

# Building Inspection Report



**123 Any Street, Our City**

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**Inspection Date:** July 2, 2007

**Prepared For:** New Homeowner

**Prepared By:**

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**Report Number:** 1234

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American Society of Home Inspectors® Certified Inspector

*FOR OTHER THAN THE ABOVE-NAMED:*

*If you are not named above and wish to use this report, we strongly urge that you retain HomeWise Inspections, Inc. or other qualified inspection firm for an on-site review of this building and report. This report is based on information obtained at the site. With time, conditions change and the information may no longer be accurate. We will return and review the building and report with any interested party for an additional fee. This offer is good for 6 months from the date of inspection, after which a complete re-inspection should be performed.*

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# Report Overview

## THE HOUSE IN PERSPECTIVE

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This building is a single-family residence. This is a single story structure over a partial basement.

The building interior was partially furnished. Areas obscured by furnishings were not accessible to inspection. These areas should be examined after the furnishings have been removed. The sky was cloudy at the time of our inspection.

This report describes the building as viewed from the street.

We were informed the house was built in 1923. Several modifications have been made to the building. We recommend a permit history be obtained from the local building department to determine if modifications to the building were made with proper permits.

## CONVENTIONS USED IN THIS REPORT

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

- **Major Concern:** denotes an unservicable condition of a major system or component that in our opinion indicates a compromise to its ability to perform its intended function. We recommend that immediate action be taken to correct the condition. A qualified contractor or specialist should be consulted for specific recommendations and/or corrective work and to determine if additional conditions exist within the system or component requiring correction. Significant deficiencies need to be corrected and, except for some safety items, are likely to involve significant expense
- **Safety Issue:** denotes an observation or recommendation that is considered an immediate safety concern or potential hazard to life or property. We recommend these concerns be addressed immediately by a qualified contractor or specialist.
- **Repair:** denotes a minor repair or improvement that should be anticipated over the short term. This type of condition is normally addressed by homeowner maintenance but may require the service of a handyman or contractor.
- **Improve:** denotes improvements which are recommended but not required.
- **Monitor:** denotes an area where further investigation and/or monitoring is needed. Repairs may be necessary. During the inspection, there was insufficient information. Recommendations cannot be determined until further investigation or observations are made.

## PRIMARY RECOMMENDATIONS / SUMMARY

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The following is a list of the recommendations we believe to be the most important. Those recommendations should not be considered the only significant items. You should establish your own priorities after thoroughly studying this report, reviewing all the recommendations in the report, and consulting experts or specialists as desired.

### Right Front Porch

- **Repair:** The steps are not even. We recommend the inconsistent steps be modified or rebuilt for safe usage.
- **Major Concern:** This porch is supported by wood framing. We observed evidence of wood destroying insect pests in several places in the framing below the porch. We recommend examination and repair by a qualified pest control firm.

### Right Front Stairway to Street

- **Repair:** The steps are not even. We recommend the inconsistent steps be modified or rebuilt for safe usage.

### Handrails & Guardrails

- **Repair:** We recommend proper railings be installed as needed for safety.

### Lot Drainage

- **Repair:** We observed indications of marginal or faulty grade conditions at the left and at the right front porch. We recommend a careful examination of potential faulty and marginal grade areas be made by a qualified pest control firm.

### Retaining Walls

- **Repair:** The wall by the driveway is not provided with guardrails. We recommend safety barriers be installed.

### Roof Drainage

- **Repair:** We recommend the downspouts be extended away from the foundation.

**Foundation**

- **Major Concern:** Portions of the foundation at the front appear constructed of a poor quality concrete and the concrete has deteriorated in several places. We recommend this foundation be examined by a qualified engineer and modified as needed by a qualified contractor, sufficient to provide adequate structural support for the building.

**Basement**

- **Major Concern:** We observed indications of previous water entry on the basement floors in the laundry and at the base of the walls in the right rear room. We recommend the area drainage be reviewed by a qualified contractor or engineer and improved as needed to prevent significant water entry.

**Crawl Space / Subfloor Area**

- **Repair:** We recommend ¼ inch mesh vent screens be installed as needed to prevent pest entry beneath the building.

**Substructure Framing**

- **Major Concern:** We observed indications of wood destroying insect pest activity and moisture related damage in the subfloor area and at the left of the garage. We recommend the damaged wood be replaced. We recommend a qualified pest control firm be consulted to determine the presence of pest damage, decay, or other wood-destroying organisms.
- **Repair:** There is direct contact between wood framing and the soil at the right rear of the crawlspace. We recommend all wood-soil contact be eliminated.
- **Repair:** Anchor bolts have been added to the foundation in several places. Several of the bolts are not fully driven into the foundation at the right front. We recommend additional bolts be installed by a qualified contractor where needed.
- **Improve:** We recommend a qualified engineer be retained to examine the building structure and foundation and to review the current upgrades and design or specify any additional seismic improvements appropriate for this building.

**Main Distribution Panel**

- **Major Concern:** This panel is an outdated Federal Pacific Stab-Lok type. We recommend this panel be replaced with a modern circuit breaker panel.
- **Repair:** There is an oversized breaker in this panel. We recommend a proper breaker be installed.

**Wiring**

- **Repair:** There are exposed splices in the crawl space. We recommend proper junction boxes be installed as needed.

**Receptacles**

- **Repair:** There are several ungrounded 3-hole outlets. We recommend each 3-hole outlet be examined by a qualified electrician and properly grounded as needed.
- **Repair:** We recommend additional outlets be added as needed for convenience and safety.

**GFCI's**

- **Repair:** We recommend adding Ground-Fault-Circuit-Interrupter protection to meet current safety standards.
- **Repair:** The GFCI outlet at the rear exterior does not disconnect and we recommend it be repaired or replaced.

**Switches**

- **Repair:** The three way switches at the basement stairway are improperly wired and we recommend repair.

**Water Supply Plumbing**

- **Major Concern:** There is a significant drop in water flow in the lower bathroom when several valves are operated at the same time. We recommend the water flow be reviewed by a qualified plumber and that the system be modified as needed to provide adequate flow at the fixtures.

**Drain / Waste / Vent**

- **Repair:** The fixture trap at the kitchen sink is not properly configured. The arm after the trap slopes up. We recommend this piping be properly installed by a qualified plumber.

**Gas**

- **Improve:** We recommend a motion sensitive automatic gas shutoff valve be installed.

**Sump Pump**

- **Repair:** We observed a well for a sump pump at the rear exterior. There is no pump installed and we recommend a pump be properly installed by a qualified contractor.
- **Repair:** The sump pit should be properly covered for improved safety.

**Furnace**

- **Repair:** There are visible deposits on the vent piping. We recommend that the vent piping be examined by a qualified heating contractor and repaired or replaced as needed.
- **Repair:** We recommend a qualified furnace company be retained to service this equipment.

**Walls / Ceilings**

- **Repair:** The bottom edges of the walls in the basement room at the right rear are damaged by moisture. We recommend the damaged wood be replaced. We recommend examination by a qualified pest control firm.

**Floors**

- **Repair:** The floor finish is worn in several places. We recommend the floors be refinished as needed.
- **Repair:** There is a low laundry chute opening in the hall closet. We recommend a childproof latch be installed.

**Stairways**

- **Repair:** The stairs are unusually steep and would not be allowed in new construction. The staircase is unusually narrow. The overhead clearance above the stairway is not sufficient and could cause injury.
- **Repair:** There are large openings in the railings by the stair opening and we recommend the railings be modified for safer use.

**Windows**

- **Safety Issue:** The windows in the basement right rear room are too small and too high to provide safe escape in a fire and we recommend adequate egress be provided.
- **Safety Issue:** The glass in several doors is apparently untempered. We recommend the glass in areas of potential impact be replaced with safety glass or that protective safety films be applied to the glass in these areas.

**Doors**

- **Repair:** The rear bedroom and basement doors stick and we recommend they be repaired to operate properly.
- **Repair:** One of the laundry doors drags on the floor and we recommend it be repaired to operate freely.
- **Repair:** The basement rear exterior door is damaged by moisture at the bottom edge and we recommend it be repaired or replaced. We recommend examination by a qualified pest control firm.
- **Repair:** A basement rear exterior door opens over several steps down. We recommend the door be modified to swing in the other direction or that a platform be built which is level with the floor.

**Upper Hall Bathroom**

- **Repair:** The shower hot - cold valves are reversed and we recommend they be changed to the standard hot/left, cold/right position.

