



WA State License #350 / WSDA SPI#77102



7112 W 5th PI Kennewick, WA

Report Number:
0119AC024 0717A

Inspection Date:
8/3/2010

Prepared For:
Joe Smith

Prepared By:
Columbia Valley Inspection Services
7112 W 5th PI
Kennewick, WA 99336
(509) 308-6165
jnugent@cvinspect.com

Inspector:
Jeff Nugent



Columbia Valley Inspection Services

7112 W 5th Pl Kennewick, WA 99336

At your request, an inspection of the above property was performed. Columbia Valley Inspection Services is pleased to submit the enclosed report. This report is a professional opinion based on a visual inspection of the accessible components of the home. This report is not an exhaustive technical evaluation. An evaluation of this nature would cost many times more.

Please understand that there are limitations to this inspection. Many components of the home are not visible during the inspection and very little historical information is provided in advance of the inspection. While we can reduce your risk of purchasing a home, we cannot eliminate it, nor can we assume it. Even the most comprehensive inspection cannot be expected to reveal every condition you may consider significant to ownership. In addition to those improvements recommended in our report, we recommend that you budget for unexpected repairs. On average, we have found that setting aside roughly one percent of the value of the home on an annual basis is sufficient to cover unexpected repairs.

Your attention is directed to your copy of the Pre-Inspection Agreement. It more specifically explains the scope of the inspection and the limit of our liability in performing this inspection. The Standards of Practice and Code of Ethics of the American Society of Home Inspectors (ASHI®) prohibits us from making any repairs or referring any contractors. We are not associated with any other party to the transaction of this property, except as may be disclosed to you.

The information provided in this report is solely for your use. CVIS will not release a copy of this report without your written consent.

Thank you for selecting our company. We appreciate the opportunity to be of service. Should you have any questions about the general condition of the house in the future, we would be happy to answer these. There is no fee for this telephone consulting. Our fees are based on a single visit to the property. If additional visits are required for any reason, additional fees may be assessed.

Sincerely,

Columbia Valley Inspection Services

Report Overview

THE HOUSE IN PERSPECTIVE

This is an average quality home. As with all homes, ongoing maintenance is required and improvements to the systems of the home will be needed over time. *The improvements that are recommended in this report are not considered unusual for a home of this age and location.* Please remember that there is no such thing as a perfect home.

CONVENTIONS USED IN THIS REPORT

For your convenience, the following conventions have been used in this report.

Major Concern: *a system or component which is considered significantly deficient or is unsafe. Significant deficiencies need to be corrected and, except for some safety items, are likely to involve significant expense.*

Safety Issue: *denotes a condition that is unsafe and in need of prompt attention.*

Repair: *denotes a system or component which is missing or which needs corrective action to assure proper and reliable function.*

Improve: *denotes improvements which are recommended but not required.*

Monitor: *denotes a system or component needing further investigation and/or monitoring in order to determine if repairs are necessary.*

Deferred Cost: *denotes items that have reached or are reaching their normal life expectancy or show indications that they may require repair or replacement anytime during the next five (5) years.*

Please note that those observations listed under “Discretionary Improvements” are not essential repairs, but represent logical long term improvements.

IMPROVEMENT RECOMMENDATION HIGHLIGHTS / SUMMARY

The following is a synopsis of the potentially significant improvements that should be budgeted for over the short term. Other significant improvements, outside the scope of this inspection, may also be necessary. Please refer to the body of this report for further details on these and other recommendations.

MAJOR CONCERNS

SAFETY ISSUES

REPAIR ITEMS

- **Repair:** Surface deterioration (spalling, crumbling material) was observed on foundation walls. This condition is common in many homes and does not usually represent a serious structural concern unless there is substantial loss of material. In an effort to prevent long term deterioration, it would be wise to consider parging (a concrete stucco-like coating) over deteriorated areas. Lot drainage improvements and elimination of water or roof runoff splashing against foundation walls.
- **Repair:** Exposed fasteners noted in the roof covering – recommend all roof penetrations (nail heads) should be examined and sealed.
- **Repair:** Corner trim pieces of the siding showed some damage – recommend repair or replacement as needed. **Repair:** The fascia in many locations has small nails that were used possibly during installation – recommend resetting and sealing all exposed fasteners to prevent water penetration.
- **Repair:** The heat pump has a max fuse or breaker rating of 15 amps. Both the fuses in the exterior disconnect and at the main panel are 30 amps – recommend a HVAC technician be consulted and repairs made as necessary.
- **Repair:** Cracked, deteriorated and/or missing caulk in the master bathroom behind the sink should be replaced.

ITEMS TO MONITOR

- **Monitor:** The garage floor slab has typical cracks usually the result of shrinkage and/or settling of the slab. Cracks more than 1/8” high could present a trip hazard.

- **Monitor:** Typical cracks noted in driveway - recommend sealing as needed.
- **Monitor:** Typical drywall flaws and nail pop was observed in the family room – recommend repairs made as needed and monitor.

THE SCOPE OF THE INSPECTION

All components designated for inspection in the WA State Standards of Practice are inspected, except as may be noted in the “Limitations of Inspection” sections within this report.

It is the goal of the inspection to put a home buyer in a better position to make a buying decision. Not all improvements will be identified during this inspection. Unexpected repairs should still be anticipated. The inspection should not be considered a guarantee or warranty of any kind.

This inspection is visual only. A representative sample of building components are viewed in areas that are accessible at the time of the inspection. No destructive testing or dismantling of building components is performed.

Please refer to the pre-inspection contract for a full explanation of the scope of the inspection.

BUILDING DATA

Approximate Age: 1997
Style: Single Family
Main Entrance Faces: West
State of Occupancy: Occupied/Fully Furnished
Weather Conditions: Sunny
Recent Rain: No
Ground cover: Dry

Structure

DESCRIPTION OF STRUCTURE

Foundation:	•Poured Concrete •Crawl Space Configuration
Columns:	•Wood
Floor Structure:	•Wood Joist
Wall Structure:	•Wood Frame
Ceiling Structure:	•Joist
Roof Structure:	•Trusses •Waferboard Sheathing

STRUCTURE OBSERVATIONS

General Comments

Typical minor flaws were detected in the structural components of the building. No major defects were observed in the accessible structural components of the house.

RECOMMENDATIONS / OBSERVATIONS

Foundation

- **Repair:** Surface deterioration (spalling, crumbling material) was observed on foundation walls. This condition is common in many homes and does not usually represent a serious structural concern unless there is substantial loss of material. In an effort to prevent long term deterioration, it would be wise to consider parging (a concrete stucco-like coating) over deteriorated areas. Lot drainage improvements and elimination of water or roof runoff splashing against foundation walls.



LIMITATIONS OF STRUCTURE INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Structural components concealed behind finished surfaces could not be inspected.
- Only a representative sampling of visible structural components were inspected.
- Furniture and/or storage restricted access to some structural components.
- Engineering or architectural services such as calculation of structural capacities, adequacy, or integrity are not part of a home inspection.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Roofing

DESCRIPTION OF ROOFING

Roof Covering:	•Asphalt Shingle
Roof Flashings:	•Metal
Chimneys:	•None
Roof Drainage System:	•Plastic
Skylights:	•None
Method of Inspection:	•Walked on roof

ROOFING OBSERVATIONS

Positive Attributes

The roof coverings are newer and appear to be in generally good condition.

RECOMMENDATIONS / OBSERVATIONS

Sloped Roofing

- **Repair:** Exposed fasteners noted in the roof covering – recommend all roof penetrations (nail heads) should be examined and sealed.



LIMITATIONS OF ROOFING INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Not all of the underside of the roof sheathing is inspected for evidence of leaks.
- Evidence of prior leaks may be disguised by interior finishes.
- Estimates of remaining roof life are approximations only and do not preclude the possibility of leakage. Leakage can develop at any time and may depend on rain intensity, wind direction, ice build up, and other factors.
- Antennae, chimney/flue interiors which are not readily accessible are not inspected and could require repair.
- Roof inspection may be limited by access, condition, weather, or other safety concerns.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Exterior

DESCRIPTION OF EXTERIOR

Wall Covering:	•Vinyl Siding
Eaves, Soffits, And Fascias:	•Vinyl
Exterior Doors:	•Metal
Window/Door Frames and Trim:	•Vinyl-Covered
Entry Driveways:	•Concrete
Entry Walkways And Patios:	•Concrete
Porches, Decks, Steps, Railings:	•Concrete
Overhead Garage Door(s):	•Steel
Surface Drainage:	•Graded Away From House
Retaining Walls:	•None
Fencing:	•Wood

EXTERIOR OBSERVATIONS

General Comments

The exterior of the home is generally in good condition.

