceiling Materials:	Wall Material:	Floor Covering(s):	
Unfinished	Concrete	Concrete	
Exhaust Fans:	Exterior Dryer Duct Location:		
None	East Side of Home	<i>Items</i>	

10.0 WALL, CEILINGS, FLOORS

Comments: Inspected

10.1 OUTLETS SWITCHES AND FIXTURES

Comments: Repair or Replace

Repair Replace/Upgrade/Comment- Older home dryer outlet is 3 prong outlet. Standard practice for homes built after the year 1996 is to have 4-prong outlets. Standard practices prohibit changing a 4-prong to a 3-prong outlet (unless properly wired for a 4 wire circuit), but does allow changing the dryer's cord to match the existing outlet regardless of whether the cord is 3-prong or 4-prong. If you prefer to update your outlet from 3-prong to 4-prong, I recommend that a qualified electrician evaluate and make the repair.

10.2 SINKS

Comments: Repair or Replace

(1) **Repair Replace-** Cement laundry tub is cracked and leaking. This can lead to damage to materials around the sink. This is a conducive condition for wood destroying insects and organisms. I recommend a qualified plumber evaluate, repair and replace as necessary.

(2) **Repair Replace-** The sink faucet is leaking behind the laundry tub. This may need an adjustment or replacement of the seals or replacement of the faucet. I recommend a qualified person or plumber evaluate and repair as necessary.

(3) **Repair Replace-** The sink faucet is leaking. This may need an adjustment or replacement of the seals or replacement of the faucet. I recommend a qualified person or plumber evaluate and repair as necessary.

10.3 WASHER HOOK UP

Comments: Upgrades/Comments

Comment- Washer rubber hoses. As rubber ages, it loses its flexibility and maybe subjected to water hammer over the years. The rubber washing machine hoses over time are more prone to failure. A good rule of thumb is to replace rubber washing machine hoses every five years or every leap year. Stainless steel braided hoses are much more resistant to bursting, and are fairly inexpensive. Floodchek hoses are more expensive but are warranted for 20 years.

Example of Braided Hoses- [Amazon](https://www.amazon.com/)

Floodchek Hoses- <http://www.floodchek.com/>

Informational link-

<http://www.anpac.com/safety/home/IBHS/WashingMachineHoseFailure.pdf>

10.4 WASHER/DRYER

Comments: Not Present

10.5 CLOTHES DRYER VENT PIPING

Comments: Maint/Monitor Item

Maint./Comment- Dryer ducts typically need to be cleaned about once a year, sometimes more if your household does an excessive amount of laundry.

You can do some of it yourself with just a shop-vac, but in most cases you'll need some extra tools like a dryer brush or augur and some flexible rod attachments (so it can go around bends and turns) that connect to a power drill.

You can buy a number of dryer vent cleaning tool kits that include everything you need, from the brushes to the rods to special vacuum adapters.

Informational link-

[Dryer Duct Cleaning](#)

10.6 EXHAUST FAN

Comments: Repair or Replace

Repair Replace/Comment- No fan for laundry area. Standard practice is to have an exhaust fan for proper ventilation. This can lead to moisture issues. I recommend a qualified contractor and/or electrician evaluate and install a exhaust fan as necessary.

11. Main Bathroom

Component Styles & Materials

Exhaust Fans:

Fan only

Flooring:

Vinyl/Linoleum

Counter tops:

Pedestal/Wall mount

Fixtures:

Shower/Tub Combo

Single Sink

Window Types:

Sliders

Items

11.0 COUNTERS AND CABINETS

Comments: Inspected

11.1 GROUT AND CAULKING

Comments: Maint/Monitor Item

Maint-- Caulking around control valves needs repair. The valve escutcheons (Trim plate) are not long enough to create a proper seal. This can allow moisture entry into the substructure. I recommend a qualified person or contractor repair as necessary. All caulking in bathrooms is a maintenance item and needs monitoring and replacement from time to time.

11.2 WALL, CEILINGS, FLOORS

Comments: Inspected

11.3 DOORS (REPRESENTATIVE NUMBER)

Comments: Maint/Monitor Item

Maint- Door stop missing/damaged. This can allow damage to walls from the door handle. I recommend installing/repairing door stops on all doors as necessary.

11.4 WINDOWS

Comments: Upgrades/Comments

Comment- The tub/shower enclosure has a window installed in it. These can be problematic for moisture damage over time. I recommend having a waterproof curtain,such as a vinyl curtain, installed over the window to minimize moisture in the window sill area.

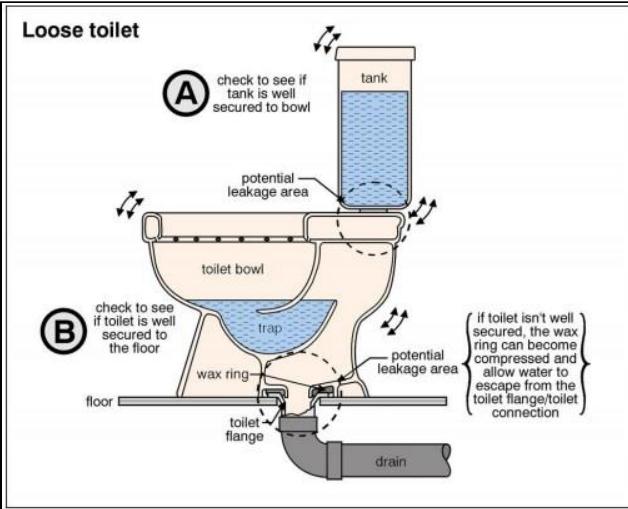
11.5 PLUMBING DRAIN, WASTE AND VENT SYSTEMS

Comments: Inspected

11.6 PLUMBING WATER SUPPLY AND DISTRIBUTION SYSTEMS AND FIXTURES

Comments: Repair or Replace, Maint/Monitor Item

(1) Repair Replace- Toilet was loose and no caulking at the base of the toilet. When it is loose, it is likely that the wax ring is damaged. When toilet repair is being done, and toilet has been lifted, if any damage is seen below, repair at that time. I recommend a qualified person or contractor evaluate repair/replace as necessary.



11.6 Photo 1

(2) **Maint.** - The pedestal sink is not securely attached to the wall. The wall screws are loose. I recommend properly securing the sink to the wall.

11.7 OUTLETS SWITCHES AND FIXTURES

Comments: Repair or Replace

Repair Replace/Comment- Receptacles not properly placed in bathroom. Receptacles on medicine cabinet is not accessible. Bathroom receptacles should be installed within 3 ft from the outside edge of each bathroom basin. The receptacle should be located on a wall or partition adjacent to the basin counter surface, or on the side or face of the basin cabinet not more than 12 in. below the countertop.

11.8 EXHAUST FAN

Comments: Maint/Monitor Item

Maint- All bathroom exhaust fans should be cleaned and inspected on a regular cleaning schedule. The build up of lint in these fans can create a potential fire hazard and inhibit performance. Any fans that have any evidence of heat damage or do not turn freely should be replaced by a fan that is thermally protected.

Informational Link- <http://www.wikihow.com/Clean-a-Bathroom-Fan>

12. 1/2 Bathroom

Component Styles & Materials

Bathroom Location:	Exhaust Fans:	Flooring:
Upstairs	None	Vinyl/Linoleum
Counter tops:	Cabinetry:	Fixtures:
Corian/Acrylic	Wood	Single Sink

Window Types:
Single-hung

Items

12.0 COUNTERS AND CABINETS

Comments: Maint/Monitor Item

Maint- Counter top is not properly secured. I recommend properly securing counter top.

12.1 GROUT AND CAULKING

Comments: Inspected

12.2 WALL, CEILINGS, FLOORS

Comments: Inspected

12.3 DOORS (REPRESENTATIVE NUMBER)

Comments: Inspected

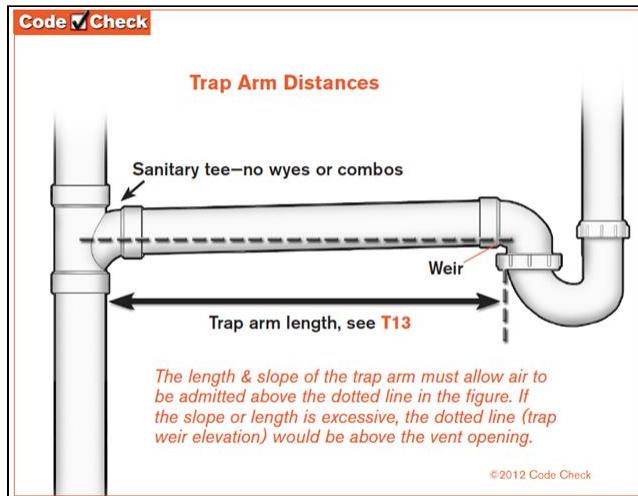
12.4 WINDOWS

Comments: Inspected

12.5 PLUMBING DRAIN, WASTE AND VENT SYSTEMS

Comments: Repair or Replace

Repair Replace- Improper angle/configuration on trap arm for sink. I recommend a qualified person or plumber evaluate and repair as necessary.



12.5 Photo 1



12.5 Photo 2

12.6 PLUMBING WATER SUPPLY AND DISTRIBUTION SYSTEMS AND FIXTURES

Comments: Repair or Replace

Repair Replace- Toilet was loose and no caulking at the base of the toilet. When it is loose, it is likely that the wax ring is damaged. When toilet repair is being done, and toilet has been lifted, if any damage is seen below, repair at that time. I recommend a qualified person or contractor evaluate repair/replace as necessary.

Note: there was staining by the toilet and signs of past leaks in bathroom below.

12.7 OUTLETS SWITCHES AND FIXTURES

Comments: Inspected

12.8 EXHAUST FAN

Comments: Upgrades/Comments

Comment- There is no exhaust fan installed in the bathroom. Proper spot ventilation play a very important role in controlling moisture in the home. I would recommend evaluating having a fan installed in the bathroom.

13. Interior Rooms (Front, Family, Dining, Den, Office etc...)

Component Styles & Materials

Ceiling Materials:

Plaster

Wall Material:

Plaster

Floor Covering(s):
Hardwood T&G
Vinyl/Linoleum
Interior Doors:

Wood

Window Types:
Casement
Single-hung
Items

13.0 WALL, CEILINGS, FLOORS

Comments: Upgrades/Comments

Comment - The ceiling/walls has some cracking. It is not unusual to have some cracking in plaster ceilings and walls in older homes. I recommend that the client monitor the ceiling for additional movement.