**Kitchen**

- **Repair:** The refrigerator area is not provided with a grounded 3-hole receptacle and we recommend a grounded 3-hole receptacle be installed.
- **Repair:** The counter space at the left of the sink is not provided with receptacles. We recommend GFCI protected outlets be added.
- **Repair:** The disposer and trash compactor are wired with Romex cable with a plug attached. We recommend proper flexible appliance cords be installed.

**Garage**

- **Repair:** There was no electrical power to the garage. We recommend repair as needed by a qualified electrician.
- **Repair:** Water appears to flow through the vehicle door in wet weather. We recommend a proper drain or diverter be installed to keep water off the garage floor.
- **Repair:** There is a drain in the garage floor at the rear. The drain appears clogged and we recommend it be cleared.
- **Repair:** The vehicle doors are damaged by moisture and we recommend they be repaired or replaced. We recommend examination by a qualified pest control firm.
- **Repair:** We observed moisture-related damage to the garage framing in several places at the right. We recommend the damaged wood be replaced. We recommend this area be examined by a qualified pest control firm.

**Chimney**

- **Repair:** The ash pit cleanout door is loose and we recommend it be repaired.

**Fireplace**

- **Repair:** There is no damper and we recommend one be installed.

## THE SCOPE OF THE INSPECTION

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This report is a general overview of the structural components and major systems. It is not intended to be technically exhaustive in any one field. If further information is desired, specialists in the relevant fields should be retained to perform additional inspections.

A determination as to the presence of animal pests, rodents, termites, decay or other wood destroying organisms is beyond the scope of this inspection. A qualified pest control firm should be contacted with any questions concerning the presence or treatment of these organisms. We are not qualified in these fields. Periodic examinations should be made by a licensed pest control firm as part of routine property maintenance.

We may make recommendations or suggestions in this report that differ from requirements by the local building department. For determinations as to what is permitted in this jurisdiction, the local building department should be consulted.

This report includes only those areas that are visually accessible and not areas that are made inaccessible by walls, concrete, earth, or any other obstacle to physical access or visual inspection, such as furniture or stored items. Defects in mechanical equipment not disclosed by our functional operation or visual inspection are not included. Items or conditions not mentioned in this report are not within the scope of this inspection. An examination of every window, door, light switch, outlet, water valve, etc., was not made. No destructive testing or dismantling of building components is performed.

It is the goal of the inspection to put a homebuyer in a better position to make a buying decision. Not all defects 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.

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

# Exterior

## DESCRIPTION OF EXTERIOR

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<b>Siding:</b>	•Stucco
<b>Soffit / Fascia:</b>	•Wood •Stucco
<b>Window/Door Frames and Trim:</b>	•Wood
<b>Right Front Porch:</b>	•Concrete over wood framing
<b>Right Front Stairway to Street:</b>	•Concrete
<b>Rear Deck:</b>	•Wood & composite wood
<b>Lot Slope:</b>	•Moderate slope •Site slopes down to right & front
<b>Walkways:</b>	•Concrete •Brick
<b>Retaining Walls:</b>	•Concrete
<b>Driveway:</b>	•Concrete
<b>Fencing:</b>	•Wood

## EXTERIOR RECOMMENDATIONS/OBSERVATIONS

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### Exterior Walls

- **Monitor:** We observed normal stucco cracking in several places. Periodic repair of stucco cracking should be expected as part of routine maintenance.

*Stucco consists of a cement and sand plaster, held in place with wire mesh and installed over a water resistant membrane. New stucco is typically pigmented rather than painted, and the surface may show absorption of moisture from rains. Stucco cracking is common and may be caused by movement in the wall framing, foundation settling, seismic activity, or stucco shrinkage. Minor cracks usually do not need repair and are normally filled when the stucco is painted. Cracks large enough to allow water entry should be caulked or patched. In relatively new construction, the bottom of the stucco typically has a metal edge called a "drip screed". The soil surface should be maintained below this edge to prevent moisture and termite entry behind the stucco. In older buildings, the bottom of the stucco often extends below soil level and may conceal moisture or termite entry. These areas should be inspected regularly by a pest control firm.*

- **Monitor:** The building exterior has been recently painted. Recent painting conceals historical evidence.

### Right Front Porch

- **Repair:** The steps are not even. We recommend the inconsistent steps be modified or rebuilt for safe usage. The difference in height between individual steps should not be more than 3/8 inch.
- **Repair:** The painted walking surfaces could be slippery when wet. We suggest self-adhering strips or non-slip paint be applied to provide safer walking surfaces.
- **Major Concern:** This porch is supported by wood framing. We observed evidence of wood destroying insect pests in several places in the framing below the porch. We recommend examination and repair by a qualified pest control firm. *Concrete, brick, tile, and other masonry stairs, landings, and decks are often supported by wood framing. A membrane is typically placed over the framing to prevent moisture entry and damage. This membrane is typically not visible. The framing beneath should be checked regularly for signs of water penetration. Any cracks or openings in these surfaces should be caulked or filled to prevent water entry.*

### Right Front Stairway to Street

- **Repair:** The steps are not even. We recommend the inconsistent steps be modified or rebuilt for safe usage. The difference in height between individual steps should not be more than 3/8 inch.
- **Repair:** The painted walking surfaces could be slippery when wet. We suggest self-adhering strips or non-slip paint be applied to provide safer walking surfaces.

### Rear Deck

This deck is in new condition.

### Handrails & Guardrails

- **Repair:** Handrails are not provided for both staircases at the right front porch and at the right front concrete stair to the street. The right front porch guardrails are too low. We recommend proper railings be installed as needed for safety. *Staircases with four or more steps should have handrails that are between 1 1/2 and 2 inches wide. Handrails should be placed and shaped so they can be readily grasped for safety. Handrails should be 34 to 38 inches above the leading edge of the stairway treads. Handrails should return to the railing or post or to the ground. Handrails should not end in a projection which could be hooked by clothing. Modern building standards call for guard railings at least 42 inches high at every deck, stair, or landing more than 30 inches above an adjacent surface, and for openings in the rail to be less than 4 inches in diameter. Large railing openings which may allow a child to fall through should be modified for safety. This standard was recently changed from 6 inches to 4 inches as it was found that small children can slip through a 6 inch opening.*

### Lot Drainage

- **Repair:** We observed indications of marginal or faulty grade conditions at the left and at the right front porch. We recommend a careful examination of potential faulty and marginal grade areas be made by a qualified pest control firm. *A faulty grade (where the exterior soil level is above the top of the concrete or masonry foundation) can allow moisture penetration, leading to decay and termite infestation. The standard in new construction is for the top of the foundation to be at least 6 inches above the soil level. Removal of soil adjacent to the foundation can eliminate a faulty grade condition, but it may also direct surface water toward the foundation. Typical repair methods include: a concrete cap on top of the foundation to raise it above the exterior soil level; a concrete curb outside the foundation to act as a moisture barrier; or a low concrete or wood retaining wall to hold soil away from the foundation. A qualified contractor should be consulted as to the appropriate repair method.*
- **Monitor:** The surfaces adjacent to the foundation at the front are low and may direct surface water towards the foundation, contributing to a defective drainage condition. Ideally all adjacent surfaces should slope away from the foundation. These areas should be monitored during wet weather and the grading be corrected if necessary.

### Walkways

- **Repair:** The front walkways are uneven and there are potential trip hazards. We recommend the walking areas be examined and repaired as needed to provide for safe foot traffic.
- **Repair:** The painted walking surfaces at the front and right could be slippery when wet. We recommend self-adhering strips or non-slip paint be applied as needed to provide safer walking surfaces.

### Retaining Walls

- **Monitor:** There are several cracks in the front retaining walls. *Cracks in masonry, concrete block, or concrete retaining walls may be formed by settlement or pressures of the soils retained by the walls. Minor cracking is common. Major cracking may indicate settlement or lack of adequate drainage systems behind the retaining wall.*
- **Monitor:** The retaining wall by the driveway is leaning. *Leaning may indicate that retaining walls are not adequate to support the soil behind them. Substantial leaning indicates there is a potential for failure and that the retaining walls should be replaced for safety. Generally, new walls higher than 4 feet must be designed by a qualified engineer.*
- **Repair:** The wall by the driveway is not provided with sufficient barriers or guardrails to prevent a fall. We recommend adequate safety barriers be installed.

### Fencing

- **Repair:** The gate at the right rear of the garage is difficult to operate. We recommend the gate be repaired or adjusted as necessary for convenient operation.



