



## Property Inspection Report

LOCATED AT:

XXX

PREPARED EXCLUSIVELY FOR:

XXX

INSPECTED ON:

Saturday, April 4, 2015

11:30 AM



Inspector, Marc Mazza  
Mazza Inspection Group  
(866) 996-2992

[www.mazzainspections.com](http://www.mazzainspections.com)

## SUMMARY

This summary report is intended to provide a convenient and cursory preview of the more significant conditions and components that we have identified within our report as needing service, but could be incomplete.

The summary is obviously not comprehensive, and should not be used as a substitute for reading the entire report, nor is it a tacit endorsement of the condition of components or features that may not appear in this summary.

Also, in accordance with the terms of the contract, the service recommendations that we make in this summary and throughout the report should be investigated further and completed well before the close of escrow by licensed specialists, who may well identify additional defects or recommend some upgrades that could affect your evaluation of the property.

This summary report is intended to provide a convenient and cursory preview of a limited number of items, conditions and components that we have identified within our report as requiring more immediate service. This summary is not comprehensive and does not include all of the issues documented within this report.

Items included in the summary will be an item, component or situation which is not performing its function or its condition, or is not appropriate for its age or use. This may also denote a safety hazard or safety risk. Immediate replacement, improvement or repairs may be required to make serviceable. Items identified in the summary should be reviewed by a professional licensed contractor in the trade necessary for appropriate repairs that should be completed in accordance to local building standards.

All work should be followed up by a receipt or warrantee by the contractor.

## EXTERIOR

### Trim

#### EAVES

**s-1:** - Moisture stains and possible moisture damage were observed at the rear eaves at the time of the inspection. Additional evaluations may be necessary and should be conducted by a professional pest control company.

### Electrical

#### EXTERIOR WIRING & CONDUIT

**s-2:** - Loose and exposed wiring was observed at the north side of the structure, which poses a potential safety hazard and is suggested to be improved.

## STRUCTURAL

### **ROOF FRAMING**

**s-3:** - We observed a cut or otherwise damaged truss within the attic. These trusses are structural components and as such will require building permits for repair. Prior to that, however, an engineer should evaluate the condition in order to determine how to best remedy this condition.

## ROOF

### **SKYLIGHTS**

**s-4:** - The skylight dome is cracked, could leak, and should be replaced.

### **FLASHINGS & VENT TERMINATIONS**

**s-5:** - The roof flashings that are visible, are suggested to be sealed as part of typical service. They are comprised of metal that seals valleys, plastic or metal vents and other roof / wall penetrations, and are the most common point of leaks. This is particularly true of the flashings on a layered roof, which are covered by the roofing material and are even more susceptible to leaks - Reference Building Code IRC-P3103.3.

**s-6:** - We observed an under-cut valley flashing. This single crown valley flashing appears to be cut short prior to extending over the eave and drip edge flashing.

### **CONCRETE TILE OBSERVATIONS**

**s-7:** - There are cracked roof tiles that were observed at the main roof. This should be expected as regular wear and tear, however, the tile should be serviced to maintain the water tight integrity of the roof.

## CHIMNEY & FIREPLACE

### **FACTORY BUILT CHIMNEY**

#### **FACTORY BUILT CHASE COVER**

**s-8:** - The metal termination cap is slightly sunken and may hold water. It should be serviced or evaluated to ensure that moisture has not contaminated the area surrounding the flue.

### **FACTORY BUILT FIREPLACE**

#### **FUEL AND LOG STARTER**

**s-9:** - The void / separation around the gas pipe in the sidewall of the fireplace should be sealed with refractory caulk to prevent any possibility of back-drafting a flame beyond the combustion chamber, where it could come into contact with combustible material.

## PLUMBING

### MAIN SERVICE

#### **WATER PRESSURE**

**s-10:** - As the static water pressure of the supply plumbing system exceeds 80 pounds per square inch (psi) it would be wise to (install) or adjust the pressure regulator. Otherwise, the plumbing system may be prone to leaks in piping, fittings or other equipment. The water pressure was taken from the nearest accessible hose bib or at the laundry.

Note: We cannot determine which hose bibs are regulated and which are not regulated.

608.2 Excessive Water Pressure. Where static water pressure in the water supply piping is exceeding eighty (80) pounds per square inch (552 kPa), an approved-type pressure regulator preceded by an adequate strainer shall be installed and the static pressure reduced to eighty (80) pounds per square inch (552 kPa) or less.

### DRAIN, WASTE & VENTS

#### **DRAIN PIPING OBSERVATIONS**

**s-11:** - A drain that appears to have been added to the system was observed in garage. The added drain appears to have been installed in a substandard manner should be corrected by a professional plumber.

### WATER HEATER

#### **WATER HEATER STRAPS**

**s-12:** - The water heater lower strap is too close to the gas controls. In accordance of the Department of General Services Division of the State Architect and the California plumbing code, the water heater straps must maintain a 4 inch clearance from the gas controls at the lower strap.

Code Reference CPC 508.2

Strapping shall be at a point within the upper 1/3 and the lower 1/3 of the water heater's vertical dimensions. At the lower point, a minimum distance of four (4) inches shall be maintained above the controls to the strap.

## GARAGE

#### **GENERAL CONDITIONS**

**s-13:** - A portion of the garage appears to have been converted into a mechanical room. The work was performed in a substandard manner and likely may not possess permits for the work performed. We omit any work performed without the endorsement of the authority having jurisdiction from this inspection.

#### **FIREDOOR**

**s-14:** - The entry door from the garage into the house has a pet door installed into the door. This door is required to be solid-core, to maintain the necessary firewall separation between a garage and living quarters, and should be replaced.



## ELECTRICAL

### ELECTRICAL SERVICE

#### DEAD FRONT COVER

**s-15:** - There are voids and / or open knockouts in the panel box of the main electrical panel that should be covered with a rigid material as a safety precautionary measure.

#### SERVICE PANELBOARD OBSERVATIONS

**s-16:** - We observed openings within the service equipment panel. Openings in the panel are not suggested and should be closed or sealed off by a professional.

Code reference NEC 110.12(A) Unused Openings. Unused openings, other than those intended for the operation of equipment, those intended for mounting purposes, or those permitted as part of the design for listed equipment, shall be closed to afford protection substantially equivalent to the wall of the equipment. Where metallic plugs or plates are used with nonmetallic enclosures, they shall be recessed at least 6 mm (¼ in.) from the outer surface of the enclosure.