Informational link-

<http://www.how2plaster.com/restlath.html>

13.1 DOORS (REPRESENTATIVE NUMBER)

Comments: Inspected

13.2 WINDOWS (REPRESENTATIVE NUMBER)

Comments: Repair or Replace, Maint/Monitor Item

(1) **Repair Replace/Maint**- Several windows do not open properly and/or may be stuck or painted shut. This is not uncommon in older homes. Unsticking windows needs to be done carefully. Attached is a link on tips to freeing a window. If still stuck after attempting freeing or if windows are too high for safe working condition a qualified person or contractor should evaluate and repair as necessary.

<http://www.homeadditionplus.com/window-info/Unsticking-Stuck-Windows.htm>

Window locations-

(2) **Maint**- Annual inspection, cleaning and maintenance should be performed on the windows and doors. Cleaning and lubrication help to maintain smooth operation of movable parts of windows and patio doors and, in most cases, offer corrosion protection. Always thoroughly clean hardware before lubricating.

Informational Links-

<http://www.pella.com/Support-Center-Articles/recommended-maintenance-windows-doors.aspx>

<http://www.milgard.com/learn/window-and-door-care/care-and-maintenance>

http://www.jeld-wen.com/images/stories/pdf/care_maintenance/jcm003.pdf

13.3 OUTLETS SWITCHES AND FIXTURES

Comments: Inspected

13.4 CLOSETS

Comments: Inspected

13.5 MISC. INFORMATION

Comments: Upgrades/Comments

Comment- Homes other than brand new will have wear and tear to many items in the home (doors, windows, cabinets, countertops, walls and ceilings, floor coverings etc...). For a home inspector much of this is mainly cosmetic in nature and does not effect the function of the home. The inspector may note some items as a courtesy to the client. As is the case with interior decor, the client should make sure that the condition (age, cleanliness and functionality) meets their expectations.

14. Hallway, Entrances and Stairways

Component Styles & Materials

Ceiling Materials:	Wall Material:	Floor Covering(s):
Plaster	Plaster Paneling	Wood
Interior Doors:	Window Types:	
Wood	Casement	

Items

14.0 WALL, CEILINGS, FLOORS

Comments: Inspected

14.1 STEPS, STAIRWAYS, BALCONIES AND RAILINGS

Comments: Repair or Replace

(1) **Repair Replace-** Improper guardrails/ wall support to upstairs. A variety of styles are allowed as long as the interior sections of the rail don't possess any openings large enough to pass a 4" diameter sphere through. In the case of guardrails for stairs there is an exception that allows up to a 6" diameter sphere through the triangle opening formed by the stair riser, stair tread, and bottom rail. The guardrails must be strong enough to withstand a concentrated 200 lb force anywhere along the top of the rail. To achieve this you should space rail posts no greater than 6' apart. I recommend a qualified contractor evaluate and repair as necessary.

Information links-

<http://www.co.stevens.wa.us/landservices/documents/MEANSOFEGRESSSTAIRWAYSANDGUARDS.pdf>

Stairways.org

<http://www.staircraft.com/codes.htm>

(2) **Repair Replace-** The handrail at the stairs are missing. Standard building practices require that handrails be installed at stairs with 4 or more risers, shaped so your hand can encircle them, permanently secured to withstand 200 pounds of force, be continuous and extend the entire flight of stairs and be between 30 to 38 inches above the leading edge. The balusters should be less than 4-3/8 inches apart. I recommend a qualified contractor install as per standard building practices

Informational Link-

Stairways.org

(3) **Repair Replace-** Missing guardrail at for basement stairs. I recommend a qualified contractor installing guardrail per current standard practice.

Information links-

[Stairways.org](http://www.stairways.org)

<http://www.staircraft.com/codes.htm>

(4) Repair Replace/Comment- Stairwells in older homes may not meet modern building standards of practice. The steps rise and run are often different and may be steeper. Height and width clearances required of modern homes may not be present and railings are often not up to today's standards. Upgrading stairs in some older homes can be difficult or impractical in some cases. The client should be aware some limitations may be present and care should be taken when traversing non standard stairs.

Information links-

<http://www.co.stevens.wa.us/landservices/documents/MEANSOFEGRESSSTAIRWAYSANDGUARDS.pdf>

[Stairways.org](http://www.stairways.org)

<http://www.staircraft.com/codes.htm>

14.2 DOORS (REPRESENTATIVE NUMBER)

Comments: Inspected

14.3 WINDOWS (REPRESENTATIVE NUMBER)

Comments: Repair or Replace

Repair Replace- Windows in stair landing not safety glass. Standard practices state that any windows that are within a 60 inch width by 60 inch height area, from the first stair tread, should be made using tempered safety glass. The stairway landings that include a window that lacks a guard railing and/or safety glass is a safety concern for someone who falls down the stairs should they fall into and break the window glass, or worse, fall right through the window. I recommend a qualified contractor evaluate, repair and replace as necessary.



14.3 Photo 1

14.4 OUTLETS SWITCHES AND FIXTURES

Comments: Inspected

14.5 CLOSETS

Comments: Inspected

15. Bedrooms

Inspected (IN) Not Inspected (NI) Not Present (NP) Repair or Replace (RR) Maintenance/Monitor Item (M) Comment (CM)

Component Styles & Materials

Ceiling Materials:	Wall Material:	Floor Covering(s):
Plaster	Plaster	Hardwood T&G
Interior Doors:	Window Types:	
Wood	Casement Single-hung	

Items

15.0 WALL, CEILINGS, FLOORS

Comments: Inspected

15.1 DOORS (REPRESENTATIVE NUMBER)

Comments: Inspected

15.2 WINDOWS (REPRESENTATIVE NUMBER)

Comments: Repair or Replace

Repair Replace/Upgrade/Comment- In older homes, windows in bedrooms, or sometimes basements, as applicable, may not comply with all of today's strict safety guidelines that apply to window sizing and sill height for emergency and secondary egress.

Bedroom windows not large enough or too high from the floor for today's fire emergency escape & rescue standards (At least 1 window per bedroom should have a minimum opening that is 24" high or 20" wide with a net opening of at least 5.7 square feet, or 5.0 Square feet if on 1st floor level). This means if a window opening is 24 inches high, it must be 34 1/2 inches wide to meet the 5.7 sq ft/This means if a window opening is 24 inches high, it must be 30 inches wide to meet the 5 sq ft. The height should be not greater than 44 inches from the floor. Below grade windows should have a window well that is that 9 square feet. While they probably met standards when the house was constructed, you should be aware of this condition and may consider upgrading to meet today's safety requirements.

Note: Some municipalities will let you replace a window as long as the existing dimension are not reduced. Some municipalities require one window be brought up to current standards. I recommend contacting the local building department for guidance.

15.3 OUTLETS SWITCHES AND FIXTURES

Comments: Inspected

15.4 CLOSETS

Comments: Inspected

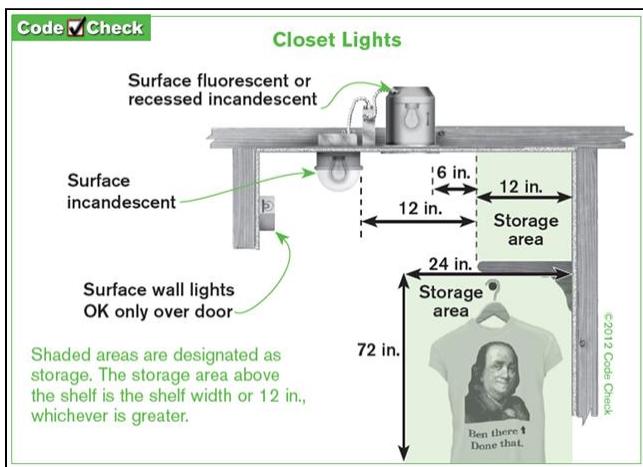
15.5 CLOSET LIGHTS

Comments: Repair or Replace

Repair Replace- Incandescent light fixtures in closet are too close to shelves and/or storage areas. This is a safety hazard due to the risk of fire. Stored items may come into contact with hot light fixtures, and glass enclosures or lamps may be broken. Current standard is to use; surface-mounted or recessed incandescent or

LED luminaires with completely enclosed light sources, surface-mounted or recessed fluorescent lights or surface-mounted fluorescent or LED lights fixtures identified as suitable for installation within the closet storage space. At a minimum the client should be aware of this condition. Clothing and stored items should always be kept away from closet light fixtures. I recommend a qualified person or electrician replace the light fixture with an approved fixture and bulb.

Standard building practices require incandescent closet light fixtures to have the following clearances: 12 inches from shelves, spaces above shelves and above the closet pole.



15.5 Photo 1

16. Attic / Roof Structure

Inspected (IN) Not Inspected (NI) Not Present (NP) Repair or Replace (RR) Maintenance/Monitor Item (M) Comment (CM)

Component Styles & Materials

Method used to observe attic:	Number of individual Attic Spaces:	Roof Structure:
Partially traversed	One	Rafters
Ceiling Structure:	Attic info:	Attic Insulation:
2X4	Attic access Upper Hallway	Batt Fiberglass Cellulose Wood Shavings
R- Value Approximate (if accessible/observable):		
Variable		

Items

16.0 ATTIC (miscellaneous information)

Comments: Upgrades/Comments

(1) **Comment**-Attic was partially traversed. When it is feasible to do so, the inspector will traverse the attic. If, in the inspector's opinion, doing so could be hazardous to the inspector or damage components in the home, the attic will not be traversed or fully traversed. At this home the attic does not have a floor over the ceiling structure and insulation obscures the ceiling structure. The attic is not safe to fully traverse because there is the risk that an inspector might step off a structural member and damage the ceiling below. The attic was viewed from the central or the center locations of the attic. Some locations are excluded from view. That is a necessary limitation to the inspection.

(2) **Comment** - In a WDO (Wood Destroying Insects and Organisms) inspection attics produce difficulties of performing an thorough inspection. Some of these difficulties are, unsafe travel, compression of insulation, obscured visibility, low or restrictive travel, damage to finish surface below etc... The inspector will make every effort to make some observations but this will be limited in scope.