The driveway and walkways are in good condition.

The exterior siding that has been installed on the house is relatively low maintenance.

Window frames are clad, for the most part, with a low maintenance material.

The aluminum/Vinyl soffits and fascia are a low-maintenance feature of the exterior of the home.

RECOMMENDATIONS / OBSERVATIONS

Exterior Walls

- **Repair:** Corner trim pieces of the siding showed some damage – recommend repair or replacement as needed.



Exterior Eaves

- **Repair:** The fascia in many locations has small nails that were used possibly during installation – recommend resetting and sealing all exposed fasteners to prevent water penetration.



Garage

- **Monitor:** The garage floor slab has typical cracks usually the result of shrinkage and/or settling of the slab. Cracks more than 1/8" high could present a trip hazard.

Driveway

- **Monitor:** Typical cracks noted in driveway - recommend sealing as needed.

Fencing

- **Repair:** The fencing is in fair condition. Minor repairs are needed.

Discretionary Improvements

It would not be a bad idea to install a smoke detector in the garage.

LIMITATIONS OF EXTERIOR INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- A representative sample of exterior components was inspected rather than every occurrence of components.
- The inspection does not include an assessment of geological, geotechnical, or hydrological conditions, or environmental hazards.
- Screening, shutters, awnings, or similar seasonal accessories, fences, recreational facilities, outbuildings, seawalls, break-walls, docks, erosion control and earth stabilization measures are not inspected unless specifically agreed-upon and documented in this report.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

**308-408C WAC
STANDARDS OF PRACTICE**

WAC 308-408C-010 Standards of practice (SOP)--Purpose and scope.

Violations of the following SOP and ethics are subject to disciplinary action under RCW 18.235.130. The purpose of a home inspection is to assess the condition of the residence at the time of the inspection using visual observations, simple tools and normal homeowner operational controls; and to report deficiencies of specific systems and components. Inspectors must perform all inspections in compliance with the SOP set forth by the Washington state department of licensing. A home inspection is not technically exhaustive and does not identify concealed conditions or latent defects. This SOP is applicable to buildings with four or fewer dwelling units and their attached garages or carports.

WAC 308-408C-020 Ethics--Statement of purpose.

In order to ensure the integrity and high standard of skill and practice in the home inspection profession, the following rules of conduct and ethics shall be binding upon the inspector.

The home inspector must:

- (1) Provide home inspection services that conform to the Washington state home inspectors' SOP.
- (2) Provide full written disclosure of any business or familial relationships or other conflicts of interest between themselves and any other party to the transaction. The parties may include, but are not limited to, buyers, sellers, appraisers, real estate licensees, mortgage representatives, title companies, vendors and service contractors.
- (3) Act as an unbiased party and discharge his or her duties with integrity and fidelity to the client.
- (4) Perform services and express opinions based on genuine conviction and only within the inspector's area of education, training, or expertise.
- (5) Not conduct a home inspection or prepare a home inspection report that knowingly minimizes, compromises or attempts to balance information about defects for the purpose of garnering future referrals.

- (6) Not provide services that constitute the unauthorized practice of any profession that requires a special license when the inspector does not hold that license.
- (7) Not accept compensation for a home inspection from more than one party without written disclosure to the inspector's client(s).
- (8) Not for one year after completion of the inspection repair, replace, or upgrade for compensation components or systems on any building inspected - this section applies to the inspector's firm and other employees or principals of that firm or affiliated firms.
- (9) Not provide compensation, inducement, or reward directly or indirectly, to any person or entity other than the client, for the referral of business, inclusion on a list of recommended inspectors or preferred providers or participate in similar arrangements. The purchase and/or use of low-value advertising or marketing services or products that does not exceed ten dollars per item, is not considered inducement or reward.
- (10) Not disclose information contained in the inspection report without client approval or as required by law. However, at their discretion inspectors may disclose when practical observed safety or health hazards to occupants or others that are exposed to such hazards.
- (11) Not advertise previous experience in an associated trade as experience in the home inspection profession. An inspector's advertised inspection experience will reflect only the inspector's experience as a home inspector and inspectors shall not advertise, market or promote their home inspection services or qualifications in a fraudulent, false, deceptive or misleading manner.
- (12) Not accept a home inspection referral or perform a home inspection when assignment of the inspection is contingent upon the inspector reporting predetermined conditions.

WAC 308-408C-030 Exclusions and limitations.

Inspectors are not required to:

- (1) Determine the condition of any system or component that is not readily accessible; the remaining service life of any system or component; the strength, adequacy, effectiveness or efficiency of any system or component; causes of any condition or deficiency; methods, materials, or cost of corrections; future conditions including, but not limited to, failure of systems and components.
- (2) Comment on the suitability of the structure or property for any specialized use, compliance with codes, regulations, laws or ordinances.
- (3) Report the presence of potentially hazardous plants or animals including, but not limited to, wood destroying insects or diseases harmful to humans; the presence of any environmental hazards including, but not limited to mold, toxins, carcinogens, noise, and contaminants in soil, water or air; the effectiveness of any system installed or methods utilized to control or remove suspected hazardous substances.
- (4) Determine the operating costs of any systems or components.
- (5) Determine the acoustical properties of any systems or components.
- (6) Operate any system or component that is shut down, not connected or is otherwise inoperable.
- (7) Operate any system or component that does not respond to normal user controls.
- (8) Operate any circuit breakers, water, gas or oil shutoff valves.
- (9) Offer or perform any act or service contrary to law. (10) Offer or perform engineering services or work in any trade or professional service other than home inspection.
- (11) Offer or provide warranties or guarantees of any kind unless clearly explained and agreed to by both parties in a pre inspection agreement.
- (12) Determine the existence of or inspect any underground items including, but not limited to, underground storage tanks or sprinkler systems.
- (13) Inspect decorative items, or systems or components that are in areas not entered in accordance with the SOP.
- (14) Inspect detached structures, common elements and areas of multiunit housing such as condominium properties or cooperative housing.
- (15) Perform any procedure or operation that will, in the opinion of the inspector, likely be dangerous to the inspector or others or damage the property, its systems or components. (16) Move suspended ceiling tiles, personal property, furniture, equipment, plants, soil, snow, ice or debris.
- (17) Dismantle any system or component, except as explicitly required by the SOP.
- (18) Enter flooded crawlspaces, attics that are not readily accessible, or any area that will, in the opinion of the inspector, likely be dangerous to the inspector or other persons or damage the property, its systems or components.
- (19) Inspect or comment on the condition or serviceability of elevators or related equipment.

Inspectors are not limited from examining other systems and components or including other inspection services. Likewise, if the inspector is qualified and willing to do so, an inspector may specify the type of repairs to be made.

An inspector may exclude those systems or components that a client specifically requests not to be included in the scope of the inspection or those areas that, in the opinion of the inspector, are inaccessible due to obstructions or conditions dangerous to the inspector. When systems or components designated for inspection under this SOP are excluded, the reason the item was excluded will be reported.

WAC 308-408C-040 Recordkeeping.

- The inspector is required to maintain the following records for a period of three years: (1) Preinspection agreements signed by the client and the home inspector for all home inspections.
- (2) Home inspection reports.

(3) Timesheets or similar documentation used to establish proof of field training, when supervising a home inspector applicant/candidate.

WAC 308-408C-050 Contracts.

A pre inspection agreement is mandatory and as a minimum must contain or state:

- (1) Address of property.
- (2) Home inspector compensation.
- (3) General description of what the home inspector will and will not inspect. That description will include all items that the Washington state SOP requires to be inspected.
- (4) A statement that the inspection does not include investigation of mold, asbestos, lead paint, water, soil, air quality or other environmental issues unless agreed to in writing in the pre inspection agreement.

WAC 308-408C-060 Procedures.

A home inspector must:

- (1) Provide a copy of the preinspection agreement to the client prior to the inspection unless prevented by circumstances from doing so.
- (2) Provide the client a copy of the home inspection report according to the terms of the pre inspection agreement.
- (3) Return client's money related to a home inspection report when ordered to do so by a court.

WAC 308-408C-070 Structure.

An inspection of the structure will include the visible foundation; floor framing; roof framing and decking; other support and substructure/superstructure components; stairs; ventilation (when applicable); and exposed concrete slabs in garages and habitable areas.

(1) **The inspector will:**

Describe the type of building materials comprising the major structural components.

Enter and **traverse** attics and subfloor crawlspaces.

Inspect

(a) The condition and serviceability of visible, exposed foundations and grade slabs, walls, posts, piers, beams, joists, trusses, subfloors, chimney foundations, stairs and the visible roof structure and attic components where readily and safely accessible.

(b) Subfloor crawlspaces and basements for indications of flooding and moisture penetration.