#### SERVICE PANEL BUS BAR(S)

**s-17:** - There is visible damage within the panel on the feeder bar. It is our suggestion the buyer employ the services of an electrician who can remove and inspect the bus for any permanent damage. The reason for the scorching is not evident. We should note that this bus stab is not suggested to be used.

#### EQUIPOTENTIAL BONDING

**s-18:** - We were unable to verify a cold (and hot) water bond at the main water supply, or supply piping. In accordance to building standards; the bond is suggested to be installed in or attached to a building structures metal piping system(s) including hot water, cold water and the gas piping, that are likely to become energized. These aforementioned components should be bonded to the service equipment enclosure in accordance to building standard. The bonding jumper(s) should be sized in accordance with the NEC, using the rating of the circuit that is likely to energize the piping system(s).

#### PANEL GROUNDING

**s-19:** - There are mixed ground / neutral conductors within the service equipment panel, inserted under one terminal lug at the ground bus bar. Current building standard requires all grounded conductors to be inserted into individual terminals. Furthermore, neutral conductors and ground conductors should not be intertwined under one terminal. For a more in-depth examination of this condition, we suggest further assessment and advice by a qualified electrician.

### INTERIOR ELECTRICAL

#### LUMINARIES

**s-20:** - The ceiling lights installed in the common bathroom does not possess a wet type fixture trim kit and appeared to be installed within the 8 x 3 shower spray zone of the shower enclosure. For some older structures, this may not have been a code requirement, however, improvements are always suggested as old or new code is the minimum standard and is always suggested to be exceeded - Reference from NEC 410.10-(D).

## **RECEPTACLES**

**s-21:** - A ground fault circuit interrupter (GFCI) outlet in the bathrooms did not respond correctly when tested. This receptacle should be replaced as a safety precautionary measure.

**s-22:** - Ungrounded three prong receptacles was/were identified in the common and master bathrooms. In many cases, the original two prong receptacle was replaced with the new three prong type without adding a grounding conductor or grounding to the metal junction box (if applicable). Or in a modern house, the grounding conductor is not attached to the receptacle (providing the conductor is present). The receptacles should be upgraded to include grounding conductors where necessary and all wet areas by GFI protection.

## **WIRING**

**s-23:** - Exposed electrical conductors were observed in the kitchen, which represents a potential safety hazard if not properly terminated/covered. Improvements are recommended as a safety precautionary measure.

**s-24:** - NM cable wiring (I.E. Romex, cord etc..) exposed to physical damage or contact was observed in the kitchen which is within harms reach should be relocated or protected from damage or contact by the use of conduit. Improvements are recommended for safety.

## **INTERIOR**

### **SMOKE ALARMS**

**s-25:** - Smoke alarms and smoke detectors shall not be installed within a 36 in. (910 mm) horizontal path from the supply registers of a forced air heating or cooling system and shall be installed outside of the direct airflow from those registers.

## **BATHROOMS**

### **Master Bathroom**

#### **SHOWER**

**s-26:** - The shower pan was tested and appears to be leaking. Repairs are suggested at the pan so the shower enclosure may function without leaking. It should be noted that shower pans should hold water for an indefinite amount of time without losing water. Further assessment is advised.

## **ATTIC**

### **ATTIC ELECTRICAL**

**s-27:** - There are open electrical junction boxes, which should be sealed to contain any arcing or sparking that might occur. The installation of cover plates is suggested.

## HEATING

### **COMBUSTION CHAMBER**

**s-28:** - We observed what may be a crack in the heat exchanger. To error on the side of caution, we feel it prudent that until this condition is inspected by a HVAC technician the furnace should not be used for fear of interior contamination and carbon monoxide poisoning.

### **VENTING AND DRAFT HOOD**

**s-29:** - The furnace vent pipe is not well seated at the transition between the FAU and the roof vent (reducer), which not only could inhibit the bi-products of combustion from being vented beyond the residence but which could contaminate the residence, and should be serviced by an HVAC contractor.

## AIR CONDITIONER

### **AIR CONDITIONER**

**s-30:** - According to the information provided on the manufacturer's specifications plate, it appears the condenser may be considered slightly smaller than what is suggested for this size structure. Information played only provides a number which is taken and converted into a crude method of determining an approximate size to square footage ratio. There are, however, many factors which go into determining the precise square footage to condenser tonnage ratio. We do not possess the tools necessary nor the time to conduct such an comprehensive test during this somewhat brief home inspection. This test should be conducted by a licensed heating and air conditioning contractor.

### **AIR CONDITIONER SERVICE COIL ELECTRICAL**

**s-31:** - The air condition service disconnect which possesses 30 amp fuses and breaker which are too large for this condenser.

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## DISCLOSURE

Thank you for choosing the Mazza Inspection Group to perform your inspection. The goal of this inspection and report is to put you in a better position to make an informed real estate decision. This report is a general guide and provides you with some objective information to help you make your own evaluation of the overall condition of the home and is not intended to reflect the value of the property, or to make any representation as to the advisability of purchase. Not all improvements will be identified during this inspection. Unexpected repairs should still be anticipated. This inspection is not a guarantee or warranty of any kind. The report is effectively a snapshot of the house – recording the conditions on a given date and time. Home Inspectors cannot predict future behavior, and as such, we cannot be responsible for things that occur after the inspection.

The observations and opinions expressed within this report are those of the inspection company and supersede any alleged verbal comments. We inspect all of the systems, components, and conditions described in accordance with the standards of NACHI, and those that we do not inspect, are clearly disclaimed in the contract and/or in the aforementioned standards. However, some components that are inspected and found to be functional, may not necessarily appear in the report, simply because we do not wish to waste our client's time by having them read an unnecessarily lengthy report about components that do not need to be serviced.

In accordance with the terms of the contract, the service recommendations that we make in this report should be completed by licensed specialists, who may well identify additional defects or recommend some upgrades that could affect your evaluation of the property.

Many comments on components or systems observed as defective, damaged or otherwise may be followed by a comment which suggests the buyer to have an additional inspection of that listed component or system by a specialist. We make these suggestions to ensure our client has ample time to have that specific item evaluated by a specialist of that particular component or system who can then make specific recommendations of repair or replacement and provide our customers with real costs associated with that component or system.