16.1 ATTIC (Report leak signs, condensation, fireblocking etc..)

Comments: Inspected

16.2 VENTILATION, FANS AND THERMOSTATIC CONTROLS (ATTIC)

Comments: Repair or Replace

Repair Replace- The gable vent screen is damaged. This can allow entry by birds, rodents and pests. I recommend repairing the screen and evaluating for any issue from possible entry by pests.



16.2 Photo 1

16.3 INSULATION IN ATTIC

Comments: Repair or Replace, Maint/Monitor Item, Upgrades/Comments

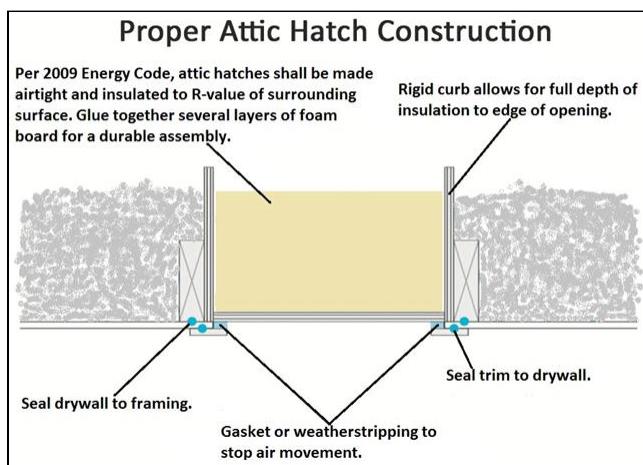
(1) **Repair-Replace/Comment-** The insulation level in the attic varies. Some of it/This is from compression from service activities in the attic. Some area need additional insulation. The client may want to evaluate having additional insulation installed to bring the overall level up to current standards.

Note: This should be done after all repairs in the attic has been performed.

Informational Link-

<http://www.energy.wsu.edu/Documents/BFG%20Chapter%204-Jan2011.pdf>

(2) **Maint.** The attic hatch insulation is not sufficient. There was no gasket at the hatch entrance. The curb (baffles for insulation) needs to be fixed. This can allow air bypass into the attic. I recommend properly attaching insulation and installing a gasket as necessary. I recommend installing a wood curb versus cardboard.



16.3 Photo 1

(3) **Repair Replace-** Exposed kraft backed insulation. All US manufacturers of paper and foil faced insulation prohibit such installation in their printed instructions and on the insulation's packaging materials. This vapor retarder is impregnated with an asphalt adhesive and is considered a flammable material. If no vapor barrier is required removal of the paper from the insulation is acceptable. Standard practice is to install drywall or other approved materials to cover this insulation. I recommend that a qualified contractor evaluate and repair as necessary.

Areas Observed- Shop, west crawlspace

Informational Link-

<http://www.insulate.org/tb6.pdf>

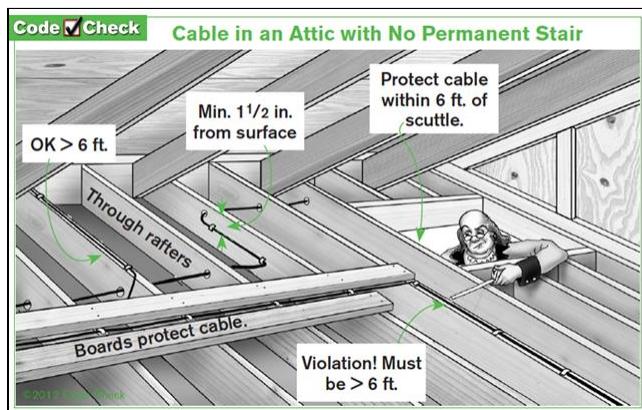
(4) **Comment-** Wood shavings as insulation in attic. It was common in older homes to have wood shavings in the attic and walls. Wood shavings has a R-value of about 2.5 "R" per inch. Some concerns with wood shavings are it is hard to treat against fire, vermin, and fungal growth.

(5) **Comment-** Batt insulation requires proper installation to achieve desired r-values. It is common with this type of insulation that loose fitting and poor seam coverage areas will lead to air bypass and/or voids that will lead to energy loss and possible moisture infiltration. I recommend a qualified insulation contractor evaluate further.

16.4 VISIBLE ELECTRIC WIRING IN ATTIC

Comments: Repair or Replace

Repair Replace- Electrical wires by the attic access in are right by hatch are not protected. Romex/NM must be protected by guard strips that are at least as high as the romex/NM wires. If the attic is not accessible by permanent stairs or drop down ladders wire protection is only required within 6' of attic scuttle hole/entrance. After 6' away from the entrance no protection strips are needed. I recommend a qualified person or electrician evaluate and install protection as needed.



16.4 Photo 1

16.5 EXHAUST DUCTING (bathroom fans, kitchen etc.)

Comments: Not Present

16.6 ROOF STRUCTURE

Comments: Repair or Replace

Repair Replace- Roof sheathing damage by over the north bedroom shop area. This could allow potential fall through on the roof. The sheathing is soft and sounds of cracking was observed when on the roof. I recommend a qualified contractor evaluate and repair as necessary.

17. Structural Components/Crawlspace(s)/Basement

Inspected (IN) Not Inspected (NI) Not Present (NP) Repair or Replace (RR) Maintenance/Monitor Item (M) Comment (CM)

Component Styles & Materials

Foundation: Poured concrete	Foundation Style: Crawlspace Basement	Method used to observe Crawlspace: Crawled
Crawlspace Access: Exterior of home Shop	Number of Crawlspaces: Two	Floor Structure: Wood joists
Wall Structure: 2 X 4 Wood	Columns - Piers- Stem walls: Wood Stem/Cripple Walls Post and Beam	Floor System Insulation: Batts Fiberglass
<i>Items</i>		

17.0 GENERAL/MISC. INFORMATION/ITEMS

Comments: Upgrades/Comments

(1) **Comment**- Crawlspace inspections present unique challenges during the inspection process. Due to insulation, plumbing and ducting many areas may not be fully visible or obstructed. Due to the tight conditions this will impede the inspectors ability to fully and thoroughly evaluate all areas. If, in the inspector's opinion, doing so could be hazardous to the inspector or damage components in the home, the crawlspace may not be fully traversed. When work is performed there may other hidden issues that may not have been visible during the inspection process. Due diligence should be used in the evaluation of the crawlspace and its associated systems.

(2) **Comment** -The foundation consisted of a combination of crawlspace(s), basement and slab.

17.1 FOUNDATIONS

Comments: Maint/Monitor Item, Upgrades/Comments

(1) **Repair Replace/Monitor/ Comments**- The foundation has several cracks at various locations. It is normal to have some cracking from settlement and/or shrinkage from concrete curing process. It is not possible to determine if structural movement is occurring and has subsided by one inspection. I recommend the client monitor cracks in the foundation to see if movement is active and for any water infiltration in these areas. If concerned or there is continued movement is confirmed then a engineer or qualified contractor may need to be consulted.

Information on foundation monitoring and movement-

[http://www.concreteconstruction.net/Images/
Evaluating%20Cracks%20in%20Concrete%20Walls_tcm45-342514.pdf](http://www.concreteconstruction.net/Images/Evaluating%20Cracks%20in%20Concrete%20Walls_tcm45-342514.pdf)

http://www.inspectapedia.com/structure/Foundation_Crack_Monitors.htm

<http://www.structuralworkshop.com/reference-desk>

(2) **Maint-** A penetration/gap on the foundation wall of the crawlspace that could allow pest entry. The penetrations should be properly sealed to prevent rodent and pest entry. I recommend sealing as necessary.



17.1 Photo 1

(3) **Monitor/Comment-** Spalling on concrete surface Spalling on concrete surface of foundation. This can be caused by several things from poor mixture of concrete, poor condition during a pour and other conditions. This also can be caused by moisture working through the concrete. If spalling is severe enough it could effect the structural integrity of the concrete. Efflorescence (white powdery material on concrete) and spalling can often be prevented in concrete by stopping moisture migration. This can be accomplished with a capillary break or liquid applied elastomeric waterproofing. At a minimum the client should monitor for any additional deterioration. If the the condition worsens I recommend a qualified contractor evaluate and repair as necessary.



17.1 Photo 2



17.1 Photo 3



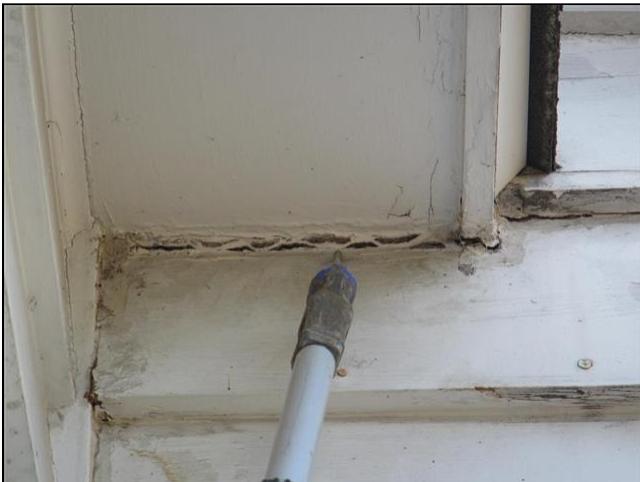
17.1 Photo 4

(4) **Comment-** Some settlement has occurred on the home at the back (old porch area). Uneven floors and some minor separation are all indication of movement. This can be caused by several conditions or combination of conditions that include; Improper footings, Weak Bearing Soils, Poor Compaction, Changes in Moisture Content, Soil Consolidation and/or Maturing Trees and Vegetation. In older home this may have subsided and the home is now settled. It is impossible to determine this from one inspection. I recommend at a minimum the client monitor this condition. The client may want to contact a structural engineer for further evaluation.

Informational Links-

<http://www.inspectapedia.com/structure/FoundationCracks.htm>

<http://www.foundationsupportworks.com/foundation-repair/foundation-settlement/what-causes-foundation-settlement.html>



17.1 Photo 5 --minor separation

(5) **Comment-** White efflorescence (powder substance) on concrete wall indicates moisture is in contact with the cement. This does not necessarily indicate that intrusion will occur. I recommend checking the gutters and the downspout drain lines for proper operation and grading around the home. Efflorescence is found on many homes without water intrusion occurring inside the home. But, it should alert you to the possibility that future steps may be needed.