Probe a representative number of structural components where deterioration is suspected or where clear indications of possible deterioration exist. Probing is not required when probing will damage any finished surface or where no deterioration is suspected.

Describe any deficiencies of these systems or components. **Report** all wood rot and pest-conducive conditions discovered.

Refer all issues that are suspected to be insect related to a licensed structural pest inspector (SPI) or pest control operator (PCO) for follow up.

(2) **The inspector is not required to:**

Enter

(a) Subfloor crawlspaces that require excavation or have an access opening less than eighteen inches by twenty-four inches or headroom less than eighteen inches beneath floor joists and twelve inches beneath girders (beams).

(b) Any areas that are not readily accessible due to obstructions, inadequate clearances or have conditions which, in the inspector's opinion, are hazardous to the health and safety of the inspector or will cause damage to components of the home.

Move stored items or debris or perform excavation to gain access.

WAC 308-408C-080 Exterior.

An inspection of the exterior includes the visible wall coverings, trim, protective coatings and sealants, windows and doors, attached porches, decks, steps, balconies, handrails, guardrails, carports, eaves, soffits, fascias and visible exterior portions of chimneys.

(1) **The inspector will:**

Describe the exterior components visible from ground level.

Inspect visible wall coverings, trim, protective coatings and sealants, windows and doors, attached porches, decks, steps, balconies, handrails, guardrails, carports, eaves, soffits, fascias and visible exterior portions of chimneys.

Probe exterior components where deterioration is suspected or where clear indications of possible deterioration exist. Probing is not required when probing will damage any finished surface or where no deterioration is suspected.

Describe any deficiencies of these systems or components.

(2) **The inspector is not required to:**

Inspect

(a) Buildings, decks, patios, fences, retaining walls, and other structures detached from the dwelling.

(b) Safety type glass or the integrity of thermal window seals.

(c) Flues or verify the presence of flue liners beyond what can be safely and readily seen from the roof or the firebox of a stove or fireplace.

Test or **evaluate** the operation of security locks, devices or systems.

Enter areas beneath decks with less than five feet of clearance from the underside of joists to grade.

Evaluate the function or condition of shutters, awnings, storm doors, storm windows, screens, and similar accessories.

WAC 308-408C-090 Roofs.

An inspection of the roof includes the roof covering materials; gutters and downspout systems; visible flashings; roof vents; skylights, and any other roof penetrations; and the portions of the chimneys and flues visible from the exterior.

(1) **The inspector will:**

Traverse the roof to inspect it.

Inspect the gutters and downspout systems, visible flashings, soffits and fascias, skylights, and other roof penetrations.

Report the manner in which the roof is ventilated.

Describe the type and general condition of roof coverings.

Report multiple layers of roofing when visible or readily apparent.

Describe any deficiencies of these systems or components.

(2) **The inspector is not required to:**

Traverse a roof where, in the opinion of the inspector, doing so can damage roofing materials or be unsafe. If the roof is not traversed, the method used to inspect the roof must be reported.

Remove snow, ice, debris or other material that obscures the roof surface or prevents access to the roof.

Inspect gutter and downspout systems concealed within the structure; related underground drainage piping; and/or antennas, lightning arresters, or similar attachments.

Operate powered roof ventilators.

Predict remaining life expectancy of roof coverings.

WAC 308-408C-100 Plumbing system.

An inspection of the plumbing system includes visible water supply lines; visible waste/soil and vent lines; fixtures and faucets; domestic hot water system and fuel source.

(1) **The inspector will:**

Describe the visible water supply and distribution piping materials; drain, waste and vent materials; water-heating equipment.

Report

(i) The presence and functionality of sump pumps and waste ejector pumps when visible.

(ii) The presence and location of a main water shutoff valve and/or fuel shutoff valve(s), or report that they were not found.

(iii) The presence of the temperature and pressure relief (TPR) valve and associated piping.

(iv) Whether or not the water temperature was tested and state that the generally accepted safe water temperature is one hundred twenty degrees Fahrenheit.

Inspect the condition of accessible and visible water supply pipes, drain/waste plumbing and the domestic hot water system when possible.

Operate fixtures in order to observe functional flow.

Check for functional drainage from fixtures.

Describe any deficiencies of these systems or components in the inspection report.

(2) **The inspector is not required to:**

Operate any valves, including faucets of freestanding or built-in appliances or fixtures, if the outlet end of the valve or faucet is connected or intended to be connected to an appliance.

Inspect

(i) Any system that is shut down or winterized.

(ii) Any plumbing components not readily accessible.

(iii) Floor drains and exterior drain systems, including but not limited to, exterior stairwell drains and driveway drains.

(iv) Fire sprinkler systems.

(v) Water-conditioning equipment, including softeners and filter systems.

(vi) Private water supply systems.

(vii) Gas supply systems.

(viii) Interior components of exterior pumps or sealed sanitary waste lift systems.

(ix) Ancillary systems or components such as, but not limited to, those related to solar water heating and hot water circulation.

Test

(i) Pressure or temperature/pressure relief valve.

(ii) Shower pans for leaks or use special equipment to test/scan shower or tub surrounds for moisture in surrounding substrate materials.

Determine

- (i) The potability of any water supply whether public or private.
- (ii) The condition and operation of water wells and related pressure tanks and pumps.
- (iii) The quantity of water from on-site water supplies.
- (iv) The quality or the condition and operation of on-site sewage disposal systems such as waste ejector pumps, cesspools, septic tanks, drain fields, related underground piping, conduit, cisterns, and related equipment.
- (e) **Ignite** pilot lights.

WAC 308-408C-110 Electrical system.

The inspection of the electrical system includes the service drop through the main panel; subpanels including feeders; branch circuits, connected devices, and lighting fixtures.

(1) **The inspector will:**

Describe in the report the type of primary service, whether overhead or underground, voltage, amperage, over-current protection devices (fuses or breakers) and the type of branch wiring used.

Report

- (i) The existence of a connected service-grounding conductor and service-grounding electrode when same can be determined.
- (ii) When no connection to a service grounding electrode can be confirmed.

Inspect the main and branch circuit conductors for proper over-current protection and condition by visual observation after removal of the readily accessible main and subelectric panel cover(s).

Report, if present, solid conductor aluminum branch circuits. Include a statement in the report that solid conductor aluminum wiring may be hazardous and a licensed electrician should inspect the system to ensure it's safe.

Verify

- (i) The operation of a representative number of accessible switches, receptacles and light fixtures.
- (ii) The grounding and polarity of a representative number of receptacles; particularly in close proximity to plumbng fixtures or at the exterior.
- (iii) Ground fault circuit interrupter (GFCI) protection and arc-fault circuit interrupter (AFCI) protection where required.

Report the location of any inoperative or missing GFCI and/or AFCI devices when they are recommended by industry standards.

Advise clients that homes without ground fault protection should have GFCI devices installed where recommended by industry standards.

Report on any circuit breaker panel or subpanel known within the home inspection profession to have safety concerns.

- (i) **Describe** any deficiencies of these systems or components.

(2) **The inspector is not required to:**

Insert any tool, probe or testing device into the main or subpanels.

Activate electrical systems or branch circuits that are not energized.

Operate circuit breakers, service disconnects or remove fuses.

Inspect ancillary systems, including but not limited to:

- (i) Timers.
- (ii) Security systems.
- (iii) Low voltage relays.
- (iv) Smoke/heat detectors.
- (v) Antennas.
- (vi) Intercoms.
- (vii) Electrical deicing tapes.
- (viii) Lawn sprinkler wiring.
- (ix) Swimming pool or spa wiring.
- (x) Central vacuum systems.
- (xi) Electrical equipment that's not readily accessible.

Dismantle any electrical device or control, except for the removal of the deadfront covers from the main service panel and subpanels.

Move any objects, furniture, or appliances to gain access to any electrical component.

Test every switch, receptacle, and fixture.

Remove switch and receptacle cover plates.

Verify the continuity of connected service ground(s).

WAC 308-408C-120 Heating system.

The inspection of the heating system includes the fuel source; heating equipment; heating distribution; operating controls; flue pipes, chimneys and venting; auxiliary heating units.

(1) **The inspector will:**

Describe the type of fuel, heating equipment, and heating distribution systems.

Operate the system using normal readily accessible control devices.

Open readily accessible access panels or covers provided by the manufacturer or installer, if readily detachable.

Inspect

- (i) The condition of normally operated controls and components of systems.
- (ii) The condition and operation of furnaces, boilers, heat pumps, electrical central heating units and distribution systems.
- (iii) Visible flue pipes and related components to ensure functional operation and proper clearance from combustibles.
- (iv) Each habitable space in the home to determine whether or not there is a functioning heat source present.
- (v) Spaces where fossil fuel burning heating devices are located to ensure there is air for combustion.
- (vi) Electric baseboard and in-wall heaters to ensure they are functional.