Your report includes many digital photos and may include infrared images as well. Some pictures are intended as a courtesy and are added for your information. Some are to help clarify where the inspector has been, what was looked at, and the condition of the system or component at the time of the inspection. Some of the pictures may be of deficiencies or problem areas, these are to help you better understand what is documented in this report and may allow you to see areas or items that you normally would not see. Not all problem areas or conditions will be supported with photos.

Again, Thanks very much for the opportunity of conducting this inspection for you. We are available to you throughout the entire real estate transaction process and beyond. Should you have any questions, please do not hesitate to call or email us.

**NOTICE:** This report should not be used by anyone other than the individual who has signed the inspection agreement and purchased this report. The conditions affecting this property may have changed since the time of this inspection, as many often do under various circumstances. Do not rely on this inspection report as a basis for a real estate transaction decision. It is advised that new parties involved in any transaction concerning the above property, complete a more current evaluation with a qualified inspector.

**SCOPE OF WORK:** You have contracted with the Mazza Inspection Group to perform a generalist inspection in accordance with the standards of practice established by NACHI, a copy of which is available upon request or on our website. Generalist inspections are essentially visual and distinct from those of specialists, inasmuch as they do not include the use of specialized instruments, the dismantling of equipment, or the sampling of air and inert materials. Consequently, a generalist inspection and the subsequent report will not be as comprehensive, nor as technically exhaustive, as that generated by specialists, and it is not intended to be. The purpose of a generalist inspection is to identify significant defects or adverse conditions that would warrant a specialist evaluation. Therefore, you should be aware of the limitations of this type of inspection, which are clearly indicated in the standards. However, the inspection is not intended to document the type of cosmetic deficiencies. Similarly, we do not inspect for vermin infestation, which is the responsibility of a licensed pest control company.

## GENERAL INFORMATION

### **STRUCTURE ORIENTATION**

1: - The structure faces east.

### **PRESENT AT INSPECTION**

2: - Client(s), Buyer's Agent

### **TYPE OF RESIDENCE / LEVELS**

3: - The residence is a single family residence and is a one story.

### **AGE OF STRUCTURE / YEAR BUILT**

4: - 1991

### **UNOFFICIAL SQUARE FOOTAGE**

5: - 1234 square feet

### **FOUNDATION TYPE**

6: - The structure has a slab foundation.

### **OCCUPANCY**

7: - The residence was occupied and furnished at the time of the inspection.

8: - Access to some items and areas such as electrical outlets, switches, windows, walls, floor surfaces, cabinet interiors, attic, garage, patio surfaces, exterior walls restricted by the occupant's furniture and personal belongings may not be visible or accessible to inspect. Any such areas or items are excluded from the inspection report

### **UTILITIES**

9: - All utilities were on at the time of the inspection.

### **WEATHER CONDITIONS**

10: - The weather was clear and sunny.

### **EXTERIOR TEMPERATURE**

11: - 85-95 degrees

## GROUNDS

We do not water test or evaluate subterranean drainage systems, any mechanical or remotely controlled components, such as driveway gates. Cracks in hard surfaces can imply the presence of expansive soils that can result in continuous movement, but this could only be confirmed by a geological evaluation of the soil.



## Driveway

### DRIVEWAY MATERIAL

**12:** - The flatwork material consists of concrete.

### DRIVEWAY COMMENTS

**13:** - The driveway is in acceptable condition, only where visible, or unless otherwise stated.

**14:** - The driveway has material that is raised. This may pose a possible tripping hazard and is recommended to be repaired as a safety upgrade.



**15:** - Sealant is recommended at the top of the driveway to garage slab connection to reduce the potential for intrusion.



## Walkways

### WALKWAY MATERIAL

**16:** - The flatwork material consists of concrete.

### WALKWAY COMMENTS

**17:** - Cracks were noted at the walkways. This implies that movement has occurred. Sealant is recommended on the sidewalks to prevent further damage and performed on a regular basis to prevent extended wear.

**18:** - The sidewalks show evidence of moisture staining as well as standing water, which may indicate chronic ponding or poor drainage. In time, this condition can accelerate the wear and deterioration of the sidewalk.



**19:** - Trees were planted close to the sidewalks. In time, these trees once matured may cause damage to the concrete sidewalks. We suggest that the sidewalks be monitored annually for potential damage.

**20:** - The sidewalk areas appears to have been installed in an amateurish fashion.

## **Yardwalls**

### **LOCATION**

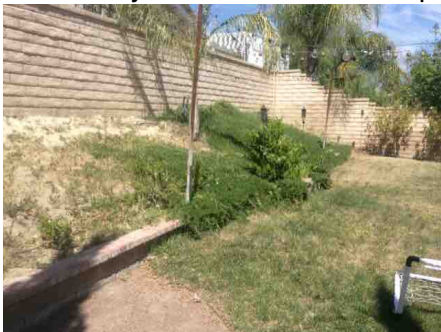
**21:** - The retaining wall is located at the west side.

### **RETAINING WALL MATERIALS**

**22:** - The yard wall materials are slump stone block.

### **RETAINING WALL OBSERVATIONS**

**23:** - The yard wall was not completely visible to inspect due to the foliage present.



**24:** - We suggest removing at least six inches of dirt from behind the retaining walls to eliminate the possibility of spill-over.

## **Porch**

### **PORCH MATERIAL**

**25:** - The flat work material consists of brick.

## PORCH COMMENTS

**26:** - The porch surface material is high at the foundation, which does not allow a complete inspection of the foundation. Furthermore, moisture may penetrate beyond the slab into the interior wood framing members via the weep screed flashing (or under a house with a crawlspace). Sealant is recommended to be installed at the slab to foundation connection(s) as preventative maintenance - IRC 2012 §703.6.2.1.



**27:** - The porch surface showed signs of poor drainage or ponding judging by the stains present. Standing water poses a threat to the interior wood framing thru foundation weep screed if the wall is equal or lower than the slab. We recommend monitoring the drainage of the patio when moisture is present. Repairs may include the installation of drains.



**28:** - The porch surface was settled at the time of the inspection. This poses a possible tripping hazard and should be serviced for safety.



## Patios

### PATIO

**29:** - The patio material consists of concrete and brick.

**30:** - Cracks were noted at the patio(s). This implies that movement, such as settlement, has occurred. Sealant is recommended on the patio cracks to prevent further damage. This should be performed to prevent extended wear. We recommend that this condition be monitored and further evaluated by a qualified contractor if any sign of more significant movement is observed.