Informational Link- [Building science](#)

17.2 FOOTINGS

Comments: Upgrades/Comments

Comment- Footings were not visible due to construction.

17.3 FOUNDATION ANCHOR BOLTS/ANCHORING (representitive number)

Comments: Upgrades/Comments

Comment-No anchor bolts were installed to fasten the home structure to the foundation. Older homes are inspected within the context of the time period in which they were built, taking into account the generally-accepted building practices of that time period. Homes are not required to be constantly upgraded to comply with newly-enacted building codes but are only required to comply with building codes or generally-accepted standards which existed at the time of original construction. Installation of anchor bolts may not have been required when this home was built.

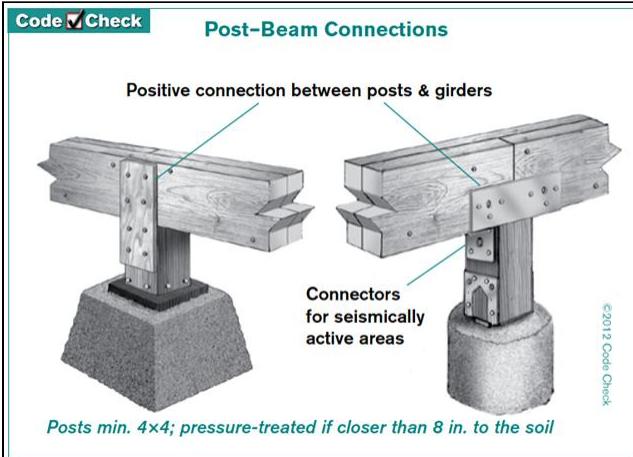
17.4 WALLS (including structural)

Comments: Inspected

17.5 COLUMNS, PIERS, BARING WALLS

Comments: Repair or Replace

(1) **Repair/Replace-**There is no positive connections between the support posts to the beams above. Installing metal ties, bracing with lumber and/or plywood gussets as per standard building practices is recommended. I recommend a qualified person or contractor should evaluate and make repairs as necessary.



17.5 Photo 1



17.5 Photo 2

(2) Repair Replace- Cripple wall under bedroom is out of plumb. I recommend a qualified person or contractor evaluate and repair as necessary.



17.5 Photo 3

17.6 FLOORS AND BEAMS (including structural)

Comments: Upgrades/Comments

Comment- The sub floor has water stains at various plumbing drops through the floor. This is not unusual in older homes as they age. Many of the associated leaks may have been corrected. Periodic monitoring should be performed on all plumbing lines for evidence of leaks as a standard practice. Slow leaks can cause a great deal of damage if they go undetected over long periods of time.

17.7 CEILINGS (Structural)

Comments: Inspected

17.8 BASEMENTS AND CRAWLSPACES (Report signs of abnormal or harmful water, debris or other conditions.)

Comments: Inspected

17.9 INSULATION UNDER FLOOR SYSTEM (crawlspaces)

Comments: Repair or Replace

Repair Replace- No insulation in floor under lower bedroom. This can lead to heat loss. I recommend a qualified person or insulation contractor install insulation in accordance of standard building practices.

Informational Links-

[Compliance- Wash. State Energy Code](#)

[Insulation- Wash. St. Energy Code](#)

[Foundations- Wash. St. Energy Code](#)

17.10 VAPOR RETARDERS (ABOVE, ON GROUND IN CRAWLSPACE OR BASEMENT)

Comments: Repair or Replace

Repair Replace- No vapor barrier present in west crawlspace. The soil below a vapor barrier should be smooth and free of sharp objects. The seems should overlap a minimum of 12 inches. The vapor barrier should lap up onto the foundation side walls. This is a condition that is conducive to wood destroying insects and organisms. I recommend a qualified contractor install as needed.

Informational Link-

[Foundations- Wash. St. Energy Code](#)



17.10 Photo 1

17.11 VENTILATION OF FOUNDATION AREA (crawlspace or basement)

Comments: Inspected

17.12 WIRING/PLUMBING/DUCTING/OTHER (visible in crawlspace)

Comments: Inspected

Executive Summary

Report ID 12022015SI



NCW Home Inspections, LLC

1920 Hideaway PL
Wenatchee Wa 98801
509-670-9572

Customer

Jane and John Doe

Address

1234 Inspection St
Wenatchee WA 98801

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 warrants 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 or efficiency 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. WDO

2.3 DAMAGE (Visible evidence of damage from wood destroying insects with recommendations)

Repair or Replace

Repair Replace- Subterranean termite activity in the form of mud tubes, scaling unique to subterranean termites, and dead swarmers in cobwebs on or in the structure was found approximately in the south side of the north crawlspace and on the north side of the basement. Evidence of old mud tubes was present on the east wall of the west crawlspace. Correct any conditions that conducive to damage from wood destroying insects.

I recommend treatment for the control of subterranean termites with and it EPA approved material. Treatment is to be performed by a licensed pest control operator (PCO). The treatment should conform to current regulatory standards. The PCO should provide a one year written warranty against reinvestigation or per industry standards

2. WDO

I recommend all damaged/infected wood to be removed and replaced by a qualified contractor.

4. Roofing / Chimneys

4.2 ROOF PENETRATIONS (vents and other)

Repair or Replace

Repair Replace- Plumbing vent boots where not properly installed. This can lead to leakage. The boot should be replaced and properly installed. I recommend a qualified roofing contractor evaluate, repair and replace as necessary.

4.3 CHIMNEYS

Repair or Replace

(1) **Repair Replace-** Cracking or deterioration of mortar on chimney. The crown is most likely deteriorated also though not visible. The mortar between the bricks/stones on your chimney can begin to crack and crumble over time because of the constant exposure to the outside elements. Damaged mortar can open areas between the bricks and allow moisture to invade the chimney. It is recommended to repair the joints between the bricks/stone and replace it with new mortar or masonry repair caulk in a procedure known as re-pointing. I recommend a qualified mason evaluate and repair as necessary.

Note: there was damage in the interior area as well by the fireplace.

Informational Links-

<http://www.quikrete.com/PDFs/Projects/TuckPointingMortarJoints.pdf>

<http://www.quikrete.com/PDFs/Projects/RepairingChimneys.pdf>

(2) **Repair Replace-** Chimneys/Chase should have a cricket if the chimney is greater than 30 inches. The cricket and the chimney should be flashed and counter-flashed in the same manner as normal roof-chimney intersections. Crickets help prevent debris collection and divert water around the chimney/chase. I recommend a qualified roofer evaluate and repair as necessary.

(3) **Repair Replace-** The flashing around the chimney was not performed in normal roofing practices and is very prone to leaking. Light was visible in the attic at this location. I recommend a qualified roofing contractor evaluate and repair as necessary.

6. Electrical System

6.0 SERVICE ENTRANCE CONDUCTORS

Repair or Replace

(1) **Repair Replace-** Service entry conductor have improper clearance to flat roof. Overhead service conductors should maintain a minimum clearance of 8 ft above the surface of a roof or 10 feet if the roof is to be used for a deck. I recommend contacting the local PUD and/or qualified electrician to evaluate and correct as necessary.

6.1 METER, SERVICES, MAIN OVERCURRENT DEVICE, MAIN, DISTRIBUTION PANELS AND DISCONNECTS

Repair or Replace, Upgrades/Comments

(1) **Repair Replace-** Double lugging (double tapping) on the terminal to the furnace disconnect switch. Missing restraint on conductors to lights. Double-lug means there are two wires under a single screw. The lug has to be approved for this application. I recommend a qualified electrician evaluate and repair if necessary.

6.4 BRANCH WIRING AND CONDUITS

Repair or Replace, Upgrades/Comments

6. Electrical System

(1) **Repair Replace**-Wire splices exposed and not contained in a covered junction box. Electrical connections made without junction boxes, made with junction boxes not properly secured to framing members, wires not secured to the junction box or withing an appropriate distance, or open knock outs in junction box. All knock out in junction boxes need to be filled.

Where electrical connections are made with no junction boxes, the danger of electrical shock and fire is increased. With the exception of the early knob-and-tube wiring, all connections should be made in certified metal or plastic junction boxes. Junction boxes not only protect the connection itself, but secure the wires coming into the box and hold them in place.

I recommend a qualified electrician should evaluate and make repairs as necessary.

Areas observed- Wall behind main bathroom tub

(2) **Repair Replace/Comment**- This property has "knob and tube" wiring, which was commonly installed to the 1930's and possibly to 1950. It is ungrounded system and over time, the wire's insulation may become brittle and fall apart or wear thin. This wiring could be overloaded and/or have incorrect tapping of new wiring into it. It is often recommended that these circuits should not have more than a 15 amp breaker/fuse protecting them.

Some energized knob and tube wiring was found during the inspection. It is not within the scope of this inspection to determine what percentage of this property's wiring is of the knob and tube type, or to determine what percentage of the knob and tube wiring is energized vs. abandoned.

Replacement may be warranted over time, use of AFCI (see electrical AFCI comments) breakers is suggested on these circuits till replacement can be achieved.

A qualified electrician should evaluate this wiring system and make repairs or replace wiring as necessary

Note: Some insurance companies may be unwilling to offer homeowner's insurance or higher rates for properties with knob and tube wiring. I recommend that the client(s) consult with their insurance carrier regarding this.

Informational Link-

http://www.creia.org/assets/docs/knob_tube_locked.pdf

(3) **Repair Replace**- Wire cable sheathing stripped to far back leaving conductors exposed outside of box and not protected from damage at clamp. Standard practice is to have the cable sheathing should extend a minimum of about 1/4 in. inside the box. I recommend a qualified electrician evaluate an repair as necessary.

6.5 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)

Repair or Replace, Upgrades/Comments

(1) **Repair Replace/Upgrade/Comment**- Kitchen has no circuits supplying power to the countertops. Common modern practice is that a minimum of two circuits should be provided to the kitchen counter areas for small appliances (SABC- since the early 1960's) and using what is referred to as the 2 and 4 rule for receptacle placement. Standard practice is that these circuits that service the Kitchen counter tops should not serve any other receptacles or outlets that are not located in the kitchen/cooking area or other appliances (other than the refrigerator). The client should be aware of this. I recommend that a qualified electrician evaluate, repair and replace as necessary if concerned.