Report any evidence that indicates the possible presence of an underground storage tank.

Describe any deficiencies of these systems or components.

(2) **The inspector is not required to:**

Ignite pilot lights.

Operate:

- (i) Heating devices or systems that do not respond to normal controls or have been shut down.
- (ii) Any heating system when circumstances are not conducive to safe operation or when doing so will damage the equipment.

Inspect or evaluate

- (i) Heat exchangers concealed inside furnaces and boilers.
- (ii) Any heating equipment that is not readily accessible.
- (iii) The interior of chimneys and flues.
- (iv) Installed heating system accessories, such as humidifiers, air purifiers, motorized dampers, heat reclaimers; solar heating systems; or concealed distribution systems.

Remove covers or panels that are not readily accessible or removable.

Dismantle any equipment, controls, or gauges except readily identifiable access covers designed to be removed by users.

Evaluate whether the type of material used to insulate pipes, ducts, jackets and boilers is a health hazard.

Determine:

- (i) The capacity, adequacy, or efficiency of a heating system.
- (ii) Determine adequacy of combustion air.

Evaluate thermostats or controls other than to confirm that they actually turn a system on or off.

WAC 308-408C-130 Air conditioning systems.

The inspection of the air conditioning system includes the cooling equipment; cooling distribution equipment and the operating controls.

(1) **The inspector will:**

Describe the central air conditioning system and energy sources.

Operate the system using normal control devices and **determine** temperature differential.

Open readily accessible access panels or covers provided by the manufacturer or installer.

Inspect the condition of controls and operative components of the complete system; conditions permitting.

Describe any deficiencies of these systems or components in the inspection report.

(2) **The inspector is not required to:**

Activate cooling systems that have been shut down.

Inspect

- (i) Gas-fired refrigeration systems.
- (ii) Evaporative coolers.
- (iii) Wall or window-mounted air-conditioning units.
- (iv) The system for refrigerant leaks.

Check the coolant pressure/charge.

Determine the efficiency, or adequacy of the system.

Operate cooling system components if the exterior temperature is below sixty degrees Fahrenheit or when other circumstances are not conducive to safe operation or when doing so might damage the equipment.

Remove covers or panels that are not readily accessible.

Dismantle any equipment, controls, or gauges except readily identifiable access covers designed to be removed by users.

Determine how much current the unit is drawing.

Evaluate digital-type thermostats or controls.

WAC 308-408C-140 Interiors.

The inspection of the interior includes the walls, ceilings, floors, windows, and doors; steps, stairways, balconies and railings.

(1) **The inspector will:**

Verify

That steps, handrails, guardrails, stairways and landings are installed wherever necessary and **report** when they are missing or in need of repair and **report** when baluster spacing exceeds four inches.

Inspect

- (i) The overall general condition of cabinets and countertops.
- (ii) Caulking and grout at kitchen and bathroom counters.
- (iii) The interior walls, ceilings, and floors for indicators of concealed structural deficiencies, water infiltration or major damage.
- (iv) The condition and operation of a representative number of windows and doors.

Comment on the presence or absence of smoke detectors.

Describe any noncosmetic deficiencies of these systems or components.

(2) **The inspector is not required to:**

Report on cosmetic conditions related to the condition of interior components.

Verify whether all walls, floors, ceilings, doorways, cabinets and window openings are square, straight, level or plumb.

WAC 308-408C-150 Insulation and ventilation.

The inspection of the insulation and ventilation includes the type and condition of the insulation and ventilation in viewable unfinished attics and subgrade areas as well as the installed mechanical ventilation systems.

(1) **The inspector will:**

Inspect the insulation, ventilation and installed mechanical systems in viewable and accessible attics and unfinished subfloor areas.

Describe the type of insulation in viewable and accessible unconditioned spaces.

Report missing or inadequate vapor barriers in subfloor crawlspaces with earth floors.

Report the absence of insulation at the interface between conditioned and unconditioned spaces where visible.

Report the absence of insulation on heating system ductwork and supply plumbing in unconditioned spaces.

Describe any deficiencies of these systems or components.

(2) **The inspector is not required to:**

Determine the presence, extent, and type of insulation and vapor barriers concealed in the exterior walls.

Determine the thickness or R-value of insulation above the ceiling, in the walls or below the floors.

WAC 308-408C-160 Fireplaces and stoves.

Includes solid fuel and gas fireplaces, stoves, dampers, fireboxes and hearths.

(1) **The inspector will:**

Describe fireplaces and stoves.

Inspect dampers, fireboxes and hearths.

Describe any deficiencies of these systems or components.

(2) **The inspector is not required to:**

Inspect flues and verify the presence of flue liners beyond what can be safely and readily seen from the roof or the firebox of a stove or fireplace.

Ignite fires in a fireplace or stove.

Determine the adequacy of draft.

Perform a chimney smoke test.

Inspect any solid fuel device being operated at the time of the inspection.

Evaluate the installation or adequacy of fireplace inserts.

Evaluate modifications to a fireplace, stove, or chimney.

Dismantle fireplaces or stoves to inspect fireboxes or remove rain caps to inspect chimney flues.

WAC 308-408C-170 Site.

The inspection of the site includes the building perimeter, land grade, and water drainage directly adjacent to the foundation; trees and vegetation that adversely affect the structure; walks, grade steps, driveways, patios, and retaining walls contiguous with the structure.

(1) **The inspector will:**

Describe the material used for driveways, walkways, patios and other flatwork around the home.
Inspect

(i) For serviceability of the driveways, steps, walkways, patios, flatwork and retaining walls contiguous with the structure.

(ii) For proper grading and drainage slope.

(iii) Vegetation in close proximity to the home.

Describe any deficiencies of these systems or components.

(3) **The inspector is not required to:**

Inspect fences, privacy walls or retaining walls that are not contiguous with the structure.

Report the condition of soil, trees, shrubs or vegetation unless they adversely affect the structure.

Evaluate hydrological or geological conditions.

Determine the adequacy of bulkheads, seawalls, breakwalls, and docks.

WAC 308-408C-180 Attached garages or carports.

The inspection of attached garages and carports includes their framing, siding, roof, doors, windows, and installed electrical/mechanical systems pertaining to the operation of the home.

(1) **The inspector will:**

Inspect the condition and function of the overhead garage doors and associated hardware.

Test the function of the garage door openers, their auto-reverse systems and secondary entrapment devices (photoelectric and edge sensors) when present.

Inspect the condition and installation of any pedestrian doors.

Inspect fire separation between the house and garage when applicable.

Report as a fire hazard the presence of any ignition source (gas and electric water heaters, electrical receptacles, electronic air cleaners, motors of installed appliances, etc.) that is within eighteen inches of the garage floor.

Describe any deficiencies of these systems or components.

(2) **The inspector is not required to:**

Determine whether or not a solid core pedestrian door that is not labeled is fire rated.

Verify the functionality of garage door opener remote controls.

Move vehicles or personal property.

Operate any equipment unless otherwise addressed in the SOP.



REMARKS

SERVICE WALKS/DRIVEWAYS

Spalling concrete cannot be patched with concrete because the new will not bond with the old. Water will freeze between the two layers, or the concrete will break up from movement or wear. Replacement of the damaged section is recommended. Walks or driveways that are close to the property should be properly pitched away to direct water away from the foundation. Asphalt driveways should be kept sealed and larger cracks filled so as to prevent damage from frost.

Patios that have settled towards the structure should be mudjacked or replaced to assure proper pitch. Improperly pitched patios are one source of wet basements.

EXTERIOR WOOD SURFACES

All surfaces of untreated wood need regular applications of paint or special chemicals to resist damage. Porch or deck columns and fence posts which are buried in the ground and made of untreated wood will become damaged within a year or two.

Decks should always be nailed with galvanized, stainless steel or aluminum nails. Decks that are not painted or stained should be treated with a water sealer.

GRADING AND DRAINAGE

Any system of grading or landscaping that creates positive drainage (moving water away from the foundation walls) will help to keep a basement dry. Where negative grade exists and additional backfill is suggested, it may require digging out around the property to get a proper pitch. Dirt shall be approximately 6" below the bottom sill and should not touch wood surfaces.

Flower beds, loose mulched areas, railroad ties and other such landscaping items close to the foundation trap moisture and contribute to wet basements. To establish a positive grade, a proper slope away from the house is 1" per foot for approximately 5-6 feet. Recommend ground cover planting or grass up to foundation.

ROOF AND SURFACE WATER CONTROL

Roof and surface water must be controlled to maintain a dry basement. This means keeping gutters cleaned out and aligned, extending downspouts, installing splashblocks, and building up the grade so that roof and surface water is diverted away from the building.