## **LIMITATIONS OF EXTERIOR INSPECTION**

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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, erosion control and earth stabilization measures are not inspected unless specifically agreed-upon and documented in this report.
- Landscaping and plants restricted our view of some exterior areas of the house.
- Debris in the driveway restricted our inspection of the area.
- Portions of the fencing are covered with plant growth and are not accessible to inspection.

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

# Roofing

## DESCRIPTION OF ROOFING

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<b>House Roof Covering:</b>	•Laminated, composition asphalt shingles & modified bitumen
<b>Method of Inspection:</b>	•Walked on roof
<b>Garage Roof Covering:</b>	•Modified bitumen
<b>Method of Inspection:</b>	•Walked on roof
<b>Flashings:</b>	•Sheet metal •Mastic •Modified bitumen
<b>Roof Drainage:</b>	•Membrane fascia gutters & metal downspouts

## ROOFING RECOMMENDATIONS/OBSERVATIONS

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### House Roof

The roof is in new condition. We recommend the installing contractor be contacted for information on this installation and a review of any applicable guarantees or warranties.

We observed one layer of roofing material.

- **Monitor:** A membrane seam is reversed at the front and the edges are lapped facing the flow of water. We recommend it be monitored periodically for delamination and corrected if necessary.
- **Improve:** We recommend the trees over or near the roof at the right front be trimmed well away from the roof surface to prevent debris accumulation and roof surface damage.
- **Improve:** There is an accumulation of debris on the roof surfaces at the right front. We recommend debris be removed periodically as part of routine maintenance. The portions of the roof covered with debris are not accessible for inspection.

### Garage Roof

The roof is also in new condition. We recommend the installing contractor be contacted for information on this installation and a review of any applicable guarantees or warranties.

### Roof Flashings

- **Repair:** Mastic was used at several of the roof flashing connections.  
*Mastic is the general name for a thick roof patching compound or cement. It is considered a temporary method to seal connections. Mastic dries out and cracks, typically requiring a new application every 2 to 4 years. Painting the mastic can help protect it from the sun and give a better appearance. The best procedure is to replace old metal flashings when a new roof is installed. It is common practice in some areas to leave old flashings in place and to cover them with mastic when applying new roofing over an existing roof surface.*
- **Repair:** A piping penetration at the right rear is not adequately sealed. We recommend the roof piping penetration flashings be sealed as needed by a qualified contractor.
- **Improve:** There is an unpainted black ABS plastic plumbing vent pipe that is exposed to the sun at the right rear. All exposed plastic pipes should be painted for solar protection.

### Roof Drainage

- **Monitor:** This roof has membrane fascia type rain gutters. The “fascia” or horizontal roof edge boards form a channel which holds water which should be directed to the downspouts. This channel is lined with the roof membrane. This portion of the roof may be subject to deterioration more rapidly than other areas, and may require periodic coatings repair by a qualified roofer.
- **Repair:** Several downspouts empty near the foundation walls. We recommend the downspouts be extended away from the foundation.

*Substantial water will flow from a roof and enter the foundation area unless it is directed away from the building perimeter, which is usually done by installing extensions or splash blocks for the downspouts. Subsurface drain piping may be needed in some areas to provide adequate drainage.*

- **Monitor:** Several rain gutter downspouts are directed into subsurface drain lines. Flexible corrugated plastic tubing has been used for the subsurface piping. This material, while common, is more susceptible to clogging and is more difficult to clean out than the preferred rigid smooth wall plastic piping.

*Rain gutter downspouts are sometimes connected to underground drainage systems to prevent water from ponding adjacent to the foundation where it could adversely affect the soils supporting the building. Catch basins or surface mounted drains may also be connected to this piping. Subsurface drain piping can become clogged with debris and should be checked periodically in rainy weather or by using water from a garden hose to be sure the drains are free flowing.*

## LIMITATIONS OF ROOFING INSPECTION

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As we have discussed and as described in your inspection contract, this is a visual inspection only. Roofing life expectancies can vary depending on several factors. Any estimates of remaining life are approximations only. This assessment of the roof does not preclude the possibility of leakage. Leakage can develop at any time and may depend on rain intensity, wind direction, ice build up, etc. The inspection of the roofing system was limited in scope by (but not restricted to) the following conditions:

- The entire underside of the roof sheathing was not inspected for evidence of leaks.
- Evidence of prior leaks may be disguised by interior finishes.
- 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.

# Structure

## DESCRIPTION OF STRUCTURE

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<b>Foundation:</b>	<ul style="list-style-type: none"> <li>•Raised perimeter concrete</li> <li>•Intermediate concrete piers &amp; walls</li> <li>•Basement and crawl space configuration</li> </ul>
<b>Method of Inspection:</b>	<ul style="list-style-type: none"> <li>•Walking &amp; crawling beneath the accessible portions of the building</li> </ul>
<b>Columns:</b>	<ul style="list-style-type: none"> <li>•Wood</li> </ul>
<b>Floor Structure:</b>	<ul style="list-style-type: none"> <li>•1" (nominal) deck boards over 2" (nominal) joists</li> <li>•Concrete</li> </ul>
<b>Wall Structure:</b>	<ul style="list-style-type: none"> <li>•Wood frame</li> </ul>
<b>Ceiling Structure:</b>	<ul style="list-style-type: none"> <li>•Joist</li> </ul>
<b>Roof Structure:</b>	<ul style="list-style-type: none"> <li>•Rafters</li> <li>•Solid plank sheathing</li> </ul>

## STRUCTURE RECOMMENDATIONS/OBSERVATIONS

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### Foundation

- **Monitor:** The foundation supporting this structure is outdated by modern standards. *The concrete does not appear to be steel reinforced and probably does not have footings which extend deeply into the soil. Foundations of this type are typically more susceptible to cracking, settlement, deterioration from moisture entry, and earthquake damage. For information as to the structural adequacy of concrete foundations a qualified engineer should be consulted.*
- **Repair:** We observed substantial efflorescence and spalling on the foundation walls in the basement at the left rear indicating an excessive moisture condition (see Basement below). *Efflorescence is a white powdery deposit which occurs on masonry or concrete. Efflorescence indicates the presence of moisture in contact with the masonry or concrete. Substantial efflorescence usually indicates a defective drainage condition. We recommend the drainage be improved.*



- **Major Concern:** Portions of the foundation at the front appear constructed of a poor quality concrete and the concrete has deteriorated in several places. We recommend this foundation be examined by a qualified engineer and modified as needed by a qualified contractor, sufficient to provide adequate structural support for the building.

*Concrete is a mixture of sand, cement, and rocks (aggregate). Too much rock was used in many older foundations, making it porous and weak. Round beach sand was often used instead of sharp sand from a quarry. Old, poor quality concrete is susceptible to moisture entry and will often crumble and deteriorate with age, causing settlement. Some building departments will not permit the installation of earthquake bolts into poor quality concrete. In order to adequately reinforce these buildings against seismic activity it may be necessary to install new concrete foundation walls.*

*Concrete deterioration and spalling are usually the result of prolonged moisture penetration. As moisture moves through the concrete and dries on the surface, mineral salts dissolved in the water form crystals which expand and cause surface crumbling (spalling). Minor surface deterioration is common in older foundations. With continued moisture penetration over many years, the concrete may deteriorate to the point where replacement becomes necessary.*

### **Basement**

- **Major Concern:** We observed indications of previous water entry on the basement floors in the laundry and at the base of the walls in the right rear room. It may be necessary to install a drainage system or sump pump to correct a significant moisture problem. There is a sump pump well and possible drainage piping visible at the rear exterior. We recommend the area drainage be reviewed by a qualified contractor or engineer and improved as needed to prevent significant water entry.

*Floors which are below the exterior soil level may be subject to water or moisture entry, especially in very rainy weather. Valuable items should be stored on boards or pallets to prevent moisture damage. If carpeting is used, we suggest it be loosely installed so it can be easily pulled back for drying. It is not unusual to find occasional or unexpected water entry in below grade areas which have been dry for years.*

- **Monitor:** We observed wood floors in the basement at the right rear and were unable to obtain access below them. We observed no obvious indications of damage beneath these floors.

*There is a potential for hidden decay or termite damage beneath wood floors when they are placed directly over concrete or soil. A destructive examination may be the only way to determine the condition of the inaccessible areas. A qualified pest control firm should be retained to determine if there are indications of potential damage.*

### **Crawl Space / Subfloor Area**

The sub area soils were dry.