(2) **Repair Replace**- Several "three-prong" outlets are not grounded. It is common in older home that these have been replaced with improper outlets. These need to either be replaced with a two prong outlet or a GFCI outlet marked "no ground". I recommend a qualified electrical contractor repair and replace as necessary. Further evaluation of any receptacles that was obstructed by belongings and storage should be performed.

6. Electrical System

Note: Current standards are when repairs are performed to these receptacles AFCI upgrade may be required.

Areas where they are located- Old garage/shop, front room, kitchen (refrigerator and over range), main floor bedroom,

6.6 OPERATION OF GFCI AND AFCI (GROUND FAULT CIRCUIT/ARC FAULT CIRCUIT INTERRUPTERS)

Repair or Replace

(1) **Repair Replace/Upgrade-** GFCI (ground fault circuit interrupt) are not installed in several areas as required per current standards (e.g. bathrooms, garages etc...). There are some areas with the age they were not required but I highly recommend their installation. These devices protect you from shock due to grounding issues. State law mandates that an inspector must recommend upgrading GFCI protection to current standards. The areas of protection have recently expanded to include areas not previously required, such as laundry, dishwasher, 6 feet from all sinks and all fixed electrical equipment with exposed grounded metal parts within an enclosed shower area or within five feet of the top inside edge of a bathtub must have ground fault circuit interrupter protection. etc...

I recommend a qualified electrical contractor evaluate and install GFCI protection where appropriate.

Areas Observed: some shop receptacles, front exterior receptacle, laundry area, main bathroom receptacle and grounded metal within 5 feet of tub, basement receptacles

Below is a list, not necessarily conclusive as to all GFCI protection requirements:

All outdoor receptacles, except those designated for ice melting equipment (must be dedicated circuit), Receptacles in garages and outbuildings, All receptacles (120V), no exceptions, installed in bathrooms and laundry, All receptacles installed to service kitchen countertop areas (Including islands, desk etc..), Circuits (Outlets) to dishwashers, All receptacles within 6 ft of the outside edge of any sink (kitchen sink included), Receptacles located in crawl spaces, unfinished basements, shops or mechanical rooms, Receptacles/Outlets supplying power to jetted tub motors, Receptacle for pool circulation and sanitation equipment. Receptacles and outlets serving pool equipment, motorized covers and pumps.

Exterior GFCI's need to be weather resistant style. All GFCI's need to be readily accessible. Shelving, appliances, cabinets and storage should not be placed in front of GFCI receptacles.

Link on GFCI and how they work-

<http://www.cpsc.gov//PageFiles/118853/099.pdf>

(3) **Comment-** Washington State has adopted 2014 NEC as of July 2014, there is provisions about AFCI and GFCI requirements for branch circuits that will effect all homeowners.

Any 15- and 20-ampere branch circuits; if a receptacle(s) is replaced or where branch-circuit wiring is modified, replaced, or extended that affected circuit may have to be AFCI protected if required by location. AFCI protection is not be required where the extension of the existing conductors is not more than 6 ft and does not include any additional outlets or devices. If receptacles are to be replaced in areas requiring AFCI protection you are required to upgrade to AFCI protection. I recommend if any alterations of existing circuits or receptacles are to be replaced that you consult a qualified electrician.

Basically per the 2014 NEC AFCIs are required in all homes (dwelling units) for all 15 and 20 amp 120v circuits except those receptacles and circuits in bathrooms and attached garages.

Per the National Fire Protection Agency (NFPA)- Older homes are statistically more vulnerable to electrical fires. Extra protection for older homes is provided by the gradual replacement, over time, of non-AFCI-protected receptacles with new AFCI-protected ones.

6. Electrical System

Informational Link-

<http://www.ncwhomeinspections.com/New+AFCI+rules+for+2014>

6.7 SMOKE ALARMS (OR DETECTORS)

Repair or Replace

Repair Replace/Comment- Due to the age of home smoke alarms (or detectors) not in all locations per current standards. Some smoke alarms are missing or disabled. I recommend installing smoke alarms in all location per current standards and the testing of all smoke alarms present. It is recommended that smoke alarms be checked monthly and batteries changed yearly.

Smoke alarms should not remain in service longer than **10 years** from the date of manufacture and should be replaced thereafter. Vacuum the dust off smoke alarms every six months.

There are two main types of smoke alarms-

Ionization smoke detection: is generally more responsive to flaming fires. (Most common type in homes and more prone to nuisance tripping)

Photoelectric smoke detection: is generally more responsive to fires that begin with a long period of smoldering (smoke).

Note: I recommend installing photoelectric smoke alarms due to the fact that most fatalities are attributed to smoke inhalation. If your home is equipped with ionization detectors at a minimum you should supplement them with photoelectric type of detector.

Informational Links-

<http://www.ncwhomeinspections.com/Smoke+Alarms+Usage+and+Placement>

There is now available wireless interconnected alarms available for use in older homes where wiring is not present.

Informational Links-

<http://www.ncwhomeinspections.com/Smoke+Alarms+Usage+and+Placement>

State recommendations for locations. <http://apps.leg.wa.gov/wac/default.aspx?cite=170-296-0580>

NFPA Information- [Link](#)

My building permit tip sheet- http://www.mybuildingpermit.com/Constuction%20Tip%20Sheets/2012%20Tip%20Sheets/MBP%20Tip%20Sheet%2004_2012.pdf

7. Plumbing System

7.0 PLUMBING WATER SUPPLY AND DISTRIBUTION SYSTEMS AND FIXTURES

Repair or Replace, Upgrades/Comments

(1) **Repair Replace-** Several shut off valves are leaking. This can lead to damage of materials and is a conducive condition for wood destroying insects and organisms. I recommend that a qualified plumber evaluate and repair as necessary.

7. Plumbing System

Areas Observed- By water heater, by main shut off

7.1 PLUMBING DRAIN, WASTE AND VENT SYSTEMS

Repair or Replace, Upgrades/Comments

(2) **Comment-** In older homes main drains (such as cast iron, Orangeburg (bituminous fiber), clay etc...) may be more problematic as they age. This is especially true were tree roots could effect the drain line. It is recommended that you ask the sellers if they have ever experienced any drainage problems, or even better you may wish to have the main waste line video inspected.

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

Repair or Replace, Upgrades/Comments

(1) **Repair Replace-** Improper vent connector pitch. This can lead to improper draft. A water heater vent connector, often called a 'flue', is required to pitch upwards towards the chimney or vent at a minimum slope of one quarter inch per foot. The steeper the pitch, the better the draft. I recommend a qualified plumber or contractor evaluate, repair and replace as necessary.

8. Heating / Air Conditioning

8.6 SOLID FUEL HEATING DEVICES (Fireplaces, Woodstove)

Repair or Replace, Upgrades/Comments

(1) **Repair Replace-** Fireplace fireproof bricks lining the fireplace are cracked and/or the mortar is failing.

These are specialized devices so recommend contracting with a chimney sweep to repair/further evaluate the wood burning device and associated chimney and components. The National Fire Protection Association has stated that an in-depth Level 2 chimney inspection should be part of every sale or transfer of property with a wood burning device. Such an inspection may reveal defects that are not apparent to the home inspector who is a generalist.

For additional information, and to evaluate if you wish to have such an inspection, please visit: <http://www.csia.org/HomeownerResources/ChimneySafetyHotTopics/ChimneyInspections/tid/116/Default.aspx>

8.7 COOLING AND AIR HANDLER EQUIPMENT

Upgrades/Comments

(4) **Comment-** The condenser outside (AC/Heat Pump unit) is older and may last a few years more, but maybe not. These units can fail shortly after a home inspection during the seasonal change from mild to hot weather. These systems typically have a life span of 15 to 20 years. Heat pumps are generally on the lower end of the life span. I cannot determine how long your AC/Heat Pump will last before a replacement is necessary. Thorough maintenance should be performed. The client should account for replacement cost at some point.

11. Main Bathroom

11.6 PLUMBING WATER SUPPLY AND DISTRIBUTION SYSTEMS AND FIXTURES

Repair or Replace, Maint/Monitor Item

(1) **Repair Replace-** Toilet was loose and no caulking at the base of the toilet. When it is loose, it is likely that the wax ring is damaged. When toilet repair is being done, and toilet has been lifted, if any damage is seen below, repair at that time. I recommend a qualified person or contractor evaluate repair/replace as necessary.

11.7 OUTLETS SWITCHES AND FIXTURES

Repair or Replace

Repair Replace/Comment- Receptacles not properly placed in bathroom. Receptacles on medicine cabinet is not accessible. Bathroom receptacles should be installed within 3 ft from the outside edge of each bathroom basin. The

11. Main Bathroom

receptacle should be located on a wall or partition adjacent to the basin counter surface, or on the side or face of the basin cabinet not more than 12 in. below the countertop.

12. 1/2 Bathroom

12.6 PLUMBING WATER SUPPLY AND DISTRIBUTION SYSTEMS AND FIXTURES

Repair or Replace

Repair Replace- Toilet was loose and no caulking at the base of the toilet. When it is loose, it is likely that the wax ring is damaged. When toilet repair is being done, and toilet has been lifted, if any damage is seen below, repair at that time. I recommend a qualified person or contractor evaluate repair/replace as necessary.

Note: there was staining by the toilet and signs of past leaks in bathroom below.

16. Attic / Roof Structure

16.6 ROOF STRUCTURE

Repair or Replace

Repair Replace- Roof sheathing damage by over the north bedroom shop area. This could allow potential fall through on the roof. The sheathing is soft and sounds of cracking was observed when on the roof. I recommend a qualified contractor evaluate and repair as necessary.

17. Structural Components/Crawlspac(s)/Basement

17.10 VAPOR RETARDERS (ABOVE, ON GROUND IN CRAWLSPACE OR BASEMENT)

Repair or Replace

Repair Replace- No vapor barrier present in west crawlspace. The soil below a vapor barrier should be smooth and free of sharp objects. The seems should overlap a minimum of 12 inches. The vapor barrier should lap up onto the foundation side walls. This is a condition that is conducive to wood destroying insects and organisms. I recommend a qualified contractor install as needed.