WINDOW WELLS

The amount of water which enters a window well from falling rain is generally slight, but water will accumulate in window wells if the yard is improperly graded. Plastic window well covers are useful in keeping out leaves and debris.

RETAINING WALLS

Retaining walls deteriorate because of excessive pressure buildup behind them, generally due to water accumulation. Conditions can often be improved by excavating a trench behind the retaining wall and filling it with coarse gravel. Drain holes through the wall will then be able to relieve the water pressure.

Retaining walls sometime suffer from tree root pressure or from general movement of topsoil down the slope. Normally, these conditions require rebuilding the retaining wall.

RAILINGS

It is recommended that railings be installed for any stairway over 3 steps and porches over 30" for safety reasons. Balusters for porches, balconies, and stairs should be close enough to assure children cannot squeeze through.



REMARKS

Valleys and Flashings that are covered with shingles and/or tar or any other material are considered not visible and are not part of the inspection.

Tar and Gravel Roofs are a type of covering on a pitched roof requires ongoing annual maintenance. We recommend that a roofing contractor evaluate this type of roof. Infra-red photography is best used to determine areas of potential leaks.

Flat roofs are very vulnerable to leaking. It is very important to maintain proper drainage to prevent the ponding of water. We recommend that a roofing contractor evaluate this type of roof.

ROOF TYPE	LIFE EXPECTANCY	SPECIAL REMARKS
<i>Asphalt Shingles</i>	15-20 years	Used on nearly 80% of all residential roofs; requires little maintenance
<i>Asphalt Multi-Thickness Shingles*</i>	20-30 years	Heavier and more durable than regular asphalt shingles
<i>Asphalt Interlocking Shingles*</i>	15-25 years	Especially good in high-wind areas
<i>Asphalt Rolls</i>	10 years	Used on low slope roofs
<i>Built-up Roofing</i>	10-20 years	Used on low slope roofs; 2 to 3 times as costly as asphalt shingles
<i>Wood Shingles*</i>	10-40 years ¹	Treat with preservative every 5 years to prevent decay
<i>Clay Tiles*</i> <i>Cement Tiles*</i>	20 + years 20 + years	Durable, fireproof, but not watertight, requiring a good subsurface base
<i>Slate Shingles*</i>	30-100 years ²	Extremely durable, but brittle and expensive
<i>Asbestos Cement Shingles*</i>	30-75 years	Durable, but brittle and difficult to repair
<i>Metal Roofing</i>	15-40 + years	Comes in sheets & shingles; should be well grounded for protection from lightning; certain metals must be painted
<i>Single Ply Membrane</i>	15-25 years (mfgr's claim)	New material; not yet passed test of time
<i>Polyurethane with Elastomeric Coating</i>	5-10 years ¹	Used on low slope roofs.

* Not recommended for use on low slope roof

¹ Depending on local conditions and proper installation

² Depending on quality of slate

Roof coverings should be visually checked in the spring and fall for any visible missing shingles, damaged coverings or other defects. Before re-roofing, the underside of the roof structure and roof sheathing should be inspected to determine that the roof structure can support the additional weight of the shingles.

Wood shakes and shingles will vary in aging, due to the quality of the material, installation, maintenance, and surrounding shade trees. Ventilation and drying of the wood material is critical in extending the life expectancy of the wood. Commercial preservatives are available on the market, which could be applied to wood to impede deterioration.



REMARKS

CHIMNEYS

Chimneys built of masonry will eventually need tuckpointing. A cracked chimney top that allows water and carbonic acid to get behind the surface brick/stone will accelerate the deterioration. Moisture will also deteriorate the clay flue liner. Periodic chimney cleaning will keep you apprised of the chimney's condition. The flashing around the chimney may need resealing and should be inspected every year or two. Fireplace chimneys should be inspected and evaluated by a chimney professional before using. Chimneys must be adequate height for proper drafting. Spark arrestors are recommended for a wood burning chimney, and chimney caps for fossil fuels.

Unlined Chimney should be re-evaluated by a chimney technician.

Have flue cleaned and re-evaluated. The flue lining is covered with soot or creosote and no representation can be made as to the condition.

NOT EVALUATED

The flue was not evaluated due to inaccessibility such as roof pitch, cap, cleanout not accessible, etc.

CRICKET FLASHING

Small, sloped structure made of metal and designed to drain moisture away from a chimney. Usually placed at the back of a chimney.

GUTTERS AND DOWNSPOUTS

This is an extremely important element in basement dampness control. Keep gutters clean and downspout extensions in place (4' or more). Paint the inside of galvanized gutters, which will extend the life. Shortly after a rain or thaw in winter, look for leaks at seams in the gutters. These can be recaulked before they cause damage to fascia or soffit boards. If no gutters exist, it is recommended that they be added.

SIDING

Wood siding should not come in contact with the ground. The moisture will cause rotting to take place and can attract carpenter ants. See page 34 for siding that have known problems, but are not always recognizable. EIFS This type of siding is a synthetic stucco and has experienced serious problems. It requires a certified EIFS inspector to determine condition.

Brick and stone veneer must be monitored for loose or missing mortar. Some brick and stone are susceptible to spalling. This can be caused when moisture is trapped and a freeze/thaw situation occurs. There are products on the market that can be used to seal out the moisture. This holds true for brick and stone chimneys also.

Metal siding will dent and scratch. Oxidation is a normal reaction in aluminum. There are good cleaners on the market and it is recommended that they be used occasionally. Metal siding can be painted.

DOORS AND WINDOWS

These can waste an enormous amount of energy. Maintain the caulking around the frames on the exterior. Check for drafts in the winter and improve the worst offenders first. Windows that have leaky storm windows will usually have a lot of sweating. Likewise, well-sealed storms that sweat indicate a leaky window. It is the tighter unit that will sweat (unless the home has excess humidity to begin with).

Wood that exhibits blistering or peeling paint should be examined for possible moisture sources: roof leaks, bad gutters, interior moisture from baths or laundry or from a poorly vented crawl space. Some paint problems have no logical explanation, but many are a symptom of an underlying problem. A freshly painted house may mask these symptoms, but after you have lived in the home for a year or two, look for localized paint blistering (peeling). It may be a clue.

New glazing will last longer if the raw wood is treated with boiled linseed oil prior to glazing. It prevents the wood from drawing the moisture out of the new glazing.

CAULKING

Many different types of caulk are available on the market today. Check with a paint or hardware store for the kind of application you need.



REMARKS

EXTERIOR DOORS

The exposed side of exterior doors needs to be painted or properly stained and varnished to prevent discoloring and delamination. Weatherstripping is a must to prevent drafts.

ELECTRICAL

Extension cord wiring to an automatic door opener should be removed and an outlet should be installed by the opener.



REMARKS

OVERHEAD DOOR OPENERS

We recommend that a separate electrical outlet be provided. Openers that do not have a **safety reverse** are considered a safety hazard. Small children and pets are especially vulnerable. We recommend the operating switches be set high enough so children cannot reach them. If a electric sensor is present, it should be tested occasionally to ensure it is working.

GARAGE SILL PLATES should be elevated or treated lumber should be used. If this is not the case, try to direct water away to prevent rotting.

A/C COMPRESSORS

They should not become overgrown with foliage. Clearance requirements vary, but 2' on all sides should be considered minimal with up to 6' of air discharge desirable. If a clothes dryer vent is within five to ten feet, either relocate the vent or do not run when the A/C is running. The lint will quickly reduce the efficiency of the A/C unit.

BURNERS

Any appliance such as a water heater, furnace, etc. should have the flame a minimum of 18" above the floor. Any open flame less than 18" from the floor is a potential safety hazard. The appliance should also be protected from vehicle damage.



KITCHEN REMARKS

PLASTER ON WOOD LATH

Plaster on wood lath is an old technique and is no longer in general use. Wood lath shrinks with time and the nails rust and loosen. As a result, the plaster may become fragile and caution is needed in working with this type of plastering system. Sagging ceilings are best repaired by laminating drywall over the existing plaster and screwing it to the ceiling joists.

PLASTER ON GYPSUM LATH (ROCK LATH)

Plaster on gypsum lath will sometimes show the seams of the 16" wide gypsum lath, but this does not indicate a structural fault. The scalloping appearance can be leveled with drywall joint compound and fiberglass mesh joint tape or drywall can be laminated over the existing plaster on the ceiling.

WOOD FLOORING

Always attempt to clean wood floors first before making the decision to refinish the floor. Wax removers and other mild stripping agents plus a good waxing and buffing will usually produce satisfactory results. Mild bleaching agents help remove deep stains. Sanding removes some of the wood in the floor and can usually be done safely only once or twice in the life of the floor.