- **Repair:** The subarea ventilation is minimal. There are several louvered foundation vent screens. Louvered vents may reduce the flow of air and sunlight necessary for good subfloor ventilation. Screened vents with 1/4-inch corrosion-resistant mesh are preferred for proper ventilation. We recommend the louvered vents be replaced with modern screen vents to improve subarea ventilation.

*Under-floor areas should be provided with ventilation openings which have an area not less than 1 square foot for each 150 square feet of under-floor area. Openings should be provided close to the corners and should provide cross ventilation. The vent openings should be distributed equally along the length of at least two opposite sides and should be covered with 1/4 inch wire mesh. Four-by-fourteen inch vents are typically installed every 6-8 feet. There are many ways to provide ventilation and the best method should be decided after consulting a qualified contractor or the local building department. If natural cross-circulation is not obtainable with vent openings, it may be necessary to install a mechanical venting system with fans and ducts.*

- **Repair:** The foundation vent screen at the left rear is damaged. A foundation vent screen at the right has large openings. We recommend 1/4 inch mesh vent screens be installed as needed to prevent pest entry beneath the building.
- **Improve:** Wood scraps, possible food for termites and conducive to their growth, are present on the subarea soils. We recommend all wood scraps and other debris be removed.
- **Monitor:** We found indications of previous rodent activity in the subfloor area. We recommend the subfloor area be monitored for rodents and that appropriate measures taken if they return.

## Substructure Framing

- **Monitor:** As is typical of this age of construction, the undersides of the floors are not insulated nor is there a vapor barrier present. The installation of under-floor insulation can help reduce heating costs.

*Floor framing insulation is important over unheated basements or crawlspaces in cold winter areas. In areas with moderate winters, flooring insulation is preferred but not always required.*

- **Major Concern:** We observed indications of wood destroying insect pest activity and moisture related damage in the subfloor area and at the left of the garage. We recommend the damaged wood be replaced. We recommend a qualified pest control firm be consulted to determine the presence of pest damage, decay, or other wood-destroying organisms.
- **Monitor:** We observed several stains on the subarea framing apparently indicating previous water entry or leakage. A current pest control report should be consulted concerning the presence of decay or other moisture related damage.

*Moisture stains indicate previous water penetration. Stains are commonly found around bathroom and kitchen waste piping or at the building perimeter and may also indicate previous leaks which have since been repaired. Any indications of active leakage or moisture-related damage should be promptly repaired by a qualified contractor.*

- **Repair:** There is direct contact between wood framing and the soil at the right rear of the crawlspace. We recommend all wood-soil contact be eliminated.

*Adequate clearance between soil and wood should be maintained to prevent moisture or insect damage to wood supports and framing. Wood which has been in contact with soil should be examined by a qualified pest control operator upon clearing the soils away from the wood.*

- **Repair:** A floor joists is notched at the left rear of the crawlspace. This weakens the joist. We recommend the joists be repaired or replaced.
- **Monitor:** Several aspects of the substructure framing are outdated and would be considered substandard according to modern construction practice. There is no joist blocking above the center support beams. This framing may need modification during future seismic upgrading.

Several plywood bracing panels are present.

*The installation of plywood bracing (often referred to as "shear paneling") on wall framing provides earthquake and wind resistance. It is typically used on the walls between the foundation and floor framing and around garage door openings. The panels should be nailed at all edges and at the intermediate members.*

- **Repair:** Anchor bolts have been added to the foundation in several places. Several of the bolts are not fully driven into the foundation at the right front. We recommend additional bolts be installed by a qualified contractor where needed.

*Anchor bolts and other devices are used to secure the framing to the foundation to resist displacement during earthquakes or high winds. The modern standard is for bolting at least every six feet, and with bolts within the last 12 inches of each piece of sill plate. When bolting is "retrofitted" or added to an existing building the spacing is determined by an engineer and is usually every four feet or less. Buildings greater than one story or on hillsides may require additional bolts and other seismic devices.*



- **Repair:** Round machine washers are installed under the anchor bolt nuts. We recommend the large square, thick, bearing plate washers currently required be installed as a seismic upgrade. These washers are designed to spread the load and help prevent the sill plate from splitting during an earthquake.

- **Improve:** The requirements for earthquake reinforcement are constantly changing and have been recently revised. We recommend a qualified engineer be retained to examine the building structure and foundation and to review the current upgrades and design or specify any additional seismic improvements appropriate for this building according to current standards.

#### Attic

- **Repair:** The attic access opening is too small by modern standards and we suggest it be enlarged to provide for better and safer access.
- **Monitor:** There are several stains on the roof framing. Stains are common in attic areas and do not necessarily indicate active leakage.
- **Improve:** Only minimal ventilation is provided to the attic area. We suggest additional ventilation be provided.

*Adequate attic ventilation is important to prevent the accumulation of moisture which can cause decay and damage and to prevent excessive attic temperatures. Improved ventilation can reduce attic and interior room temperatures. We recommend the installation of a power ventilator fan be considered.*

- **Improve:** The attic is insulated with loose cellulose that is approximately 8 to 10 inches thick. The standard for new construction is eight to ten inches insulation to achieve a value of R-30.
- **Monitor:** The insulation has likely been installed over knob and tube electrical wiring.

*Special procedures should be followed prior to insulating an attic with knob and tube wiring, including an inspection of the wiring by a qualified electrician who can certify it as safe. A warning notice should be posted stating that live wiring is present beneath the insulation. One method to reduce the risk of wire overheating is to lower the amperage carried by the wiring. This can be done by installing 15-amp fuses or breakers to protect the circuits with knob and tube wiring. Buried wiring is inaccessible to our inspection.*

#### Roof Framing

- **Monitor:** The framing is sagging noticeably in several places. Several aspects of the attic framing are outdated and the framing appears undersized by modern standards. The attic framing should be examined and reinforced as needed by a qualified contractor before new roofing or other weight is placed on the framing.

## LIMITATIONS OF STRUCTURE INSPECTION

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As we have discussed and as described in your inspection contract, this is a visual inspection only. Assessing the structural integrity of a building is beyond the scope of a typical home inspection. A certified professional structural engineer is recommended where there are structural concerns about the building. Inspection of structural components was 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 was inspected.
- Furniture and/or storage restricted access to some structural components.
- Insulation/ventilation type and levels in concealed areas are not inspected. Insulation and vapor barriers are not disturbed and no destructive tests (such as cutting openings in walls to look for insulation) are performed.
- Engineering or architectural services such as calculation of structural capacities, adequacy, or integrity are not part of a home inspection.
- Any estimates of insulation depths are rough average values.
- The attic was not entered and inspected from the opening only to prevent damage to the insulation and ceilings below. Portions of the attic were not visible.

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

# Electrical

## DESCRIPTION OF ELECTRICAL

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<b>Service:</b>	•Location: Left front •120 / 240 Volt
<b>Service Entrance Wires:</b>	•Overhead
<b>Service Capacity:</b>	•100 Amp
<b>Service Ground:</b>	•Copper •Connection: Water pipe
<b>Main Distribution Panel:</b>	•Location: Left front exterior •Breakers
<b>Main Disconnect:</b>	•Location: Main distribution panel •100 Amp breaker
<b>Distribution Wiring:</b>	•Knob-and-Tube Copper •Non-Metallic Cable (Romex) •AC/BX (Armored Cable) •Conduit
<b>Receptacles:</b>	•Grounded and ungrounded
<b>Ground Fault Circuit Interrupters:</b>	•Bathrooms •Exterior •Garage

## ELECTRICAL RECOMMENDATIONS/OBSERVATIONS

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Due to the potential hazards to life and property, we recommend all electrical repairs and upgrades be performed by a qualified electrician or electrical contractor.

### Electrical Service Entrance

This capacity should be adequate for normal electrical use.

*If greater electrical usage is anticipated, or the installation of additional circuits is desired, it may be necessary to install a larger panel. Modern single family residences typically have an electrical capacity of 125 to 200 amps. The minimum capacity allowed for a detached dwelling since 1960 is 100 amps.*

- **Repair:** The service wires are in contact with tree branches. We recommend the tree branches be trimmed away from the main wires by a qualified contractor.
- **Improve:** Access to the main panel is obstructed by plants. We recommend the plants be removed from the front of the main electrical panel to provide convenient access.
- **Repair:** The grounding system appears outdated and may not function effectively in some situations. We recommend a driven grounding rod be installed to upgrade the main panel grounding.