Informational Link-

[Foundations- Wash. St. Energy Code](#)

Home inspectors are not required to report on the following: Life expectancy of any component or system; The causes of the need for a repair; The methods, materials, and costs of corrections; The suitability of the property for any specialized use; Compliance or non-compliance with codes, ordinances, statutes, regulatory requirements or restrictions; The market value of the property or its marketability; The advisability or inadvisability of purchase of the property; Any component or system that was not observed; The presence or absence of pests such as wood damaging organisms, rodents, or insects; or Cosmetic items, underground items, or items not permanently installed. Home inspectors are not required to: Offer warranties or guarantees of any kind; Calculate the strength, adequacy, or efficiency of any system or component; Enter any area or perform any procedure that may damage the property or its components or be dangerous to the home inspector or other persons; Operate any system or component that is shut down or otherwise inoperable; Operate any system or component that does not respond to normal operating controls; Disturb insulation, move personal items, panels, furniture, equipment, plant life, soil, snow, ice, or debris that obstructs access or visibility; Determine the presence or absence of any suspected adverse environmental condition or hazardous substance, including but not limited to mold, toxins, carcinogens, noise, contaminants in the building or in soil, water, and air; Determine the effectiveness of any system installed to control or remove suspected hazardous substances; Predict future condition, including but not limited to failure of components; Since this report is provided for the specific benefit of the customer(s), secondary readers of this information should hire a licensed inspector to perform an inspection to meet their specific needs and to obtain current information concerning this property.

Prepared Using HomeGauge <http://www.HomeGauge.com> : Licensed To Don Hester

WDO (Wood Destroying Insects/Organisms)

Report ID 12022015SI



NCW Home Inspections, LLC

1920 Hideaway PL
Wenatchee Wa 98801
509-670-9572

Customer

Jane and John Doe

Address

1234 Inspection St
Wenatchee WA 98801

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 warrants 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 or efficiency 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. WDO

2.3 DAMAGE (Visible evidence of damage from wood destroying insects with recommendations)

Repair or Replace

Repair Replace- Subterranean termite activity in the form of mud tubes, scaling unique to subterranean termites, and dead swarmers in cobwebs on or in the structure was found approximately in the south side of the north crawlspace and on the north side of the basement. Evidence of old mud tubes was present on the east wall of the west crawlspace. Correct any conditions that conducive to damage from wood destroying insects.

I recommend treatment for the control of subterranean termites with an EPA approved material. Treatment is to be performed by a licensed pest control operator (PCO). The treatment should conform to current regulatory standards. The PCO should provide a one year written warranty against reinvestigation or per industry standards

2. WDO

I recommend all damaged/infected wood to be removed and replaced by a qualified contractor.

3. Exterior

3.2 WALL CLADDING, FLASHING AND TRIM

Repair or Replace, Maint/Monitor Item

(3) **Repair Replace/Maint-** Earth (rock, soil, landscape materials) is against, or too close to, siding and trim in a few locations, mainly east side of home. This has been defined by the State of Washington as a conducive condition since soil against wood or any structure, except for the concrete foundation, is likely to lead to wood decay. I recommend removing soil from contact with structure and grading it at a slope ratio of 6" in 10 feet out from the building or to a swale, so water is directed away from the structure. It is not always attainable to achieve 6" of clearance from earth that is recommended for wood siding/trim and 4" of clearance is recommended for cement-based or masonry materials. When work is done if any decay is discovered then repair the damage at that time. I recommend a qualified person or contractor evaluate and repair as necessary.

4. Roofing / Chimneys

4.0 ROOF COVERINGS AND DECKING

Repair or Replace, Upgrades/Comments

(3) **Maint-** Trees are overhanging roof and are within 10 feet of roof vertically. This is a conducive condition for wood destroying insects and organisms since organic debris such as leaves or needles are more likely to accumulate on the roof surface. Accumulated debris may cause water to enter gaps in the roof surface and leak into attic and/or interior spaces. Trees should be pruned so they are at least 10 feet above roof, or don't overhang the roof

4.5 ROOF DRAINAGE SYSTEMS (gutters and downspouts)

Maint/Monitor Item

Maint.- The gutters are full of debris in areas and needs to be cleaned. The debris in gutters can also conceal deterioration or leaks that are not visible until cleaned, and I am unable to determine if such conditions exist. This is a condition conducive to wood destroying insects and organisms. I recommend cleaning the gutters and evaluate for any deterioration.

Information on gutters-

<http://www.gutterworks.com/Gutterchecklist.htm>

5. Garage/Carport

5.0 CARPORT

Maint/Monitor Item

Monitor- Carport post are in contact with rock/soil. Wood (even treated) in contact with any earth material (rock, soil, bark) is a condition that is conducive to wood destroying insects and organisms. I recommend monitoring of post. If any deterioration is observed the posts will need to be trimmed and have a concrete pier installed to correct this condition.

7. Plumbing System

7.0 PLUMBING WATER SUPPLY AND DISTRIBUTION SYSTEMS AND FIXTURES

Repair or Replace, Upgrades/Comments

(1) **Repair Replace-** Several shut off valves are leaking. This can lead to damage of materials and is a conducive condition for wood destroying insects and organisms. I recommend that a qualified plumber evaluate and repair as necessary.

Areas Observed- By water heater, by main shut off

10. Laundry

10.2 SINKS

Repair or Replace

(1) **Repair Replace-** Cement laundry tub is cracked and leaking. This can lead to damage to materials around the sink. This is a conducive condition for wood destroying insects and organisms. I recommend a qualified plumber evaluate, repair and replace as necessary.

(2) **Repair Replace-** The sink faucet is leaking behind the laundry tub. This may need an adjustment or replacement of the seals or replacement of the faucet. I recommend a qualified person or plumber evaluate and repair as necessary.

17. Structural Components/Crawlspace(s)/Basement

17.10 VAPOR RETARDERS (ABOVE, ON GROUND IN CRAWLSPACE OR BASEMENT)

Repair or Replace

Repair Replace- No vapor barrier present in west crawlspace. The soil below a vapor barrier should be smooth and free of sharp objects. The seems should overlap a minimum of 12 inches. The vapor barrier should lap up onto the foundation side walls. This is a condition that is conducive to wood destroying insects and organisms. I recommend a qualified contractor install as needed.

Informational Link-

[Foundations- Wash. St. Energy Code](#)

Electrical

Report ID 12022015SI



NCW Home Inspections, LLC

**1920 Hideaway PL
Wenatchee Wa 98801
509-670-9572**

Customer

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Address

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6. Electrical System

6.0 SERVICE ENTRANCE CONDUCTORS

Repair or Replace

(1) **Repair Replace**- Service entry conductor have improper clearance to flat roof. Overhead service conductors should maintain a minimum clearance of 8 ft above the surface of a roof or 10 feet if the roof is to be used for a deck. I recommend contacting the local PUD and/or qualified electrician to evaluate and correct as necessary.

(2) **Repair Replace**- The service drop wires were in contact with trees or vegetation. The limbs should pruned to prevent straining or abrading the service conductors. I recommend a qualified arborist/tree trimming contractor trim trees as necessary. I recommend contacting the power company to disconnect the service prior to work performed.

6.1 METER, SERVICES, MAIN OVERCURRENT DEVICE, MAIN, DISTRIBUTION PANELS AND DISCONNECTS

Repair or Replace, Upgrades/Comments

6. Electrical System

- (1) **Repair Replace-** Double lugging (double tapping) on the terminal to the furnace disconnect switch. Missing restraint on conductors to lights. Double-lug means there are two wires under a single screw. The lug has to be approved for this application. I recommend a qualified electrician evaluate and repair if necessary.
- (2) **Repair Replace-** Missing restraints/bushings/cable connector in panel. Too many conductors in one knock out. This can lead to wear of wire. This is a condition for possible shock and /or fire. I recommend a qualified electrician evaluate and repair as necessary.
- (3) **Comment-**The electrical panel legend is not filled out properly and may not be accurate. This can limit the evaluation of the panel by the inspector. This is also important in an emergency to know what circuit breaker to turn off. I recommend properly labeling your panel.

Information on mapping your circuits

<http://factoidz.com/a-guide-to-mapping-your-homes-electrical-system-how-to-create-an-accurate-legend-for-your-cb-panel/>

<http://www.highelectricbill.com/labeling.htm>

http://www.inspectapedia.com/electric/Electrical_Circuit_ID.htm

6.2 GROUNDING AND BONDING EQUIPMENT

Repair or Replace, Maint/Monitor Item

- (1) **Repair Replace/Upgrade-** Improper grounding of outlets to plumbing. In older homes this may have been an acceptable practice. With homes usually having various areas of upgrade and repair the grounding paths may have been disrupted and/or the integrity of the bonding path may not adequate. Ground wires should be run back to the panel, to a grounded branch circuit or other currently approved means. I recommend a qualified electrician evaluate and repair as necessary.
- (2) **Repair Replace-** There is a ground wire to the main metal plumbing (but it is not within) 5 feet from where plumbing line enters home. The other water pipe (if it is 10 feet or longer in the soil) should also be part of the grounding electrode system. I recommend an electrical contractor install a ground wire and clamp on metal plumbing line within five feet from where plumbing line enters home, preferably right where it enters the foundation. Proper bonding should be performed on water systems that are all metal.

Note: Bonding must also occur across any dielectric union, pressure reducing valve and any valve or appurtenance that can be removed.

Information on grounding and bonding of water pipes

http://waterheatertimer.org/water_pipe_grounding.pdf

- (3) **Repair Replace-** Improper bonding jumper. Bonding jumpers should be of a an approved conductor (typically copper wire) or other listed jumpers. This is to ensure proper bonding of systems that could be energized. I recommend a qualified electrician evaluate repair and replace as necessary.

- (4) **Maint./Comment-** Ground rod (electrode) not fully driven into earth or improperly installed. The ground electrodes should be installed so that at least 8 feet of length is in contact with the soil. They should be driven to a depth of not less than 8 feet except where rock bottom is encountered and can be driven at an angle not to exceed 45 degrees from the vertical or buried in a trench that is at least 30 inches deep. The upper end of the electrodes should be flush with or below ground level except where the above ground end and the grounding electrode conductor attachment are protected against physical damage. I recommend a qualified electrician evaluate and repair as necessary.

- (5) **Repair Replace/Upgrade-**Proper grounding of communication circuits, CATV cables, TV and satellite masts, etc. are essential in preventing fires and electric shock from dangerous potential differences between the electrical systems. Grounding of all communications systems should be to the homes main grounding system. The best way

6. Electrical System

is to bond them to a common point at the building grounding electrode system. I recommend a qualified contractor or electrician evaluate and repair as necessary.