**31:** - The patio surface shows signs of poor drainage or ponding judging by the stains present. Standing water poses a threat to the interior wood framing through the foundation weep screed if the wall is equal or lower than the slab. We recommend monitoring the drainage of the patio when moisture is present. Repairs may include the installation of drains.

## Gates

### GATE MATERIALS

**32:** - The gate(s) is / are constructed in wrought iron and wood.

### GATES

**33:** - The gate was functional when tested for operation, however, moisture damaged or heavily weathered wood was noted at the gate.



**34:** - The wrought iron gate was observed to have areas of rust. Proper surface preparation and painting are necessary to prevent further / future deterioration. In some cases, wrought iron components may have to be replaced.



## Fencing

### BLOCK WALL

**35:** - The walls consist of slump stone blocks, which may or may not, possess solid grouted cells or rebar.

**36:** - There is a tree adjacent to the wall that does not appear to have affected it as yet, but you may wish to have a professional predict its growth or root movement, which could adversely affect the wall in the future.

**37:** - There are some of the "cap" bricks (block / bricks at the top of the wall) that are loose and appear to be lifting somewhat.

**38:** - Deterioration of the blocks in the block wall was noted at the time of the inspection. The wear may have been the result of over spray from the sprinkler system or moisture from the adjacent yard.



**39:** - The footing is exposed at the block wall system. This footing is the foundational support for the fence and without proper stability, the block wall is subject to failure. Repairs are recommended and should be conducted by a qualified contractor.



**40:** - The block wall is suggested to be grouted where the wall connects to the adjacent wall.





## Grade

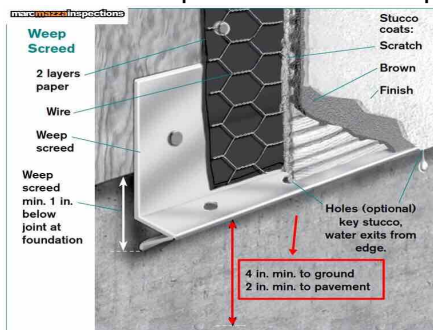
### SITE TYPE

**41:** - All structures are dependent on the soil beneath them for support, but soils are not uniform. Some that might appear to be firm and solid can turn to liquid and become unstable during seismic activity. Also, there are soils that can expand to twice their volume with the influx of water and move structures with relative ease, raising and lowering them and fracturing slabs and other hard surfaces. In fact, expansive soils have accounted for more structural damage than most natural disasters. Water can be equally destructive, and can foster conditions that are deleterious to health. For this reason, the ideal property will have soils that slope away from the residence and the interior floors will be several inches higher than the exterior grade. Also, the residence will have roof gutters and downspouts that discharge into area drains with catch basins that carry water away to hard surfaces. If a property does not meet this ideal, or if any portion of the interior floor is below the exterior grade, we cannot endorse it and recommend that you consult with a grading and drainage contractor, even though there may not be any evidence of moisture intrusion. We have confirmed moisture intrusion in residences when it was raining that would not have been apparent otherwise. Also, in conjunction with the cellulose material found in most modern homes, moisture can facilitate the growth of biological organisms that can compromise wood framing or produce molds that are deleterious to health.

**42:** - The residence is situated on a flat pad, which would typically not need a geological evaluation. However, inasmuch as we do not have the authority of a geologist, you may choose to have a site evaluation.

### GRADING

**43:** - There is concrete and soil that is high at the foundation at the time of the inspection. The soil level is up to or above the weep screed. These materials at this level may allow moisture penetration in the interior wood framing members or insect infestation. There should be at least 4 inches between the weep screed (if present) and the soil level and 6 inches between siding and the soil level. There is a recommended space of 2 inches between the weep screed and a solid surface such as concrete. It is recommended that this condition be referred to a qualified termite inspector for further evaluation - IRC 2012 §703.6.2.1.



## Subsurface Drainage

### SUBSURFACE DRAINAGE

**44:** - The property is served by sub surface drains, which are not tested. If testing is required, it is suggested to be performed by a camera or scope. Testing and verification of the termination location of the drains is recommended to be performed prior to the close of escrow, if the buyer wishes to determine the drains condition as well as the points where the drains terminate. Cleaning of the drains is recommended annually. Keep the drain covers free from debris. Without water present we cannot determine if the areas around the drain are sloped to ensure proper drainage to the drain.

**45:** - A tree or trees, are located in an area that is considered close to the subsurface drains. There is no way to determine whether or not the trees have had any affect on the drains without the use of a sewer scope/ camera.



**46:** - There were subsurface drains which were observed to be higher in areas than the surface making proper drainage difficult at various locations around the property. The drains were not tested at the time of the inspection but is strongly suggested.



## EXTERIOR

Our evaluation of the exterior of a property conforms to state or industry standards. Certain detached structures, such as storage sheds, barbecues, above ground spas, gazebos or stables are not within the scope of this inspection. Landscape components, such as trees, shrubs, fountains, ponds, statuary, pottery, fire pits, patio fans, heat lamps, and ornamental or decorative lighting are not evaluated. Surface coatings or cosmetic deficiencies and the wear and tear associated with usage or the passage of time that would be readily apparent to the average person are not commented on. The inspection of the exterior and grounds as described may be limited if not fully visible due to foliage or storage of personal belongings. Trees / foliage may have an impact on site, structure, drainage and waste.



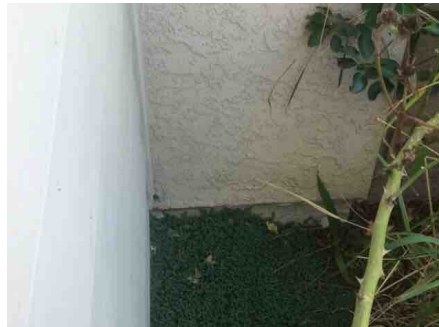
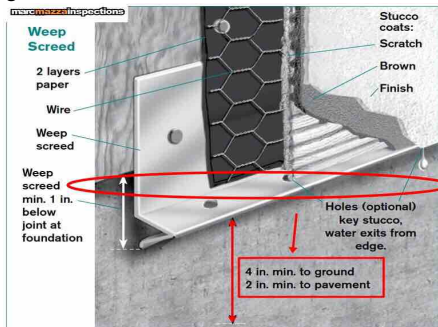
## Stucco Wall Covering

### STUCCO WALL GENERAL COMMENTS

**47:** - Cracks were noted at the exterior wall covering materials. These cracks suggest that either some type of movement within the structure has occurred. It is well beyond our scope, as well as, our expertise to attempt to draw a definitive conclusion as to the cause of these cracks without additional investigations, which may include destructive testing. In light of these findings, we must suggest the buyer employ the services of a contractor who is familiar with structural movement and/or other reasons for stucco cracking. At the very least, the buyer should monitor the cracks for further movement.