*Modern electrical services are typically grounded to the water piping, a driven rod in the earth, and/or steel rods embedded in the foundation. Older electrical services are typically grounded only to the water piping. A grounding conductor is often visible at the main panel, but it is not possible to locate the grounding connection. The gas piping and other metallic interior piping should be bonded to the grounding system.*

### Main Distribution Panel

- **Repair:** There is an oversized breaker in this panel. We recommend a proper breaker be installed by a qualified electrician.

*Circuit breakers are rated to allow a specific amount of current in the circuit before tripping. When the wrong size breaker is used, there is a potential for the wiring to overheat, creating a fire hazard. For example, a 14 gauge wire is rated to safely draw 15 amps and a 15-amp circuit breaker on this circuit will trip when overloaded. Using a larger breaker, such as one rated 20 or 30 amps, will not provide adequate protection.*

- **Repair:** The screw that holds the inside panel cover in place is missing and we recommend it be replaced.
- **Improve:** The panel circuits are not fully labeled. We suggest the panel be completely labeled to identify areas served by each of the individual circuits, for safer and easier system repair.



- **Major Concern:** This panel is an outdated Federal Pacific Stab-Lok type. There has been some recent concern that panels of this type and other discontinued brands may not operate safely in some conditions. The installation of a new panel may be the only way to eliminate potential risks associated with outdated panels. Additional information on this type panel can be found at <http://www.inspect-ny.com/fpe/fpepanel.htm>. We recommend this panel be replaced with a modern circuit breaker panel.



### Wiring

- **Monitor:** Knob and tube wiring is installed in this house. *Most buildings prior to the 1950's were wired with knob and tube systems. In some building jurisdictions, knob and tube wiring with plastic insulation was used until the 1960's. Over time, the brittle insulation on older wire breaks down, especially at ceiling mounted light fixtures as these lights expose the wiring to heat over a long period of time. The splices in knob and tube systems are soldered, and overloads can melt the solder, causing loose connections and a possible fire hazard. Using only 15-amp fuses or breakers can reduce the potential for overloading.*
- **Repair:** There are exposed splices in the crawl space. We recommend the unenclosed electrical connections be checked by a qualified electrician and proper junction boxes be installed as needed. *All electrical connections should take place in properly covered junction boxes. Visible splices are potentially hazardous and an indication of substandard work.*
- **Repair:** There is a dangling loose end wire in the garage. We recommend this wire be properly installed by a qualified electrician.



### Fixtures

- **Monitor:** There are exposed bulb light fixtures in the closets. We recommend the bulbs always be replaced with fluorescent bulbs as they are cooler and require less clearance from storage areas.

*Incandescent light fixtures should be used in closets only when located over the door or on the ceiling and at least 12 inches from storage areas. Exposed bulbs and pendant lights should not be used.*

- **Repair:** The canopy on a light fixture in the kitchen is loose and we recommend it be properly installed.
- **Repair:** The kitchen under cabinet light fixture is cord and plug connected. Permanently installed fixtures should be permanently wired. We recommend it be properly installed.

### Receptacles

- **Repair:** There are several ungrounded 3-hole outlets. Appliances, such as refrigerators, computers, microwave ovens, and clothes washers typically have three-prong plugs and need conveniently placed three-hole grounded outlets. Surge suppressors must have a grounded three-hole outlet to operate properly. We recommend each 3-hole outlet be examined by a qualified electrician and properly grounded as needed.

*Also known as an "open ground", this defect is common in older buildings and typically occurs when 2-hole outlets are replaced with 3-hole types without adding a grounding wire. Properly installed three-hole outlets have a third grounding wire and are necessary for appliances with three-prong plugs. Using a three-prong plug in an ungrounded three-hole outlet is potentially hazardous. The accepted means of correcting this condition include replacement with a 2-hole receptacle, installation of a proper grounding wire to the outlet, or replacement with a GFCI receptacle.*

- **Repair:** An outlet is loose in the basement and we recommend it be secured to prevent movement which can cause breakage or loose connections in the wiring.
- **Repair:** The number of outlets or receptacles available for use is fewer than required in new construction. We recommend additional outlets be added as needed for convenience and safety.

### GFCI's

- **Repair:** There are several GFCI outlets installed. We recommend adding Ground-Fault-Circuit-Interrupter protection as necessary to meet current safety standards.

*Ground Fault Circuit Interrupters are breakers or receptacle outlets designed to protect against electrical shocks. In recent years most jurisdictions have required ground fault protection for outlets in bathrooms, exteriors, basements, and garages (except those in a designated appliance location - such as for laundry equipment). Recent regulations also require GFCI protection for kitchen countertop outlets and for wet bars. A single GFCI receptacle may be used to protect other outlets downstream from it on the same circuit. GFCI outlets and breakers have test buttons which should be operated monthly to assure the devices are functioning properly.*

- **Repair:** The GFCI outlet at the rear exterior does not disconnect properly when tested and we recommend it be repaired or replaced.

### AFCI's

- **Improve:** The bedroom circuits are not protected by Arc Fault Circuit Interrupter (AFCI) breakers. We suggest AFCI protection be provided. Several local building departments are requiring AFCI protection if a service is upgraded.

*Arc Fault Circuit Interrupters are breakers designed to protect against arcing in wiring that could lead to a fire. These breakers are now required for all bedroom wiring. The breakers have test buttons that should be operated monthly to determine if the breakers are functioning properly.*

### Switches

- **Repair:** The three way switches at the basement stairway are improperly wired and we recommend repair by a qualified electrician.

### Exterior Electrical

- **Repair:** The exterior outlet at the right front exterior compartment is not GFCI-protected as required in new construction (see GFCI's above). We recommend GFCI protection be provided.



### LIMITATIONS OF ELECTRICAL INSPECTION

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

- Electrical components concealed behind finished surfaces are not inspected.
- Only a representative sampling of outlets and light fixtures were tested.
- Furniture and/or storage restricted access to some electrical components which may not be inspected.
- The inspection does not include remote control devices, alarm systems and components, low voltage wiring, systems and components, TV cable systems, telephone wiring, intercoms, ancillary wiring, systems and other components which are not part of the primary electrical power distribution system.

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

# Plumbing

## DESCRIPTION OF PLUMBING

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<b>Water Supply Source:</b>	•Public water supply
<b>Service Pipe to House:</b>	•1" Copper
<b>Main Valve Location:</b>	•Right front exterior
<b>Supply Piping:</b>	•Galvanized steel
<b>Waste System:</b>	•Public sewer system
<b>Drain / Waste / Vent Piping:</b>	•Cast iron & steel •ABS plastic •Copper
<b>Cleanout Location:</b>	•Rear exterior
<b>Other Components:</b>	•Sprinkler/plant watering system (not inspected)
<b>Gas Meter Location:</b>	•Right front exterior
<b>Gas Shutoff Location:</b>	•Left of meter
<b>Water Heater:</b>	•Location: Basement •Gas •50 Gallon

## PLUMBING RECOMMENDATIONS/OBSERVATIONS

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### Water Supply Plumbing

It appears supply piping from the meter to the building has been upgraded and that the original piping has been replaced. We measured the water pressure at 60 pounds (PSI). Pressures between 40 and 80 pounds are considered to be in the normal range.

- **Monitor:** The water supply piping inside the building is galvanized steel. *Mineral deposits and rust tends to accumulate in galvanized piping, resulting in reduced water flow. The extent to which this occurs depends on the type of water and the age of the piping. In the course of remodeling it is generally best to replace older galvanized piping with copper, at least in the portions that are modified.*
- **Monitor:** There is rust at several piping connections, which is not unusual in galvanized piping. The rusty connections should be checked periodically for indications of leakage.
- **Major Concern:** There is a drop in the water flow at several plumbing fixtures in the upper bathroom when several valves are operated at the same time. There is a significant drop in water flow in the lower bathroom when several valves are operated at the same time. We recommend the water flow be reviewed by a qualified plumber and that the system be modified as needed to provide adequate flow at the fixtures.
- **Monitor:** One of the angle stops under the lower bathroom sink is rusty indicating previous leakage. *Angle stops are shutoff valves normally found beneath sinks and toilets in modern construction to provide a convenient disconnect in case of leakage, or to facilitate repairs. These shutoff valves are rarely used, and may "freeze" in place or leak when operated. Angle stops should be operated periodically to keep the valves functional.*

### Drain / Waste / Vent

- **Repair:** The fixture trap at the kitchen sink is not properly configured. The arm after the trap slopes up. We recommend this piping be properly installed by a qualified plumber. *A trap is a U-shaped drain required on all plumbing fixtures (except toilets which have integral traps). The trap holds water to block sewer gas, which otherwise could flow up from the main sewer piping into the building. Sewer gas (methane) may have an odor or it may be odorless, and it can be explosive. If a trap is not properly arranged the water can be siphoned out, allowing sewer gas into the building. The horizontal pipe or "arm" after the trap should flow downward at a gentle slope (1/4 inch per foot) to the vertical drain-vent connection.*
- **Monitor:** We were informed by the listing agent that the sewer lateral has been replaced. We recommend a history of this work be obtained, including the name of the contractor and copies of the permits.