6.4 BRANCH WIRING AND CONDUITS

Repair or Replace, Upgrades/Comments

(1) **Repair Replace**-Wire splices exposed and not contained in a covered junction box. Electrical connections made without junction boxes, made with junction boxes not properly secured to framing members, wires not secured to the junction box or withing an appropriate distance, or open knock outs in junction box. All knock out in junction boxes need to be filled.

Where electrical connections are made with no junction boxes, the danger of electrical shock and fire is increased. With the exception of the early knob-and-tube wiring, all connections should be made in certified metal or plastic junction boxes. Junction boxes not only protect the connection itself, but secure the wires coming into the box and hold them in place.

I recommend a qualified electrician should evaluate and make repairs as necessary.

Areas observed- Wall behind main bathroom tub

(2) **Repair Replace/Comment**- This property has "knob and tube" wiring, which was commonly installed to the 1930's and possibly to 1950. It is ungrounded system and over time, the wire's insulation may become brittle and fall apart or wear thin. This wiring could be overloaded and/or have incorrect tapping of new wiring into it. It is often recommended that these circuits should not have more than a 15 amp breaker/fuse protecting them.

Some energized knob and tube wiring was found during the inspection. It is not within the scope of this inspection to determine what percentage of this property's wiring is of the knob and tube type, or to determine what percentage of the knob and tube wiring is energized vs. abandoned.

Replacement may be warranted over time, use of AFCI (see electrical AFCI comments) breakers is suggested on these circuits till replacement can be achieved.

A qualified electrician should evaluate this wiring system and make repairs or replace wiring as necessary

Note: Some insurance companies may be unwilling to offer homeowner's insurance or higher rates for properties with knob and tube wiring. I recommend that the client(s) consult with their insurance carrier regarding this.

Informational Link-

http://www.creia.org/assets/docs/knob_tube_locked.pdf

(3) **Repair Replace**- Wire cable sheathing stripped to far back leaving conductors exposed outside of box and not protected from damage at clamp. Standard practice is to have the cable sheathing should extend a minimum of about 1/4 in. inside the box. I recommend a qualified electrician evaluate an repair as necessary.

(4) **Repair Replace**- Potential mechanical damage of exposed wiring. Where wiring is run on the surface of walls, baseboards or other interior finishes it should be protected from mechanical damage with a rigid covering (conduit, framing etc...). Alternatively, flexible metal or rigid metal cables can be used. Several junction boxes are missing proper wire restraints. I recommend a qualified electrician evaluate wiring and repair as necessary.

Areas Observed- basement, kitchen above range area and in cabinet, main bathroom south wall, hall storage cabinet upstairs

(5) **Repair Replace/Comment**- Use of NM wiring (Romex) on the exterior of home. Standard practices is that NM wiring should not be used on the exterior of the home (damp or wet locations). Some jurisdictions may allow the use under patio covers and porches. Ideally the use of UF wire or other approved conductors should be used which is designed for wet locations. The wiring should be properly protected from mechanical damage. I recommend that a qualified electrician evaluate, repair and replace as necessary.

6. Electrical System

(6) **Repair Replace/Comment-** Use of extension cords for permanent wiring in shop to light. Extension cords should be used only on a temporary basis. If permanent use is needed a receptacle should be installed at the desired location. I recommend a qualified electrician evaluate and repair as necessary.

Areas observed-

Informational Link-

http://www.inspectapedia.com/electric/Electrical_Outlet_Installation.htm

(7) **Repair Replace-** Missing nail plates for electrical wires. This is risk for damage to the wire, shock and or fire. Nail plates should be installed over electrical cables (and plumbing) if hole in framing is less than 1-1/4 in. from face of framing member. I recommend a qualified contractor or electrician install proper nail plate protection as necessary

(8) **Repair Replace/Maint.** Wires not properly secured by panel. Romex (NM) wires should be properly supported, secured and installed so as not to damage the cable, within 12 in. of panel (and every outlet box, junction box, cabinet, or fitting). I recommend properly securing the wiring as necessary.

6.5 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)

Repair or Replace, Upgrades/Comments

(1) **Repair Replace/Upgrade/Comment-** Kitchen has no circuits supplying power to the countertops. Common modern practice is that a minimum of two circuits should be provided to the kitchen counter areas for small appliances (SABC- since the early 1960's) and using what is referred to as the 2 and 4 rule for receptacle placement. Standard practice is that these circuits that service the Kitchen counter tops should not serve any other receptacles or outlets that are not located in the kitchen/cooking area or other appliances (other than the refrigerator). The client should be aware of this. I recommend that a qualified electrician evaluate, repair and replace as necessary if concerned.

(2) **Repair Replace-** Several "three-prong" outlets are not grounded. It is common in older home that these have been replaced with improper outlets. These need to either be replaced with a two prong outlet or a GFCI outlet marked "no ground". I recommend a qualified electrical contractor repair and replace as necessary. Further evaluation of any receptacles that was obstructed by belongings and storage should be performed.

Note: Current standards are when repairs are performed to these receptacles AFCI upgrade may be required.

Areas where they are located- Old garage/shop, front room, kitchen (refrigerator and over range), main floor bedroom,

(3) **Repair Replace-** Old light fixture on porcelain base (on knob and tube system). These old fixture have exposed electrical connections which could lead to accidental contact with live wires. I recommend a qualified electrician evaluate repair and replace as necessary.

(4) **Repair Replace-** The three way switch for the kitchen light is not working properly. It only works in certain position indicating it may have not been properly wired. I recommend a qualified electrician repair as necessary.

(5) **Repair Replace-** Wires may exceed junction box capacity. This is a safety issue. I recommend a qualified electrician evaluate and repair as necessary.

(6) **Repair Replace-** Junction box not properly secured on shelf above kitchen sink. This can lead to loose connection and/or wire damage. I recommend a qualified electrician repair as necessary.

(7) **Maint.-** Several loose receptacles where found. Loose receptacles can cause fatigue of the wires over time. I recommend a qualified person or electrician tighten or replace the receptacles as necessary. Further evaluation of any receptacles that was obstructed by belongings and storage should be performed.

(8) **Upgrade/Comment-** Older home range outlet is 3 prong outlet. Standard practice for homes built after the year 1996 is to have 4-prong outlets. Standard practices prohibit changing a 4-prong to a 3-prong outlet (unless properly wired for a 4 wire circuit), but does allow changing the cord to match the existing outlet regardless of whether the

6. Electrical System

cord is 3-prong or 4-prong. If you prefer to update your outlet from 3-prong to 4-prong, I recommend that a qualified electrician evaluate and make the repair.

(10) **Comment-** Common with older homes that they do not have the number of receptacles and circuits of current homes. Current standards are to have a maximum distance to a receptacle be no more than 6 feet along any wall section 2 feet or greater (or 12 feet spacing between receptacles on large wall runs) and 2 feet on kitchen counter tops. This is so lamp cords or such (normally 6 feet long) can be connected without the use of any extension cords. The client may want to have an electrician evaluate the home and your needs and make suggestions and upgrades based on that assessment.

6.6 OPERATION OF GFCI AND AFCI (GROUND FAULT CIRCUIT/ARC FAULT CIRCUIT INTERRUPTERS)

Repair or Replace

(1) **Repair Replace/Upgrade-** GFCI (ground fault circuit interrupt) are not installed in several areas as required per current standards (e.g. bathrooms, garages etc...). There are some areas with the age they were not required but I highly recommend their installation. These devices protect you from shock due to grounding issues. State law mandates that an inspector must recommend upgrading GFCI protection to current standards. The areas of protection have recently expanded to include areas not previously required, such as laundry, dishwasher, 6 feet from all sinks and all fixed electrical equipment with exposed grounded metal parts within an enclosed shower area or within five feet of the top inside edge of a bathtub must have ground fault circuit interrupter protection. etc...

I recommend a qualified electrical contractor evaluate and install GFCI protection where appropriate.

Areas Observed: some shop receptacles, front exterior receptacle, laundry area, main bathroom receptacle and grounded metal within 5 feet of tub, basement receptacles

Below is a list, not necessarily conclusive as to all GFCI protection requirements:

All outdoor receptacles, except those designated for ice melting equipment (must be dedicated circuit), Receptacles in garages and outbuildings, All receptacles (120V), no exceptions, installed in bathrooms and laundry, All receptacles installed to service kitchen countertop areas (Including islands, desk etc..), Circuits (Outlets) to dishwashers, All receptacles within 6 ft of the outside edge of any sink (kitchen sink included), Receptacles located in crawl spaces, unfinished basements, shops or mechanical rooms, Receptacles/Outlets supplying power to jetted tub motors, Receptacle for pool circulation and sanitation equipment. Receptacles and outlets serving pool equipment, motorized covers and pumps.

Exterior GFCI's need to be weather resistant style. All GFCI's need to be readily accessible. Shelving, appliances, cabinets and storage should not be placed in front of GFCI receptacles.

Link on GFCI and how they work-

<http://www.cpsc.gov//PageFiles/118853/099.pdf>

(3) **Comment-** Washington State has adopted 2014 NEC as of July 2014, there is a provisions about AFCI and GFCI requirements for branch circuits that will effect all homeowners.

Any 15- and 20-ampere branch circuits; if a receptacle(s) is replaced or where branch-circuit wiring is modified, replaced, or extended that affected circuit may have to be AFCI protected if required by location. AFCI protection is not be required where the extension of the existing conductors is not more than 6 ft and does not include any additional outlets or devices. If receptacles are to be replaced in areas requiring AFCI protection you are required to upgrade to AFCI protection. I recommend if any alterations of existing circuits or receptacles are to be replaced that you consult a qualified electrician.

Basically per the 2014 NEC AFCIs are required in all homes (dwelling units) for all 15 and 20 amp 120v circuits except those receptacles and circuits in bathrooms and attached garages.

6. Electrical System

Per the National Fire Protection Agency (NFPA)- Older homes are statistically more vulnerable to electrical fires. Extra protection for older homes is provided by the gradual replacement, over time, of non-AFCI-protected receptacles with new AFCI-protected ones.

Informational Link-

<http://www.ncwhomeinspections.com/New+AFCI+rules+for+2014>

6.7 SMOKE ALARMS (OR DETECTORS)

Repair or Replace

Repair Replace/Comment- Due to the age of home smoke alarms (or detectors) not in all locations per current standards. Some smoke alarms are missing or disabled. I recommend installing smoke alarms in all location per current standards and the testing of all smoke alarms present. It is recommended that smoke alarms be checked monthly and batteries changed yearly.