**48:** - The weep screed (flashing at the bottom of the stucco wall) is rusted and deteriorated, which may suggest the over exposure of moisture. This may be a direct result of sprinkler contact or improper drainage, or both. This area is suggested to be monitored or tested for poor drainage or otherwise - IRC 2012 §703.6.2.1.



**49:** - Moisture staining was observed on the south and north side(s) of the exterior stucco walls under the eave. It is possible that the water is passing behind the fascia, under the gutter (if installed) or eave board, however, this is merely speculation. It may also be runoff from the roof. Without a calibrated water test there is no way to determine where these stains derived.



## PENETRATIONS

**50:** - There is missing stucco (holes, openings, missing covers, chips) noted at the exterior wall of the house. These openings may allow moisture to enter into the structure resulting in possible damage to interior wood framing members. In addition, openings in the stucco may also allow pests to enter and should be sealed as preventative maintenance.



## Siding

### WOOD SIDING

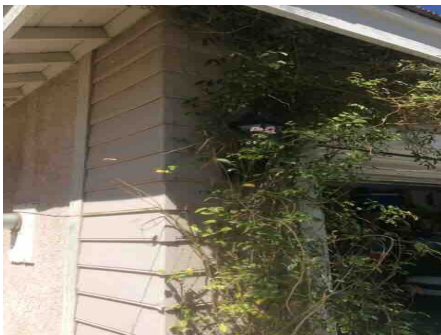
**51:** - Sealant is recommended around siding joints and connections as regular maintenance to prevent possible moisture penetration.



**52:** - Sealant is necessary around some pipes, which penetrate into the exterior wall covering materials, to prevent moisture intrusion.



**53:** - Vegetation was noted in contact with the siding wall material at various locations around the structure and should not be on or near the house. Vegetation can encourage mold / mildew, interior rot, termites and other undesirable guests. The weight of the vegetation can dislodge siding and the tendrils from some vines can actually dissolve mortar joints in masonry walls. Vegetation limits the inspection of the exterior walls and foundation.



**54:** - The siding paint / finish is weathered at various locations. Localized repairs, replacement and / or painting may extend the life of the siding. Wholesale replacement may eventually be necessary at a significant expense, which can be deferred with regular maintenance.



**55:** - There is corner-beading missing from the siding. To ensure against moisture intrusion replacement of this material is suggested.



## Trim

### TRIM OBSERVATIONS

**56:** - There are areas of exterior trim where the paint / finish was observed to be generally fair condition with signs of being weathered and/or deteriorated. Regular maintenance type service is required to decrease the possibility of premature damage.

**57:** - Sealant is needed at various areas around the exterior trim to wall connections as preventative maintenance and to prevent the possibility of moisture penetration or damage.



## EAVES

**58:** - Moisture stains and possible moisture damage were observed at the rear eaves at the time of the inspection. Additional evaluations may be necessary and should be conducted by a professional pest control company.





## DOOR / WINDOW TRIM

**59:** - There are windows and or door which appeared to have been replaced. The new trim overlaps the exterior wall covering material, leaving a small area exposed to moisture intrusion. Sealant is suggested around the exterior window trim to wall connection to decrease the possibility of moisture entry into the structure. Sealing the connection with an exterior approved material with a 25 / 50 guarantee against deterioration is suggested.



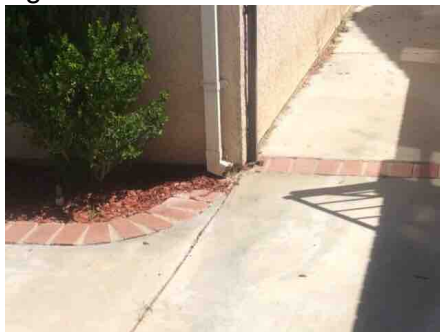
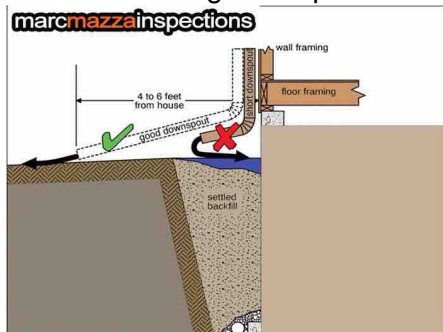
## Gutters

### GUTTER MATERIAL

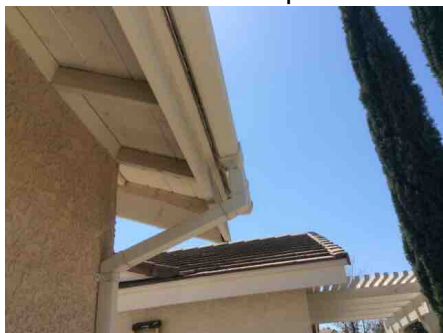
**60:** - The gutter system is a full gutter system, which covers a majority of the eaves and runoff drainage is necessary or suggested. The gutters are plastic.

### DOWNSPOUTS

**61:** - We recommend routing all of the downspout(s) away from the structure, or installing the downspout directly into the subsurface drainage, if present. The downspout(s) should discharge water at least five (5) feet from the house or drain into existing sub surface drainage. Storm water should be encouraged to flow away from the building at the point of discharge.



**62:** - The west downspout was disconnected and is suggested to be better secured for proper operation.



## Electrical

### EXTERIOR RECEPTACLES

**63:** - All of the exterior outlets are suggested to have ground fault protection. Although, the installation of Ground Fault Circuit Interrupter (GFCI - a safety device for outlets close to any water) receptacles may not have been required to be installed at the time of this houses initial construction, however, they are now and because this new code is the most stringent, we feel it prudent that this is the code to follow. NEC 2014 §210.8 Local jurisdictions to some extent, may offer a different version of this standard.



**64:** - The accessible outlets that were tested are functional, unless otherwise stated. Improvements to the electrical components suggested within this section may still may be necessary.