NAIL POPS

Drywall nail pops are due to normal expansion and contraction of the wood members to which the drywall is nailed and are usually of no structural significance.

CARPETING

Where carpeting has been installed, the materials and condition of the floor underneath cannot be determined.

APPLIANCES

(If report indicated appliances were operated, the following applies) Dishwashers are tested to see if the motor operates and water sprays properly. Stoves are tested to see that burners are working and oven and broiler get hot. Timer and controls are not tested. Refrigerators are not tested.

No representation is made to continued life expectancy of any appliance.

ASBESTOS AND OTHER HAZARDS

Asbestos fibers in some form are present in many homes, but are often not visible and cannot be identified without testing.

If there is reason to suspect that asbestos may be present and if it is of particular concern, a sample of the material in question may be removed and analyzed in a laboratory. However, detecting or inspecting for the presence or absence of asbestos is not a part of our inspection.

Also excluded from this inspection and report are the possible presence of, or danger from, radon gas, lead-based paint, urea formaldehyde, toxic or flammable chemicals and all other similar or potentially harmful substances and environmental hazards.

WINDOWS

A representative number of windows are inspected.



REMARKS

STALL SHOWER

The metal shower pan in a stall shower has a potential or probable life of 10-20 years depending on quality of the pan installed. Although a visible inspection is made to determine whether a shower pan is currently leaking, it cannot be stated with certainty that no defect is present or that one may not soon develop. Shower pan leaks often do not show except when the shower is in actual use.

CERAMIC TILE

Bathroom tile installed in a mortar bed is excellent. It is still necessary to keep the joint between the tile and the tub/shower caulked or sealed to prevent water spillage from leaking through and damaging the ceilings below. Ceramic tile is often installed in mastic. It is important to keep the tile caulked or water will seep behind the tile and cause deterioration in the wallboard. Special attention should be paid to the area around faucets and other tile penetrations.

EXHAUST FANS

Bathrooms with a shower should have exhaust fans when possible. This helps to remove excess moisture from the room, preventing damage to the ceiling and walls and wood finishes. The exhaust fan should not be vented into the attic. The proper way to vent the fan(s) is to the outside. Running the vent pipe horizontally and venting into a gable end or soffit is preferred. Running the vent pipe vertically through the roof may cause condensation to run down the vent pipe, rusting the fan and damaging the wallboard. Insulating the vent pipe in the attic will help to reduce this problem.

SLOW DRAINS on sinks, tubs, and showers are usually due to build up of hair and soap scum. Most sink popups can be easily removed for cleaning. Some tubs have a spring attached to the closing lever that acts as a catch for hair. It may require removing a couple of screws to disassemble. If you cannot mechanically remove the obstruction, be kind to your pipes. ***Don't use a caustic cleaner.*** There are several bacteria drain cleaners available. They are available at hardware stores in areas where septic tanks are used. These drain cleaners take a little longer to work, but are safe for you and your pipes.

SAFETY HAZARDS

Typical safety hazards found in bathrooms are open grounds or reverse polarity by water.
Replacing these outlets with G.F.C.I.'s are recommended.

WHIRLPOOL TUBS

This relates to interior tubs hooked up to interior plumbing. Where possible, the motor will be operated to see that the jets are working. Hot tubs and spas are not inspected.



ROOMS REMARKS

DOOR STOPS

All swinging doors should be checked for door stops. Broken or missing door stops can result in door knobs breaking through drywall or plaster.

CLOSET GUIDES

Sliding closet doors should be checked to see that closet guides are in place. Missing or broken closet guides can cause scratches and damage to doors.

COLD AIR RETURNS

Bedrooms that do not have cold air returns in them should have a 3/4" gap under the doors to allow cold air to be drawn into the hall return.

AN INSPECTION VERSUS A WARRANTY

A home inspection is just what the name indicates, an inspection of a home...usually a home that is being purchased. The purpose of the inspection is to determine the condition of the various systems and structures of the home. While an inspection performed by a competent inspection company will determine the condition of the major components of the home, no inspection will pick up every minute latent defect. The inspector's ability to find all defects is limited by access to various parts of the property, lack of information about the property and many other factors. A good inspector will do his or her level best to determine the condition of the home and to report it accurately. The report that is issued is an opinion as to the condition of the home. This opinion is arrived at by the best technical methods available to the home inspection industry. It is still only an opinion.

A warranty is a policy sold to the buyer that warrants that specific items in the home are in sound condition and will remain in sound condition for a specified period of time. Typically, the warranty company never inspects the home. The warranty company uses actuarial tables to determine the expected life of the warranted items and charges the customer a fee for the warranty that will hopefully cover any projected loss and make a profit for the warranty seller. It is essentially an insurance policy.

The service that we have provided you is an inspection. We make no warranty of this property. If you desire warranty coverage, please see your real estate agent for details about any warranty plan to which their firm may have access.



REMARKS

WINDOW FRAMES AND SILLS

Window frames and sills are often found to have surface deterioration due to condensation that has run off the window and damaged the varnish. Usually this can be repaired with a solvent style refinisher and fine steel wool. This is sometimes a sign of excess humidity in the house.

See comments regarding caulking doors and windows.

FIREPLACES

It is important that a fireplace be cleaned on a routine basis to prevent the buildup of creosote in the flue, which can cause a chimney fire.

Masonry fireplace chimneys are normally required to have a terra cotta flue liner or 8 inches of masonry surrounding each flue in order to be considered safe and to conform with most building codes.

During visual inspections, it is not uncommon to be unable to detect the absence of a flue liner either because of stoppage at the firebox, a defective damper or lack of access from the roof.

WOODBURNERS

Once installed, it can be difficult to determine proper clearances for woodburning stoves. Manufacturer specifications, which are not usually available to the inspector, determine the proper installation. We recommend you ask the owner for paperwork, verifying that it was installed by a professional contractor.

VENTILATION

Ventilation is recommended at the rate of one square foot of vent area to 300 square feet of attic floor space, this being divided between soffit and rooftop. Power vents should ideally have both a humidistat and a thermostat, since ventilation is needed to remove winter moisture as well as summer heat. Evidence of condensation such as blackened roof sheathing, frost on nail heads, etc. is an indication that ventilation may have been or is blocked or inadequate.

INSULATION

The recommended insulation in the attic area is R-38, approximately 12". If insulation is added, it is important that the ventilation is proper.

SMOKE DETECTORS

Smoke detectors should be tested monthly. At least one detector should be on each level. CO detectors are not required by most states, but for safety reasons, are highly recommended.

VAPOR BARRIERS

The vapor barrier should be on the warm side of the surface. Most older homes were built without vapor barriers. If the vapor barrier is towards the cold side of the surface, it should be sliced or removed. Most vapor barriers in the attic are covered by insulation and therefore, not visible.

SAFETY GLAZING

Safety glazing requirements vary depending on the age of the home. Every attempt is made to identify areas where the lack of safety glazing presents an immediate safety hazard, such as a shower door. In some older homes it is difficult to determine if safety glazing is present, since the glass is not marked. Therefore, no representation is made that safety glazing exists in all appropriate areas.

INSULATED GLASS

Broken seal in thermopane/insulated windows are not always visible nor detectible due to humidity and temperature changes during the day. Other factors such as window covering, dirty windows, and lack of accessibility, personal property placed in front of the windows all effect the view of the windows at the time of the inspection.



BASEMENT

Any basement that has cracks or leaks is technically considered to have failed. Most block basements have step cracks in various areas. If little or no movement has occurred and the step cracks are uniform, this is considered acceptable. Horizontal cracks in the third or fourth block down indicate the block has moved due to outside pressure. They can be attributed to many factors such as improper grading, improperly functioning gutter and downspout system, etc. Normally if little or no movement has taken place and proper grading and downspouts exist, this is considered acceptable. If the wall containing the stress crack(s) has moved considerably, this will require some method of reinforcement. Basements that have been freshly painted or tuckpointed should be monitored for movement. This will be indicated by cracks reopening. If cracks reappear, reinforcement may be necessary. Reinforcing a basement wall can become expensive.

FOUNDATION (COVERED WALLS)

Although an effort has been made to note any major inflections or weaknesses, it is difficult at best to detect these areas when walls are finished off, or basement storage makes areas inaccessible. **No representation is made as to the condition of these walls.**

MONITOR indicates that the walls have stress cracks, but little movement has occurred. In our opinion, the cracks should be filled with mortar and the walls monitored for further movement and cracking. If additional movement or cracking occurs, reinforcement may be necessary.

HAVE EVALUATED We recommend that the walls be re-evaluated by a structural engineer or basement repair company and estimates be obtained if work is required.