Smoke alarms should not remain in service longer than **10 years** from the date of manufacture and should be replaced thereafter. Vacuum the dust off smoke alarms every six months.

There are two main types of smoke alarms-

Ionization smoke detection: is generally more responsive to flaming fires.(Most common type in homes and more prone to nuisance tripping)

Photoelectric smoke detection: is generally more responsive to fires that begin with a long period of smoldering (smoke).

Note: I recommend installing photoelectric smoke alarms due to the fact that most fatalities are attributed to smoke inhalation. If your home is equiped with Ionization detectors at a minimum you should supplement them with photoelectric type of detector.

Informational Links-

<http://www.ncwhomeinspections.com/Smoke+Alarms+Usage+and+Placement>

There is now available wireless interconnected alarms available for use in older homes where wiring is not present.

Informational Links-

<http://www.ncwhomeinspections.com/Smoke+Alarms+Usage+and+Placement>

State recommendations for locations. <http://apps.leg.wa.gov/wac/default.aspx?cite=170-296-0580>

NFPA Information- [Link](#)

My building permit tip sheet- http://www.mybuildingpermit.com/Constuction%20Tip%20Sheets/2012%20Tip%20Sheets/MBP%20Tip%20Sheet%2004_2012.pdf

6.8 CARBON MONOXIDE DETECTORS

Repair or Replace

Repair Replace/Comment- There is no carbon monoxide detector found in home or by a bedroom/or missing on one of the floors/levels. Carbon monoxide (CO) is a by-product of combustion, present whenever fuel is burned. The State of Washington requires that a CO detector be installed outside of each separate sleeping area in

6. Electrical System

the immediate vicinity of the bedroom and each level in all new construction or any home sold after July, 26, 2009. All existing homes will be required to have a CO detector installed by January of 2013. Carbon Monoxide is an odorless and highly poisonous gas. I recommend that one be installed in each required location according to the manufacturer's instructions.

If you are installing only one carbon monoxide detector, the Consumer Product Safety Commission (CPSC) recommends it be located near the sleeping area, where it can wake you if you are asleep. Additional detectors in every bedroom of a home provides extra protection against carbon monoxide poisoning.

Many manufacturers recommend replacement every 5 to 7 years

[First Alert Manual](#)

The US Consumer Product Safety Commission information on CO-

<http://www.cpsc.gov/cpscpub/pubs/466.html>

10. Laundry

10.1 OUTLETS SWITCHES AND FIXTURES

Repair or Replace

Repair Replace/Upgrade/Comment- Older home dryer outlet is 3 prong outlet. Standard practice for homes built after the year 1996 is to have 4-prong outlets. Standard practices prohibit changing a 4-prong to a 3-prong outlet (unless properly wired for a 4 wire circuit), but does allow changing the dryer's cord to match the existing outlet regardless of whether the cord is 3-prong or 4-prong. If you prefer to update your outlet from 3-prong to 4-prong, I recommend that a qualified electrician evaluate and make the repair.

11. Main Bathroom

11.7 OUTLETS SWITCHES AND FIXTURES

Repair or Replace

Repair Replace/Comment- Receptacles not properly placed in bathroom. Receptacles on medicine cabinet is not accessible. Bathroom receptacles should be installed within 3 ft from the outside edge of each bathroom basin. The receptacle should be located on a wall or partition adjacent to the basin counter surface, or on the side or face of the basin cabinet not more than 12 in. below the countertop.

16. Attic / Roof Structure

16.4 VISIBLE ELECTRIC WIRING IN ATTIC

Repair or Replace

Repair Replace- Electrical wires by the attic access in are right by hatch are not protected. Romex/NM must be protected by guard strips that are at least as high as the romex/NM wires. If the attic is not accessible by permanent stairs or drop down ladders wire protection is only required within 6' of attic scuttle hole/entrance. After 6' away from the entrance no protection strips are needed. I recommend a qualified person or electrician evaluate and install protection as needed.

Plumbing

Report ID 12022015SI



NCW Home Inspections, LLC

1920 Hideaway PL
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Customer

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3. Exterior

3.7 PLUMBING WATER FAUCETS (hose bibs)

Maint/Monitor Item

(1) **Maint-** Hose bibb on the west side of home is leaking at the handle this usually indicates a loose packing nut or worn packing washer. I recommend a qualified person evaluate and repair.

Information link on how to repair leaking hose bibs-

<http://video.bobvila.com/m/21291708/how-to-repair-a-dripping-outdoor-faucet.htm>

(2) **Maint/Comment-** Hose bibbs (sillcock) are not frost free or anti-siphon. I recommend that an anti-siphon device be installed. In addition care will need to be taken to winterize the hose bibb to protect from freezing.

3. Exterior

Note: the babb on the east side was not on and most likely was turned off in the basement. This should be checked to ensure it is not leaking.

(example- <http://www.amazon.com/Orbit-Irrigation-67750-Hose-Anti-Siphon/dp/B002R5ECCI>).

Informational Links-

<http://www.ncwhomeinspections.com/Vacuum+Breakers+for+Hose+Bibbs>

<http://www.doh.wa.gov/portals/1/documents/4200/contamination.pdf>

7. Plumbing System

7.0 PLUMBING WATER SUPPLY AND DISTRIBUTION SYSTEMS AND FIXTURES

Repair or Replace, Upgrades/Comments

(1) **Repair Replace-** Several shut off valves are leaking. This can lead to damage of materials and is a conducive condition for wood destroying insects and organisms. I recommend that a qualified plumber evaluate and repair as necessary.

Areas Observed- By water heater, by main shut off

(3) **Comment-**Water supply valve is a piercing valve style called a saddle valve. I recommend monitoring of this valve because corrosion to this valve can cause them to leak. When work is performed on the plumping system I recommend having this replaced with a permanent shut off valve.

Informational link below.

<http://www.naturalhandyman.com/iip/infextra/lnfsad.html>

7.1 PLUMBING DRAIN, WASTE AND VENT SYSTEMS

Repair or Replace, Upgrades/Comments

(1) **Repair Replace-** Cleanout cap damaged in basement west wall area. This can allow sewer gases into the home and debris into the waste lines. I recommend installing a proper cap on the clean out.

(2) **Comment-** In older homes main drains (such as cast iron, Orangeburg (bituminous fiber), clay etc...) may be more problematic as they age. This is especially true were tree roots could effect the drain line. It is recommended that you ask the sellers if they have ever experienced any drainage problems, or even better you may wish to have the main waste line video inspected.

7.6 FUEL STORAGE AND DISTRIBUTION SYSTEMS (Interior fuel storage, piping, venting, supports, leaks)

Repair or Replace

(1) **Repair Replace-** Missing or improper placement of sediment trap for furnace. Standard practices require that a sediment trap shall be installed downstream of the equipment shutoff valve as close to the inlet of the equipment as practical. The sediment trap shall be either a tee fitting with a capped nipple in the bottom opening of the run of the tee or other device approved as an effective sediment trap. I recommend a qualified plumber evaluate and repair as necessary.

(2) **Repair Replace-** Improper clearances to gas meter and/or regulator vent. Standard practices is that gas meter regulator vent clearance distance should be three feet in any direction to clothes dryer intake or exhaust vent opening. I recommend a qualified plumber evaluate and move the vent to a proper location or moving the dryer vent to an appropriate location.

9. Kitchen Components and Appliances

9.4 PLUMBING DRAIN AND VENT SYSTEMS

Upgrades/Comments

Comment- The use of a flexible tailpiece on the sink may not be a good practice and may not be an approved method. I recommend when any other plumbing work is performed that this be evaluated and repaired as necessary.

10. Laundry

10.2 SINKS

Repair or Replace

- (1) **Repair Replace-** Cement laundry tub is cracked and leaking. This can lead to damage to materials around the sink. This is a conducive condition for wood destroying insects and organisms. I recommend a qualified plumber evaluate, repair and replace as necessary.
- (2) **Repair Replace-** The sink faucet is leaking behind the laundry tub. This may need an adjustment or replacement of the seals or replacement of the faucet. I recommend a qualified person or plumber evaluate and repair as necessary.
- (3) **Repair Replace-** The sink faucet is leaking. This may need an adjustment or replacement of the seals or replacement of the faucet. I recommend a qualified person or plumber evaluate and repair as necessary.

11. Main Bathroom

11.6 PLUMBING WATER SUPPLY AND DISTRIBUTION SYSTEMS AND FIXTURES

Repair or Replace, Maint/Monitor Item

- (1) **Repair Replace-** Toilet was loose and no caulking at the base of the toilet. When it is loose, it is likely that the wax ring is damaged. When toilet repair is being done, and toilet has been lifted, if any damage is seen below, repair at that time. I recommend a qualified person or contractor evaluate repair/replace as necessary.

12. 1/2 Bathroom

12.5 PLUMBING DRAIN, WASTE AND VENT SYSTEMS

Repair or Replace

- Repair Replace-** Improper angle/configuration on trap arm for sink. I recommend a qualified person or plumber evaluate and repair as necessary.

12.6 PLUMBING WATER SUPPLY AND DISTRIBUTION SYSTEMS AND FIXTURES

Repair or Replace

- Repair Replace-** Toilet was loose and no caulking at the base of the toilet. When it is loose, it is likely that the wax ring is damaged. When toilet repair is being done, and toilet has been lifted, if any damage is seen below, repair at that time. I recommend a qualified person or contractor evaluate repair/replace as necessary.

Note: there was staining by the toilet and signs of past leaks in bathroom below.

**INVOICE**

NCW Home Inspections, LLC
1920 Hideaway PL
Wenatchee Wa 98801
509-670-9572
Inspected By: Don Hester

Inspection Date: 12/2/2015
Report ID: 12022015SI

Customer Info:	Inspection Property:
Jane and John Doe	1234 Inspection St Wenatchee WA 98801
Customer's Real Estate Professional:	

Inspection Fee:

Service	Price	Amount	Sub-Total
Heated Sq Ft 0 - 2,000	400.00	1	400.00
Over 50 Years Old	50.00	1	50.00
			Tax \$0.00
			Total Price \$450.00

Payment Method:**Payment Status:** Paid**Note:**



NCW Home Inspections, LLC

Don Hester

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