**Gas**

- **Improve:** The gas meter is at the right front exterior. The gas shutoff valve is on the vertical pipe to the left of the meter. To shut off the gas, turn the valve 90° so the handle is at a right angle to the pipe. We recommend storing a large wrench near the valve so the gas can be shut off quickly in an emergency. We recommend a motion sensitive automatic gas shutoff valve be installed.
- **Repair:** We observed a union gas pipe connector in the crawl space. We recommend a proper fitting be installed by a qualified plumber to replace the improperly located union.

*Unions are a type of coupling which join threaded piping by pressing metal surfaces against each other. They are approved for gas piping only when adjacent to a meter or appliance, and should not be used in other areas, particularly crawlspaces, as they are prone to leakage. Where unions would otherwise be necessary, couplings with left-hand threads can be used.*

**Sump Pump**

- **Repair:** We observed a well for a sump pump at the rear exterior. There is no pump installed in the pit and we recommend a pump be properly installed by a qualified contractor.
- **Repair:** The sump pit should be properly covered for improved safety.
- **Repair:** We recommend a moisture alarm be installed to warn of sump pump failure. Sump pumps should be checked regularly to be sure they function properly. A failed sump pump can lead to area flooding. We advise keeping a spare pump on hand.
- **Improve:** Battery back-up for the sump pump should be considered. Prolonged power failure could lead to flooding.

**Water Heater**

- **Monitor:** The water heater is in generally worn condition. We estimate the water heater is 10 years old. The National Association of Home Builders reports the average life span of water heaters is 11 to 13 years.
- **Improve:** We suggest a catch pan and drain be installed beneath the water heater to prevent damage that could occur should the water heater leak.
- **Repair:** The water piping above the water heater is not bonded as is typically required in new installations. We recommend proper bonding clamps and wiring be installed for electrical safety.

*The gas piping and hot water piping should be bonded to the grounding system (cold water piping). Bonding (a secure joining together to maintain electrical continuity) is typically done at the water heater, but is often not present in older homes.*

- **Monitor:** There are rusty fittings above the water heater. This piping should be checked periodically for leakage and replaced if necessary.

The water heater has a temperature and pressure relief (TPR) valve.

*A temperature and pressure relief (TPR) valve is a safety valve which releases excess pressure from the water heater in the event the regulator fails. It is an important safety device which can prevent a dangerous explosion. Hot water may occasionally drip or spray from the valve discharge pipe, triggered by changes in water pressure. Leaky valves may fail from encrusted mineral residue, and should be replaced. Most TPR valve manufacturers recommend the valve be tested once a year.*

- **Repair:** The TPR valve discharge pipe terminates horizontally at the left exterior. We recommend the TPR discharge piping be modified to safely direct any discharge downward.

The water heater is equipped with seismic restraints to prevent movement during an earthquake.

*Adequate water heater strapping or bracing can significantly reduce damage which can occur from water heater movement. The best braces are rigid and support the water heater both at the top and bottom. "Plumber's tape" alone is no longer considered an adequate restraint according to the guidelines of the California Seismic Safety Commission. As of January 1, 1996, home sellers in California are required to certify that their water heater complies with current guidelines upon transfer of the property.*

- **Monitor:** It important to avoid storing combustible items near water heaters and other gas-fired appliances.

## LIMITATIONS OF PLUMBING INSPECTION

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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:

- Portions of the plumbing system concealed by finishes and/or storage (below sinks, etc.), below the structure or beneath the ground surface are not inspected.
- Water quantity and water quality are not tested and are beyond the scope of the inspection.
- Interiors of flues or chimneys which are not readily accessible are not inspected.
- Water conditioning systems, solar water heaters, fire sprinkler systems, lawn sprinkler systems and private waste disposal systems are not inspected.
- The gas and water piping was not fully accessible and an examination of each connection was not made. The standard test for leakage is to have the piping pressure tested. This is sometimes required before the gas can be turned on after it has been disconnected. With testing and a close examination of all the piping, leaking or other defects may be found.
- An inspection of the lawn sprinkler/plant watering system is outside the scope of this inspection.

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

# Heating

## DESCRIPTION OF HEATING

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<b>Primary Energy Source:</b>	•Gas
<b>Heating System Type:</b>	•Central •Forced air furnace •92,000 BTU's •Location: Crawlspace
<b>Distribution Method:</b>	•Ducting
<b>Venting:</b>	•Induced draft
<b>Air Filter:</b>	•Location: Behind the dining room air return grill •Disposable

## HEATING RECOMMENDATIONS/OBSERVATIONS

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### Furnace

- **Monitor:** The furnace is in generally worn condition and may soon need replacement. We estimate the furnace is 19 years old. The expected life span of a gas, forced air furnace is 15 to 20 years. It would be wise to budget for a new furnace in the future.

The furnace responded properly to the thermostat.

This furnace is equipped with a fan-powered, induced-draft, venting system. The purpose of the fan is to draw the exhaust fumes through the heat exchanger to increase furnace efficiency. A comprehensive evaluation of the heat exchanger is specifically excluded from this inspection due to visibility and design limitations of induced-draft forced air furnaces. Comprehensive evaluation can only be obtained by dismantling or specialized testing, which is beyond the scope of this home inspection.

*A heat exchanger is a metal chamber which encloses the flame and transmits heat to the circulating air. With age and use, cracks or rust holes can develop in heat exchangers. Fumes from the flame may flow through the exchanger wall and enter the living area. Heat exchangers should be carefully examined as part of routine servicing. Only a small portion of the heat exchanger is accessible during a typical home inspection.*

- **Repair:** There are visible deposits on the vent piping. Deposits form on the vent piping as a result of condensation in the vent piping, possibly indicating improper venting. We recommend that the vent piping be examined by a qualified heating contractor and repaired or replaced as needed.

### Supply Air Ducting

- **Repair:** We observed debris and dust in the supply ducts. We recommend the ducts be cleaned.
- **Monitor:** The space between the floor joists is being used for ducting in the kitchen and upper bathroom. This practice is not energy efficient and is no longer allowed in new construction.
- **Monitor:** The lower bathroom is unheated.
- **Repair:** The airflow appears uneven at several supply registers. We recommend the ducting system airflow be examined by a qualified heating contractor.
- **Monitor:** Most of the heat registers were originally configured for a gravity flow heating system and are not ideally placed for a forced air system. The basement heat registers are close to the doors and are not ideally placed for a forced air system. Heat distribution may be uneven. It may be necessary to add or relocate heat registers.

### Heating General

- **Repair:** This equipment does not appear to have been recently serviced. We recommend a qualified furnace company be retained to service this equipment. Furnace servicing should be performed annually as part of routine maintenance. Significant defects may be revealed during a thorough evaluation, especially with older systems.

## **LIMITATIONS OF HEATING INSPECTION**

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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:

- The adequacy of heat supply or distribution balance is not inspected.
- The interior of flues or chimneys which are not readily accessible are not inspected.
- The heat exchanger was inaccessible.

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



# Interior

## DESCRIPTION OF INTERIOR

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<b>Wall and Ceiling Finishes:</b>	•Gypsum drywall & plaster •Paneling
<b>Windows:</b>	•Wood double hung •Wood casement •Fixed pane •Double & single glazed
<b>Doors:</b>	•Wood

## INTERIOR RECOMMENDATIONS/OBSERVATIONS

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### Walls / Ceilings

- **Monitor:** There are several cracks in the interior surfaces. Surface cracking is common and periodic repair should be expected as part of routine maintenance.
- **Repair:** The bottom edges of the walls in the basement room at the right rear are damaged by moisture. We recommend the damaged wood be replaced. We recommend examination by a qualified pest control firm.