**65:** - Sealant is recommended around the exterior cover plates to wall connections.



### EXTERIOR LUMINARIES & SWITCHES

**66:** - The lights outside the doors of the residence are functional (except where otherwise noted in this section). It is not within the scope of the inspection to test or evaluate decorative, low voltage lights or motion controlled lights.

## EXTERIOR WIRING & CONDUIT

**67:** - Loose and exposed wiring was observed at the north side of the structure, which poses a potential safety hazard and is suggested to be improved.



**68:** - Extension cords are used as permanent wiring at the exterior. Extension cord materials are not intended to provide permanent power to appliances for extended lengths of time. Improvements are suggested.

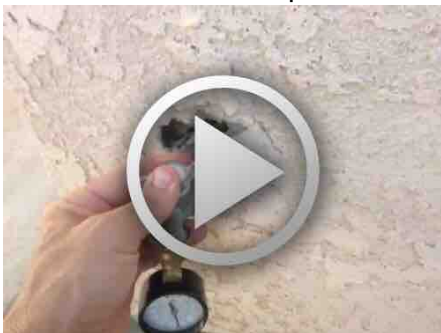


## Hose Bibs

### HOSE BIBS

**69:** - The hose bibs tested appear to be in operational condition where accessible and tested (except where noted otherwise).

**70:** - The rear side hose bib is loose where it penetrates the exterior rear wall and is suggested to be better secured at the wall to prevent damage.





## Irrigation

### IRRIGATION

**71:** - Due to the fact that the majority of the sprinkler lines are subterranean, and given the multitude of different types of sprinkler control panels, we do not evaluate automatic sprinkler systems as part of our inspection. However, we will make comments on obvious issues observed during the course of this inspection.

**72:** - There are a wide variety of irrigation components such as pipes, that could include: old galvanized ones, more dependable copper ones, and modern polyvinyl ones that are commonly referred to as PVC. Among the latter, the quality can range from a dependable thick-walled type to a less dependable thin-walled type, and it is not uncommon to find a mixture of them. To complicate things, significant portions of these pipes cannot be examined because they are buried. However, our inspection only includes the visible portions of the system, and we do not test each component, nor search below vegetation for any concealed hose bibs, actuators, risers, or heads. We will look for any visible evidence of damage or leakage, but recommend that you have the sellers demonstrate an automatic sprinkler system and indicate any seasonal changes that they may make to the program.

### SPRINKLER HEADS

**73:** - Readjusting the sprinklers away from the structure walls, walkways, fences, HVAC components, etcetera, is recommended, due to the staining created by the over spray. Over time, the sprinklers can cause excessive wear and tear to these materials.



## Shed

### SHED

**74:** - The shed present is too close to the main structure per building standards. A standard 3 foot setback is suggested between the structure and the shed. The small structures (sheds) are not within the scope of this inspection, and therefore, not inspected. Sheds may include the following: electrical components, flammable materials, hazardous materials, plumbing and more. The sheds are not entered as part of this inspection therefore the sheds are suggested to be inspected prior to the close of this escrow.



**75:** - We do not have the expertise or the authority to establish property lines, which are determined by surveyors, however, using walls or fences as boundaries, the shed in the rear yard encroaches on what would be the standard 3 to 15 foot setback. The permit should be verified for this structure because we do not endorse or tacitly approve of any structure built without a permit.

**76:** - The small structures (sheds) are not within the scope of this inspection, and therefore, not inspected. Sheds may include the following: electrical components, flammable materials, hazardous materials, plumbing and more. The sheds are not entered as part of this inspection, therefore, the sheds are suggested to be inspected prior to the close of this escrow. We may elect to comment on obvious issues, however, this does not constitute a thorough evaluation.

## Site Hazards

### MISCELLANEOUS SITE HAZARDS

**77:** - There is steel rebar sticking up in the rear side of the yard. Caution is suggested as this condition poses a potential safety hazard. Improvements are recommended as a safety precautionary measure.



## STRUCTURAL

All structures are dependent on the soil beneath them for support, but soils are not uniform. Some that might appear to be firm and solid can liquefy and become unstable during seismic activity. There are soils that can expand to twice their volume with the influx of water and move structures with relative ease, raising and lowering them and fracturing slabs and other hard surfaces. In fact, expansive soils have accounted for more structural damage than most natural disasters. Regardless, foundations are not uniform, and conform to the structural standard of the year in which they were built. In accordance with our standards of practice, we identify foundation types and look for any evidence of structural deficiencies, however, cracks or deteriorated surfaces in foundations are quite common. In fact, it would be rare to find a raised foundation wall that was not cracked or deteriorated in some way, or a slab foundation that did not include some cracks concealed beneath the carpeting and padding. Fortunately, most of these cracks are related to the curing process or to common settling, including some wide ones called cold-joint separations that typically contour the footings, but others can be more structurally significant and reveal the presence of expansive soils that can predicate more or less continual movement. We will certainly alert you to any suspicious cracks if they are clearly visible, however, we are not specialists, and in the absence of any major defects we may not recommend that you consult with a foundation contractor, a structural engineer, or a geologist, but this should not deter you from seeking the opinion of any such expert.

### **WALL CONSTRUCTION TYPE**

**78:** - The framework appears to be constructed from wood. Framing, in construction is the fitting together of pieces to give a structure support and shape and sometimes is used as a noun such as "the framing" or "framing members". Framing materials are usually wood, engineered wood, or structural steel. Building framing is divided into two broad categories, heavy-frame construction (heavy framing) if the vertical supports are few and heavy such as in timber framing, or steel framing or many and smaller called light-frame construction (light framing) including balloon, platform and light-steel framing. Light-frame construction using standardized dimensional lumber has become the dominant construction method in North America because of its economy. Modern light-frame structures usually gain strength from rigid panels plywood and other plywood-like composites such as oriented strand board (OSB) used to form all or part of wall sections) but until recently carpenters employed various forms of diagonal bracing to stabilize walls. Special framed shear walls are becoming more common to help buildings meet the requirements of earthquake engineering or wind engineering.

### **FOUNDATION TYPE**

**79:** - The floor structure consists of a poured slab that, may or may not, include reinforcing steel.

### **CONCRETE SLAB**

**80:** - The slab foundation on the exterior was evaluated by examining the stem walls that project above the footing if accessible and visible.