VAPOR BARRIER

Floors that are dirt or gravel should be covered with a vapor barrier.

MOISTURE PRESENT

Basement dampness is frequently noted in houses and in most cases the stains, moisture or efflorescence present is a symptom denoting that a problem exists outside the home. Usual causes are improper downspout extensions or leaking gutters and/or low or improper grade (including concrete surfaces) at the perimeter of the house. A proper slope away from the house is one inch per foot for four to six feet.

Expensive solutions to basement dampness are frequently offered. It is possible to spend thousands of dollars on solutions such as pumping out water that has already entered or pumping of chemical preparations into the ground around the house, when all that may be necessary are a few common sense solutions at the exterior perimeter. However, this is not intended to be an exhaustive list of causes and solutions to the presence of moisture. **No representation is made to future moisture that may appear.**

PALMER VALVE

Many older homes have a valve in the floor drain. This drain needs to remain operational.

DRAIN TILE

We offer no opinion about the existence or condition of the drain tile, as it cannot be visibly inspected.

BASEMENT ELECTRICAL OUTLETS

We recommend that you have an outlet within 6' of each appliance. The appliance you plan to install may be different than what exists, therefore the inspection includes testing a representative number of receptacles that exist. It is also recommended to have ground fault circuit interrupts for any outlet in the unfinished part of the basement and crawl spaces.



REMARKS

CRAWL SPACES

Crawl spaces are shallow spaces between the first level floor joist and the ground. Access to this area may be from the inside, outside or not accessible at all. Ductwork, plumbing, and electrical may be installed in the space in which access may be necessary. The floor of the crawl space may be covered with concrete, gravel, or may be the original soil. A vapor barrier may be a sheet of plastic or tar paper and installed over or under this material. The vapor barrier will deter the moisture from the earth from escaping into the crawl space and causing a musty smell. Ventilation is also important to control excess moisture buildup. Vents may be located on the outside of the house and are normally kept open in the summer and closed for the winter (where freezing may occur).

The basement/crawl space diagram indicates areas that are covered and not part of a visual inspection. Every attempt is made to determine if paneling is warped, moisture stains are bleeding through, etc. Storage that blocks the visibility of a wall is not removed to examine that area. Therefore, it is important that on your walk-through before closing, you closely examine these areas.

Closed crawl spaces that have vents to the outside should have insulation under the floor above the crawl space.

HAVE EVALUATED

We recommend that the walls be re-evaluated by a structural engineer or basement repair company and estimates be obtained if work is required.

MONITOR

Indicates that the walls have stress cracks, but little movement has occurred. In our opinion, the cracks should be filled with mortar and the walls monitored for further movement and cracking. If additional movement or cracking occurs, reinforcement may be necessary.



REMARKS

WELLS

Examination of wells is not included in this visual inspection. It is recommended that you have well water checked for purity by the local health authorities and, if possible, a check on the flow of the well in periods of drought. A well pit should have a locked cover on it to prevent anyone from falling into the pit.

SEPTIC SYSTEMS

The check of septic systems is not included in our visual inspection. You should have the local health authorities or other qualified experts check the condition of the septic system.

In order for the septic system to be checked, the house must have been occupied within the last 30 days.

WATER PIPES

Galvanized water pipes rust from the inside out and may have to be replaced within 20 to 30 years. This is usually done in two stages: horizontal piping in the basement first, and vertical pipes throughout the house later as needed. Copper pipes usually have more life expectancy and may last as long as 60 years before needing to be replaced.

HOSE BIBS

During the winter months it is necessary to make sure the outside faucets are winterized. This can be done by means of a valve located in the basement. Leave the outside faucets open to allow any water standing in the pipes to drain, preventing them from freezing. Hose bibs cannot be tested when winterized.

WATER HEATER

The life expectancy of a water heater is 5-10 years. Water heaters generally need not be replaced unless they leak. It is a good maintenance practice to drain 5-10 gallons from the heater several times a year. Missing relief valves or improper extension present a safety hazard.

WATER SOFTENERS

During a visual inspection it is not possible to determine if water is being properly softened.

PLUMBING

The temperature/pressure valve should be tested several times a year by lifting the valve's handle. Caution: very hot water will be discharged. If no water comes out, the valve is defective and must be replaced.

SHUT-OFF VALVES

Most shut-off valves have not been operated for long periods of time. We recommend operating each shut-off valve to: toilet bowl, water heater, under sinks, main shut-off, hose faucets, and all others. We recommend you have a plumber do this, as some of the valves may need to be repacked or replaced. Once the valves are in proper operating order, we recommend opening and closing these valves several times a year.

POLYBUTYLENE PIPING

This type of piping has a history of problems and should be examined by a licensed plumber and repaired or replaced as necessary.

MECHANICAL DEVICES MAY OPERATE AT ONE MOMENT AND LATER MALFUNCTION; THEREFORE, LIABILITY IS SPECIFICALLY LIMITED TO THOSE SITUATIONS WHERE IT CAN BE CONCLUSIVELY SHOWN THAT THE MECHANICAL DEVICE INSPECTED WAS INOPERABLE OR IN THE IMMEDIATE NEED OF REPAIR OR NOT PERFORMING THE FUNCTION FOR WHICH IS IT WAS INTENDED AT THE TIME OF INSPECTION.

CSST

Corrugated Stainless Steel Tubing is an alternative to traditional black iron gas piping. It is a continuous, flexible, stainless steel pipe with an exterior PVC covering.



REMARKS

HEATING AND AIR CONDITIONING units have limited lives. Normal lives are:

GAS-FIRED HOT AIR.....	15-25 years
OIL-FIRED HOT AIR.....	20-30 years
CAST IRON BOILER.....	30-50 years
(Hot water or steam)	or more
STEEL BOILER.....	30-40 years
(Hot water or steam)	or more
COPPER BOILER.....	10-20 years
(Hot water or steam)	
CIRCULATING PUMP (Hot water).....	10-15 years
AIR CONDITIONING COMPRESSOR....	8-12 years
HEAT PUMP.....	8-12 years

Gas-fired hot air units that are close to or beyond their normal lives have the potential of becoming a source of carbon monoxide in the home. You may want to have such a unit checked every year or so to assure yourself that it is still intact. Of course a unit of such an age is a good candidate for replacement with one of the new, high efficiency furnaces. The fuel savings alone can be very attractive.

Boilers and their systems may require annual attention. If you are not familiar with your system, have a heating contractor come out in the fall to show you how to do the necessary thing **Caution: do not add water to a hot boiler!**

Forced air systems should have filters changed every 30 to 60 days of the heating and cooling season. This is especially true if you have central air conditioning. A dirty air system can lead to premature failure of your compressor - a \$1,500 machine.

Oil-fired furnaces and boilers should be serviced by a professional each year. Most experts agree you will pay for the service cost in fuel saved by having a properly tuned burner.

Read the instructions for maintaining the humidifier on your furnace. A malfunctioning humidifier can rust out a furnace rather quickly. It is recommended that the humidifier be serviced at the same time as the furnace, and be cleaned regularly. **During a visual inspection it is not possible to determine if the humidifier is working.**

Have HVAC technician examine - A condition was found that suggests a heating contractor should do a further analysis. We suggest doing this before closing.

Heat exchangers cannot be examined nor their condition determined without being disassembled. Since this is not possible during a visual, non-technically exhaustive inspection, you may want to obtain a service contract on the unit or contact a furnace technician regarding a more thorough examination.

Testing pilot safety switch requires blowing out the pilot light. Checking safety limit controls requires disconnecting blower motor or using other means beyond the scope of this inspection. If the furnace has not been serviced in last 12 months you may want to have a furnace technician examine.

CO Test This is not part of a non-technical inspection. If a test was performed, the type of tester is indicated on the Heating System page.

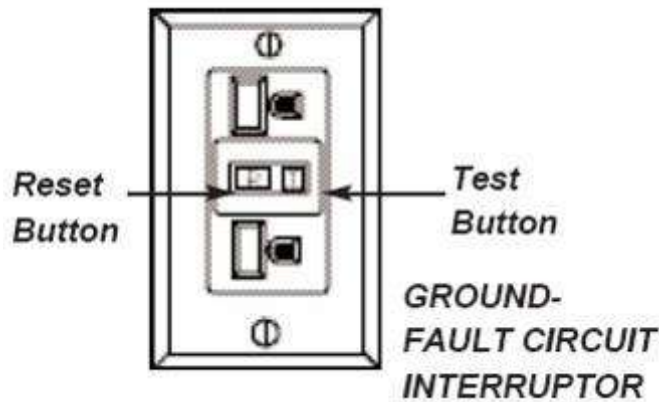
Combustible Gas Detector If a gas detector was used during the inspection of the furnace and evidence of possible combustible gases was noted, we caution you that our test instrument is sensitive to many gases and not a foolproof test. None-the-less, this presents the possibility that a hazard exists and could indicate that the heat exchanger is, or will soon be, defective.