- **Monitor:** The basement ceilings are unusually low.  
*Rooms with ceilings that are less than 7 feet 6 inches high may not be considered "habitable" by local building departments. These rooms should not be counted as bedrooms in a property description. There are exceptions to the general rule which allows for sloping ceilings and low beams. The local building department should be consulted to determine their requirements as to proper room use.*

### Floors

- **Monitor:** We observed sloping or unevenness in several of the building floors. Sloping floors are usually caused by foundation settling or movement. Future movement in the building floors should be expected.
- **Monitor:** We observed squeaking in several of the floors. Floor squeaking is not unusual in buildings of this age and type.
- **Repair:** The floor finish is worn in several places. We recommend the floors be refinished as needed for appearance and to protect the floors from damage.
- **Repair:** There is a low laundry chute opening in the hall closet. We recommend a childproof latch be installed for safety.

## Stairways

- **Repair:** The stairs are unusually steep and would not be allowed in new construction. Persons using the stairs should be warned to be especially careful. The staircase is unusually narrow. The standard requirement in new construction is 36 inches. The overhead clearance above the stairway is not sufficient and could cause injury. We suggest a sign be placed over the stairway to warn persons of impaired overhead clearance. The minimum overhead clearance in modern construction is 6 feet 8 inches above a line drawn along the leading edge of the steps.
- **Repair:** There are large openings in the stair railings by the stair opening and we recommend the railings be modified for safer use.

*Large railing openings which may allow a child to fall through should be modified for safety. Modern standards call for openings to be less than 4 inches in diameter. The standard has been recently changed to 4 inches as it is found that many children can easily slip through a 5 inch opening.*

## Smoke Detectors

There are several smoke detectors installed.

*Smoke detectors should be tested monthly by holding the test button in until the alarm sounds. Replace the batteries annually or when the alarm beeps once a minute. The National Fire Protection Association recommends ceiling mounted alarms be installed at least four inches away from the nearest wall. Wall mounted alarms should be installed four to twelve inches away from the ceiling. Many local jurisdictions do not allow wall mounted alarms. Regularly vacuum or dust the smoke alarms. Replace all smoke alarms every ten years. Most jurisdictions now require that smoke detectors also be installed in each bedroom in new construction or when modifications exceeding \$1000 in value are made. Smoke detectors in new construction should be direct wired and have backup batteries so they will function in a power outage. Fire extinguishers should be provided in kitchens and garages for emergency use.*

- **Repair:** We did not locate a carbon monoxide detector. We recommend the installation of carbon monoxide detectors as a safety improvement.

## Windows

- **Monitor:** Several of the windows are single pane glass. Moisture condensation during cold weather should be expected. Condensation can be reduced by keeping interior moisture levels low by using exhaust fans when bathing and cooking and by ventilating the house during the day. Upgrading to dual pane windows should be considered.
- **Monitor:** Several of the windows are dual glazed.

*Dual glazed windows reduce energy loss and can also reduce noise transmission. Condensation or "fog" can form in some dual glazed or double pane windows after changes in interior or exterior temperatures. The window seals may fail allowing moisture to enter. Fogging in dual glazed panes can not be predicted and window replacement is often the only repair. This fogging can usually be seen during cold weather. Dirt on windows can cover the indications of fogging. We suggest each window be cleaned and checked and repaired or replaced if needed.*

- **Repair:** Several windows in the front entry have been painted shut and we recommend they be freed to operate properly.
- **Safety Issue:** The windows in the basement right rear room are too small and too high to provide safe escape in a fire and we recommend adequate egress be provided.

*Basements and sleeping rooms below the fourth story need one escape or rescue window for emergency egress. Most building codes require this to be at least 5.7 square feet in size, at least 24 inches high, at least 20 inches wide, and with a sill not more than 44 inches from the floor.*

- **Safety Issue:** The glass in several doors is apparently untempered. We recommend the glass in areas of potential impact be replaced with safety glass or that protective safety films be applied to the glass in these areas.

*The general rule for new construction is that glass which is less than 18 inches from the floor (and larger than nine square feet), glass that is within 24 inches of the edge of a swinging door, or glass in a door (unless smaller than three inches in diameter) must be the tempered safety type. While there is no requirement to change existing glass, safety glass is usually required when new glass is installed. Special care should be taken in these areas until safety glass is installed. Furniture can often be arranged to direct traffic away from non-safety glass windows. Applying decals to sliding glass doors and large windows can help prevent accidents caused by persons who may think they are walking through an open door. Special plastic films are available which can be applied to the glass to reduce the likelihood of injury should the glass break.*

## Doors

- **Monitor:** The clearance above the basement rear exterior door is not sufficient and could cause injury. We suggest a sign be placed over the doorway to warn persons of impaired overhead clearance. The minimum overhead clearance in modern construction is 6 feet 8 inches.
- **Repair:** The rear bedroom and basement doors stick and we recommend they be repaired to operate properly.
- **Repair:** One of the laundry doors drags on the floor and we recommend it be repaired to operate freely.
- **Repair:** The basement rear exterior door is damaged by moisture at the bottom edge and we recommend it be repaired or replaced. We recommend examination by a qualified pest control firm.
- **Repair:** A basement rear exterior door opens over several steps down. We recommend the door be modified to swing in the other direction or that a platform be built which is level with the floor. This door is potentially dangerous and could lead to a fall if someone is unaware of the drop-off. Warning signs should be placed on the door until it can be modified.
- **Repair:** Several door latches are defective and we recommend they be repaired to operate properly.
- **Repair:** The right front and rear exterior door thresholds are worn. We recommend they be painted to protect them from the weather.
- **Repair:** There are no door stops at several doors and we recommend stops be installed to prevent wall damage.

## LIMITATIONS OF INTERIOR INSPECTION

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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:

- Furniture, storage, appliances and/or wall hangings are not moved to permit inspection and may block defects.
- Carpeting, window treatments, central vacuum systems, household appliances, recreational facilities, paint, wallpaper, and other finish treatments are not inspected.
- We operated a representative sampling of the windows. All windows were not checked for proper functioning, cracked or broken glass, or for the presence or condition of screens. This inspection does not include areas which are obscured by furniture, carpets, coverings, or any other items.
- An analysis of indoor air quality is beyond the scope of this inspection. The identification of mold is beyond the scope of this inspection and can only be done after laboratory testing. For further information an industrial hygienist should be contacted.
- Potentially hazardous materials such as Asbestos cannot be positively identified without a detailed inspection and laboratory analysis. This is beyond the scope of the inspection.
- Recent interior painting concealed historical evidence.

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

# Bathrooms

## DESCRIPTION OF BATHROOMS

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<b>Upper Hall Bathroom:</b>	<ul style="list-style-type: none"> <li>•Separate tub &amp; shower •Cast iron tub •Ceramic tile shower walls</li> <li>•Ventilation: Window &amp; exhaust fan •Stone countertops •Two china sinks</li> <li>•Ceramic tile floor</li> </ul>
<b>Basement Bathroom:</b>	<ul style="list-style-type: none"> <li>•Shower only •Stone tile shower walls •Ventilation: Window •Cast polymer sink &amp; countertop •Stone tile floor</li> </ul>

## BATHROOMS RECOMMENDATIONS/OBSERVATIONS

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### Upper Hall Bathroom

- **Repair:** The shower tile grout is worn and we recommend it be cleaned or re-grouted as necessary.
- **Monitor:** There is a noticeable drop in water flow at the shower when more than one valve is operated at a time.
- **Repair:** The shower hot - cold valves are reversed and we recommend they be changed to the standard hot/left, cold/right position.
- **Repair:** This bathroom has a GFCI protected receptacle by the left sink, which is a good safety feature. We recommend the GFCI device be tested monthly. We did not locate an electrical outlet by the right sink. We recommend a GFCI protected receptacle be installed for convenience and safety.
- **Repair:** The base of the toilet is not caulked to the floor and we recommend caulking be applied.
- **Monitor:** Several floor tiles are missing under the edge of the sink cabinet by the doorway.
- **Monitor:** The sink drains were being repaired at the time of the inspection. We did not run water in the sinks. We recommend the sinks be inspected for proper operation when the repairs are complete.

### Basement Bathroom

- **Monitor:** There is a noticeable drop in water flow at the shower when more than one valve is operated at a time.
- **Repair:** There is no exhaust fan in this bathroom. We suggest the installation of an exhaust fan for improved ventilation.
- **Monitor:** This bathroom has a GFCI protected receptacle, which is a good safety feature. We recommend the GFCI device be tested monthly.