**81:** - Portions of the concrete slab were not fully visible due to personal belongings which block our view of the footing. Other alternative methods of inspecting the slab may be performed, but this may require removal of personal belongings. The inspector cannot alter or change any of these conditions.

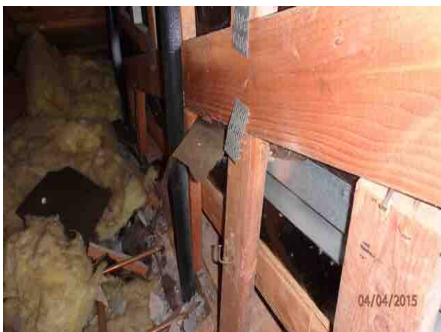
**82:** - We observed what appears to be deterioration and exposed rebar at the rear stem wall of the back exterior side of the house. We are unable to determine if the rebar pictured is / was necessary to secure a sole/sill plate. In any event, the exposure will ensure the rebar deteriorates prematurely.



## ROOF FRAMING

**83:** - The roof framing consists of a factory built truss system, comprised of components called chords, webs, and struts that are connected by wood or metal gussets nailed or glued in place. Each component of the truss is designed for a specific purpose, and cannot be removed or modified without compromising the integrity of the entire strut. The lowest component, which is called the chord and to which the ceiling is attached, can move by thermal expansion and contraction and cause creaking sounds, which are more pronounced in the mornings and evenings along with temperature changes. Such movement has no structural significance, but can result in small cracks or divots in the drywall or plaster.

**84:** - Portions of the framing system (cripples) system have been modified, damaged, sub standardly modified or re-installed. We have no way to determine if this framing was modified and re-supported with the adjacent ledger from the addition. In light of this, further assessment is advised. We recommend the advice and services of a licensed general contractor who can inspect this condition and improve upon it as / if necessary.



**85: -** We observed a cut or otherwise damaged truss within the attic. These trusses are structural components and as such will require building permits for repair. Prior to that, however, an engineer should evaluate the condition in order to determine how to best remedy this condition.



## ROOF

There are many different roof types, which we evaluate by walking on their surfaces. If we are unable or unwilling to do this for any reason (such as rain or snow presence), we will indicate the method that was used to evaluate the roof.

Every roof will wear differently relative to its age, the number of its layers, the quality of its material, the method of its application, its exposure to direct sunlight or other prevalent weather conditions, and the regularity of its maintenance. Regardless of its design-life, every roof is only as good as the waterproof membrane beneath it, which is concealed and cannot be examined without removing the roof material, and this is equally true of almost all roofs.

There are two basic roof types, pitched and flat. Pitched roofs are the most common, and the most dependable. They are variously pitched, and typically finished with composition shingles that have a design life of twenty to twenty-five years, or concrete, composite, Spanish, or metal tiles that have a design-life of forty to fifty years, and gravel roofs that have a lesser pitch and a shorter design-life of ten to fifteen years. These roofs may be layered, or have one roof installed over another, which is a common practice but one that is never recommended because it reduces the design-life of the new roof by several years, can impede emergency service by fire department personnel, and requires a periodical service of the flashings. These roofs are serviced with mastic, which eventually shrinks and cracks and provides a common point of leakage. Among the pitched roofs, gravel ones are the least dependable, because the low pitch and the gravel prevent them from draining as readily as other roofs. For this reason, they must be conscientiously maintained. In this respect, the least dependable of all roofs are flat or built-up ones. Some flat roofs are adequately sloped toward drains but many are not, and water simply ponds and will only be dispersed by evaporation.

The most common cause of leakage results when roofs are not serviced, and foliage and other debris blocks the drainage channels. In fact, the material on the majority of pitched roofs are not designed to be waterproof only water-resistant. However, what remains true of all roofs is that, whereas their condition can be evaluated, it is virtually impossible for anyone to detect a leak except as it is occurring or by specific water tests, which are beyond the scope of our service. Even water stains on ceilings or on the framing within attics, could be old and will not necessarily confirm an active leak without some corroborative evidence, and such evidence can be deliberately concealed.



Consequently, only the installers can credibly guarantee that a roof will not leak, and they do. We evaluate every roof conscientiously, and even attempt to approximate its age, but we will not predict its remaining life expectancy, or guarantee that it will not leak. Naturally, the sellers or the occupants of a residence will generally have the most intimate knowledge of the roof and of its history. Therefore, we recommend that you ask the sellers about it, and that you either include comprehensive roof coverage in your home insurance policy, or that you obtain a roof certification from an established local roofing company.

## **GENERAL ROOFING**

**86:** - Concrete tile roofs are among the most expensive and durable of all roofs, and are guaranteed by the manufacturer to last for forty years or more, but are usually only guaranteed against leaks by the installer from three to five years. Like other pitched roofs, they are not designed to be waterproof, only water resistant, and are dependant on the integrity of the waterproof membrane beneath them, which cannot be seen without removing the tiles, but which can be split by movement, deteriorated through time, or by ultra-violet contamination. Significantly, although there is some leeway in installation specifications, the type and quality of membranes that are installed can vary from one installer to another, and leaks do occur. The majority of leaks result when a roof has not been well maintained or kept clean, and we recommend servicing them annually. This is important, because our service does not include any guarantee against leaks. For a guarantee, you would need to have a roofing company perform a water test and issue a roof certification. The sellers or the occupants will generally have the most intimate knowledge of the roof, and you should ask them about its history and then schedule a regular maintenance service. Fortunately, many of these roofs can be walked on without damaging the tiles, but it is important to tread carefully on the first third of each tile.

## **METHOD OF EVALUATION**

**87:** - The roof and its components were evaluated by walking its accessible surface.

## **ROOF AGE**

**88:** - The roof appears to be the same age as the residence.

**89:** - There are areas within the roofing that appear to be relatively new (not original). This may suggest a previous repair or addition.

## **ROOF TYPE**

**90:** - The roof type is a gable roof.

## **SKYLIGHTS**

**91:** - The roof includes one or more skylights, which are notoriously problematic and a common point of leaks. There are different methods of installing them and, although opinions will vary, some methods are better than others. Therefore, it will be important to keep the area around them clean and to monitor them for evidence of leaks. The skylights were viewed from the underside if we were unable to access the units from the roof deck.