REMARKS

Every effort has been made to evaluate the size of the service. Three wires going into the home indicate 240 volts. The total amperage can be difficult to determine. We highly recommend that ground fault interrupters (G.F.C.I.) be connected to all outlets around water. This device automatically shuts the circuit off when it senses a current leak to ground. This device can be purchased in most hardware stores. G.F.C.I.'s are recommended by all outlets located near water, outside outlets, or garage outlets. Pool outlets should also be protected with a G.F.C.I.

See diagram below:



If you do have G.F.C.I.'s, it is recommended that you test (and reset) them monthly. When you push the test button, the reset button should pop out, shutting off the circuit. If it doesn't, the breaker is not working properly. If you don't test them once a month, the breakers have a tendency to stick and may not protect you when needed.

Knob and tube wiring found in older homes should be checked by an electrician to insure that the wire cover is in good condition. Under no circumstances should this wire be covered with insulation. Recess light fixtures should have a baffle around them so that they are not covered with insulation. The newer recessed fixtures will shut off if they overheat. (no representation is made as to proper recess lighting fixtures).

Federal Pacific Stab-Lok® Electrical panels may be unsafe. See www.google.com (Federal Pacific)

Aluminum wiring in general lighting circuits has a history of over heating, with the potential of a fire. If this type of wiring exists, a licensed electrical contractor should examine the whole system.

ARC FAULTS

In some areas arc faults are required in new homes, starting in 2002 and these control outlets in the bedrooms.

REVERSE POLARITY

A common problem that surfaces in many homes is reverse polarity. This is a potentially hazardous situation in which the hot and neutral wires of a circuit are reversed at the outlet, thereby allowing the appliance to incorrectly be connected. This is an inexpensive item to correct.

Each receptacle has a brass and silver screw. The black wire should be wired to the brass screw and the white wire should go to the silver screw. When these wires are switched, this is called "reverse polarity." Turning off the power and switching these wires will correct the problem.

Main service wiring for housing is typically 240 volts. The minimum capacity for newer homes is 100 amps though many older homes still have 60 amp service. Larger homes or all electric homes will likely have a 200 amp service.

Main service wiring may be protected by one or more circuit breakers or fuses. While most areas allow up to six main turnoffs, expanding from these panels is generally not allowed.

COOLING

Testing A/C System and Heat Pump- The circuit breakers to A/C should be on for a minimum of 24 hours and the outside temperature at least 60 degrees for the past 24 hours or an A/C system cannot be operated without possible damage to the compressor. Check the instructions in your A/C manual or on the outside compressor before starting up in the summer. Heat pump can only be tested in the mode it's running in. Outside temperature should be at least 65° for the past 24 hours to run in cooling mode.

Temperature differential, between 14°-22°, is usually acceptable. If out of this range, have an HVAC contractor examine it. It is not always feasible to do a differential test due to high humidity, low outside temperature, etc.

COSTS OF REMODELING OR REPAIR

The prices quoted below include a range of prices based on a typical metropolitan area. Individual prices from contractors can vary substantially from these ranges. We advise that several bids be obtained on any work exceeding \$500 dollars. **DO NOT RELY ON THESE PRICES... GET FURTHER ESTIMATES.**

ITEM	UNIT	ESTIMATED PRICE
Masonry fireplace	Each	\$4,000 - \$8,000
Install prefab fireplace	Each	2,000 - 4,000
Insulate attic	Square foot	.75 - 1.25
Install attic ventilating fan	Each	200 - 300
Install new drywall over plaster	Square foot	1.75 - 2.75
Install new warm air furnace	Each	1,800 - 3,500
Replace central air conditioning/heat pump	Per ton	1,000 - 1,500
Install humidifier	Each	300 - 500
Install electrostatic air cleaner	Each	800 - 1,500
Increase electrical service to 200 amps	Each	1,000 - 1,500
Run separate elec. line for dryer	Each	125 - 200
Run separate elec. line for A/C	Each	135 - 200
Install hardwired smoke detector	Each	100 - 180
Install new disposal	Each	150 - 250
Install new dishwasher	Each	500 - 1,000
Install new hot water boiler	Each	2,000 - 4,000
Install new 30-50 gallon water heater	Each	350 - 650
Install new 75 gallon water heater	Each	750 - 1,000
Dig and install new well	Each	get estimate
Install new septic system	Each	get estimate
Re-grade around exterior	Each	get estimate
Install new sump pump	Each	150 - 300
Build new redwood or pressure-treated deck	Square foot	15 - 30
Install storm windows	Each	60 - 150
Install wood replacement windows	Each	400 - 800
Install aluminum or vinyl replacement window	Each	150 - 400
Install new gutters and downspouts	Lineal foot	4.00 - 8.00
Install asphalt shingle o/existing	Square foot	1.20 - 1.70
Tear off existing roof and install new asphalt shingle roof	Square foot	2.50 - 4.00
Install 1-ply membrane rubberized roof	Square foot	get estimate
Install new 4-ply built-up tar & gravel	Square foot	get estimate
Remove asbestos from pipes in basement	Lineal foot	get estimate
Concrete drive or patio	Square foot	4.50 - 9.00
Plus removal of old	Square foot	1.50 - 3.00
Clean chimney flue	Each	100 - 200
Add flue liner for gas fuel	Each	900 - 1,200
Add flue liner for oil or wood	Each	2,800 - 3,500

Deferred Costs - It is impossible to determine how long these items will last before needing replacement. The report addresses most of these items from a "condition" standpoint.

PREVENTIVE MAINTENANCE TIPS

- I. **FOUNDATION & MASONRY:** *Basements, Exterior Walls:* To prevent seepage and condensation problems.
 - a. Check basement for dampness & leakage after wet weather.
 - b. Check chimneys, deteriorated chimney caps, loose and missing mortar.
 - c. Maintain grading sloped away from foundation walls.

- II. **ROOFS & GUTTERS:** To prevent roof leaks, condensation, seepage and decay problems.
 - a. Check for damaged, loose or missing shingles, blisters.
 - b. Clean gutters, leaders, strainers, window wells, drains. Be sure downspouts direct water away from foundation. Cut back tree limbs.
 - c. Check flashings around roof stacks, vents, skylights, chimneys, as sources of leakage. Check vents, louvers and chimneys for birds nests, squirrels, insects.
 - d. Check fascias and soffits for paint flaking, leakage & decay.

- III. **EXTERIOR WALLS:** To prevent paint failure, decay and moisture penetration problems.
 - a. Check painted surface for paint flaking or paint failure. Cut back shrubs.
 - b. Check exterior masonry walls for cracks, looseness, missing or broken mortar.

- IV. **DOORS AND WINDOWS:** To prevent air and weather penetration problems.
 - a. Check caulking for decay around doors, windows, corner boards, joints. Recaulk and weatherstrip as needed. Check glazing, putty around windows.

- V. **ELECTRICAL:** For safe electrical performance, mark & label each circuit.
 - a. Trip circuit breakers every six months and ground fault circuit interrupters (G.F.C.I.) monthly.
 - b. Check condition of lamp cords, extension cords & plugs. Replace at first sign of wear & damage.
 - c. Check exposed wiring & cable for wear or damage.
 - d. If you experience slight tingling shock from handling or touching any appliance, disconnect the appliance & have it repaired. If lights flicker or dim, or if appliances go on and off unnecessarily, call a licensed electrician.

- VI. **PLUMBING:** For preventive maintenance.
 - a. Drain exterior water lines, hose bibs, sprinklers, pool equipment in the fall.
 - b. Draw off sediment in water heaters monthly or per manufacturer's instructions.
 - c. Have septic tank cleaned every 2 years.

- VII. **HEATING & COOLING:** For comfort, efficiency, energy conservation and safety.
 - a. Change or clean furnace filters, air condition filters, electronic filters as needed.
 - b. Clean and service humidifier. Check periodically and annually.
 - c. Have oil burning equipment serviced annually.

- VIII. **INTERIOR:** General house maintenance.
 - a. Check bathroom tile joints, tub grouting & caulking. Be sure all tile joints in bathrooms are kept well sealed with tile grout to prevent damage to walls, floors & ceilings below.
 - b. Close crawl vents in winter and open in summer.
 - c. Check underside of roof for water stains, leaks, dampness & condensation, particularly in attics and around chimneys.

- IX. **Know the location of:**
 - Main water shutoff valve.
 - Main electrical disconnect or breaker.
 - Main emergency shutoff switch for the heating system.