## LIMITATIONS OF BATHROOMS INSPECTION

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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

- Areas concealed by finished surfaces cannot be inspected.

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

# Kitchen/Laundry

## DESCRIPTION OF KITCHEN/LAUNDRY

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<b>Kitchen:</b>	•Cast polymer countertops •Cast iron sink •Wood floor
<b>Appliances Tested:</b>	•Gas cooktop •Electric wall oven •Dishwasher •Disposer •Downdraft exhaust fan
<b>Appliances Not Tested:</b>	•Refrigerator •Microwave oven •Trash compactor
<b>Laundry:</b>	•Location: Basement •Gas supply for dryer •Dryer vent •120 Volt electric outlet for washer •Hot & cold water supply for washer •Waste standpipe •Carpet floor

## KITCHEN/LAUNDRY RECOMMENDATIONS/OBSERVATIONS

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### Kitchen

- **Monitor:** The sink faucet is the sprayer type with a flexible connector. Special care should be taken to avoid leaving this sprayer in the sink as wastewater from the sink could be drawn into the faucet and contaminate the water supply.
- **Repair:** The countertop outlets are not GFCI protected. We recommend GFCI protection be provided for all countertop outlets.
- **Repair:** There is an ungrounded 3-hole receptacle on the wall at the right of the sink. We recommend a GFCI protected outlet be installed for safety.
- **Repair:** The refrigerator area is not provided with a grounded 3-hole receptacle and we recommend a grounded 3-hole receptacle be installed.
- **Repair:** The countertop is cracked at the left of the sink and we recommend it be repaired or replaced.



- **Repair:** The counter space at the left of the sink is not provided with receptacles necessary for safety and convenience. We recommend GFCI protected outlets be added.

*Modern kitchens require receptacles every 4 feet along countertops and no point on the countertop more than 2 feet from an outlet. Each individual countertop area 12 inches or wider should have at least one receptacle.*

- **Monitor:** There are stains on the cabinet beneath the kitchen sink indicating previous leakage. This area should be monitored for possible future leaks.
- **Repair:** Several cabinet door hinges are loose and we recommend they be adjusted as needed.
- **Repair:** Flexible corrugated ducting which can trap grease has been installed for the down draft exhaust hood. We recommend upgrading to smooth-wall ducting typically required in new construction and preferred for fire safety.
- **Repair:** The down draft exhaust fan grease screen is not clean. We recommend the fan screen be cleaned (along with the fan motor and vent pipe, if necessary). Grease accumulation in screens near burners can be a fire hazard.

- **Repair:** The disposer and trash compactor are wired with Romex cable with a plug attached. We recommend proper flexible appliance cords be installed. Romex is not proper wiring for appliances, as it requires protection from physical damage. Cord caps are not approved for installation on Romex wiring.



### Laundry

- **Improve:** We suggest a catch pan and drain be installed beneath the washer to prevent damage that could occur should the washer leak or drain overflow. We suggest the clothes washer hose connectors be upgraded with metal sheathed “no-burst” types to reduce the potential for hose failure. We suggest automatic water shut off valves that shut off when leaking water is detected be installed.
- **Repair:** The dryer exhaust vent piping is not clean and we recommend it be cleaned for fire safety. Lint accumulation in vent piping can cause overheating at the dryer and could result in a fire.
- **Repair:** The exterior weatherproof cap on the clothes dryer exhaust vent pipe is not installed flush to the wall and we recommend it be properly installed.

## LIMITATIONS OF KITCHEN/LAUNDRY 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:

- Thermostats, timers and other specialized features and controls are not tested.
- The temperature calibration, functionality of timers, effectiveness, efficiency and overall performance of appliances is outside the scope of this inspection.
- Appliances are on/off tested only.
- The washer and dryer were not inspected and are outside the scope of the inspection.
- The area below and behind appliances was inaccessible and not inspected.

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

# Garage

## DESCRIPTION OF GARAGE

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Garage: •Attached  
 Garage doors: •Swinging •Wood •Manual

## GARAGE RECOMMENDATIONS/OBSERVATIONS

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### Garage

- **Repair:** There was no electrical power to the garage. We recommend repair as needed by a qualified electrician.
- **Monitor:** This garage has a GFCI protected receptacle, which is a good safety feature. We recommend the GFCI device be tested monthly.
- **Monitor:** There are stains on the garage ceiling and wall at the left rear apparently from previous leakage. We recommend a history of any leakage in this area be obtained.
- **Repair:** Water appears to flow through the vehicle door in wet weather. We recommend a proper drain or diverter be installed to keep water off the garage floor.
- **Repair:** There is a drain in the garage floor at the rear. The drain appears clogged and we recommend it be cleared. *We do not test floor drains and recommend they be tested for blockage. If a floor drain emits an odor of sewer gas, it may be connected to plumbing drains and the drain trap may have dried out. The drain trap may be primed by pouring water into the drain and the trap seal maintained by pouring a small amount of mineral oil into the trap on top of the water to prevent evaporation.*
- **Repair:** The vehicle doors are damaged by moisture and we recommend they be repaired or replaced. We recommend examination by a qualified pest control firm.
- **Repair:** There are several large cracks in the garage floor. We recommend the garage floor be repaired.
- **Repair:** We observed moisture-related damage to the garage framing in several places at the right. We recommend the damaged wood be replaced. We recommend this area be examined by a qualified pest control firm.
- **Repair:** There is a large gap under the left rear exterior door and we recommend the gap be sealed to prevent rodent entry.

## LIMITATIONS OF GARAGE INSPECTION

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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

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

# Fireplace/Chimney

## DESCRIPTION OF FIREPLACE/CHIMNEY

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<b>Chimney:</b>	•Stucco over brick
<b>Fireplace:</b>	•Masonry firebox

## FIREPLACE/CHIMNEY RECOMMENDATIONS/OBSERVATIONS

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### Chimney

- The chimney has a rain cap and spark screen.
- We applied light pressure to the chimney top above the roof and felt no unusual movement. The top of the chimney was closely examined and we observed no cracking in the chimney above the roof.
- **Repair:** The ash pit cleanout door is loose and we recommend it be repaired to prevent the escape of hot ashes which could be a fire hazard.



### Fireplace

- **Monitor:** The area above the firebox has not been fully “parged” or covered with mortar to provide a smooth transition between the firebox and the bottom of the chimney and to protect the common brick in the chimney throat. The exposed brickwork in this area can trap soot or combustible creosote creating a potential fire hazard and can be damaged by heat. We suggest the throat area be fully parged as part of any future fireplace repairs.
- **Repair:** There are small gaps at the connection between the hearth extension and the inside of the fireplace. These should be kept filled to prevent the entry of hot ashes. We recommend the gaps be sealed.
- **Repair:** There is no damper and we recommend one be installed.

*The purpose of a damper is to block the flow of warm room air up the chimney when the fireplace is not in use. An open flue is comparable to an open window and will substantially reduce heating system efficiency. Dampers should be kept closed when fireplaces are not in use. Glass doors can also be used to serve the same function.*

- **Monitor:** The hearth extension is supported by wood framing.  
*Older hearth extensions (the portion of the hearth that extends into the room) were commonly supported by wood framing which is visible in the subarea. This practice was discontinued in the 1950's. The wood framing may ignite if hot coals or ashes are allowed to spill onto the hearth extension, or if these wood supports extend to the area under the fire pit. Removal of this wood support could cause the hearth extension to crack or fall. A qualified fireplace contractor should be contacted to determine how best to support the hearth extension.*



- **Monitor:** Fireplaces should be checked periodically by a licensed chimney sweep or qualified chimney contractor. This should be done annually if they are used regularly (once a week or more). They should also be inspected after any indications of movement from settling or earthquake activity. Determinations as to whether fireplaces or chimneys have adequate draw, or are subject to smoking, or as to the soundness of chimney flue tiles, brickwork or sheet metal are beyond the scope of our inspection.

## **LIMITATIONS OF FIREPLACE/CHIMNEY INSPECTION**

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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

- The flue interior was mostly inaccessible to our inspection. Any flue or chimney that is inaccessible may be cracked, may contain a defective flue liner, or the liner may have been omitted.
- Ashes obscured our view of the firebox and our inspection of this area was incomplete. The firebox should be carefully checked for defects when full access is provided.

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

**Thank you for using HomeWise Inspections, Inc. If you have any questions, or if we can be of further assistance, please do not hesitate to call us at 510-562-8443.**