**92:** - The skylight dome is cracked, could leak, and should be replaced.



### **FLASHINGS & VENT TERMINATIONS**

**93:** - The roof flashings that are visible, are suggested to be sealed as part of typical service. They are comprised of metal that seals valleys, plastic or metal vents and other roof / wall penetrations, and are the most common point of leaks. This is particularly true of the flashings on a layered roof, which are covered by the roofing material and are even more susceptible to leaks - Reference Building Code IRC-P3103.3.



**94:** - We observed debris building in the valleys. Debris is suggested to be removed and the valleys monitored.





**95: -** We observed an under-cut valley flashing. This single crown valley flashing appears to be cut short prior to extending over the eave and drip edge flashing.



## CONCRETE TILE OBSERVATIONS

**96: -** There are cracked roof tiles that were observed at the main roof. This should be expected as regular wear and tear, however, the tile should be serviced to maintain the water tight integrity of the roof.



**97: -** The life expectancy for a concrete tile roof is marketed as a 50 year roof. However, the underlayment and batten system, even if good material and the proper installation procedure was used, will not last as long and may have to be replaced sooner than 20-40 years. Many tile roof underlayments and battens must be replaced much sooner because of inferior materials and installation procedures used - in some cases, within the first eight to twenty years. You may notice that the concrete tile also loses color and some surface texture after several years. It is suggested that the roofing underlayment be inspected in several areas as a precautionary measure.

**98: -** This roof installation employs closed cut valleys. This is to say the valleys are cut very close to one another which may allow debris to collect and pose a potential water back up and leak. The alternative method would be to have the valley flashing exposed. We suggest having the roof inspected and cleaned on a regular basis.

**99:** - The tile roof has junctions where the ridge (top tiles) and rake (side tiles) tiles meet each other. These junctions are sealed with cement or a bitumen material. Occasionally, the cement cracks or the bitumen material deteriorates or separates which may lead to a vulnerable possible moisture entry point. It is recommended that the junctions be sealed properly by a qualified roofing contractor in order to maintain the water tight integrity of the roofing system.



**100:** - We failed to verify roofing paper which will typically turn down the fascia at least 1-3 inches.



**101:** - There are loose "rake" tile(s) (tiles on the sides of the roof decks) observed at the roof structure. This is common and is considered normal for this type of roof material. Repairs are considered to be minimal and should be performed by a qualified roofing contractor.



## CHIMNEY & FIREPLACE

The Chimney Safety Institute of America has published industry standards for the inspection of chimneys, and on January 13, 2000, the National Fire Protection Association adopted these standards as code, known as NFPA 211. Our inspection of masonry and factory-built chimneys to what is known as a Level-One inspection, which is purely visual and not to be confused with Level-Two, and Level-Three inspections, which are performed by qualified specialists with a knowledge of codes and standards, and typically involves dismantling

components and/or investigations with video-scan equipment and other means to evaluate chimneys.

## FACTORY BUILT CHIMNEY

### CHIMNEY LOCATION

**102:** - This chimney is located at the north side of the structure.

### GENERAL COMMENTS

**103:** - There are a wide variety of factory built chimneys, which are constructed on site with approved components. Typically, the flue is installed within a "chase" or wood/metal framed enclosure from the fireplace firebox to the top of the roof. The inside portion of this chase is almost never accessible to view within without removal of the termination cover, which we cannot do. We only perform a competent visual inspection of the chase from the exterior, where it is accessible and visible. Additionally, we do not remove any portion of this chase at any time during this inspection. It is difficult to determine whether or not the chimney was actually manufactured to meet minimum building standards with regard to drafting, clearances etcetera. Our inspection does not include a comprehensive view of the complete flue. This is almost always performed with a camera. In short, we cannot guarantee that every particular component is the one stipulated for use by the manufacturer. With this in mind, you may wish to have a specialist who can perform destructive testing or dismantling of the materials, evaluate the chimney before the close of escrow.

### CHIMNEY FLASHING

**104:** - The base flashing between the chimney and the roof are in acceptable condition, only where visible.

### FACTORY BUILT CHASE

**105:** - The "visible" portion of the chimney chase appeared to be in generally good condition at the time of the inspection.

### FACTORY BUILT CHASE COVER

**106:** - The metal termination cap is slightly sunken and may hold water. It should be serviced or evaluated to ensure that moisture has not contaminated the area surrounding the flue.



**107:** - The chase cover has been installed tightly around the chase, which will not allow for complete ventilation and thus cooling of the fireplace chase, should it be required by this specific fireplace system. Some fireplace systems require such a gap and some do not. Improvements are recommended if necessary and should be carried out by a qualified licensed individual.



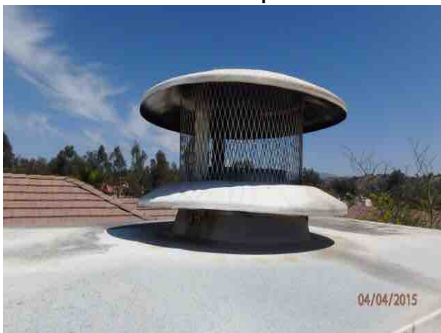
**108:** - The metal chase cover at the top of the chimney has loose nails that are recommended to be properly sealed to reduce the possibility of moisture intrusion.

#### **FACTORY BUILT FLUE**

**109:** - Inspection of the flue is limited to the visible and/or accessible components only. Examination of the accessible portions of the chimney flue, regarding the presence of cracks, misalignment, or any deterioration is beyond the scope of this inspection. Due to the limited view of the flue through the damper and not being able to view the flue through the top of the chimney (spark arrestor, height, length), the condition of the entire flue cannot be commented upon and is, therefore, not within the scope of this inspection. If further assurances are wanted, it is suggested to consult with a qualified technician prior to the close of escrow.

#### **FACTORY BUILT SPARK ARRESTOR / CAP**

**110:** - A functional spark arrestor is in place on the chimney.



## FACTORY BUILT FIREPLACE

### FIREPLACE LOCATION

**111:** - This fireplace is located in the living room.



### FACTORY BUILT FLUE

**112:** - Inspection of the flue is limited to the visible and/or accessible components only. Examination of the accessible portions of the chimney flue, regarding the presence of gaps, cracks, misalignment, or any deterioration is beyond the scope of this inspection. Due to the limited view of the flue through the damper and not being able to view the flue through the top of the chimney, the condition of the entire flue cannot be commented upon and is, therefore, not within the scope of this inspection. If further assurances are wanted, it suggested to consult with a qualified technician prior to the close of escrow.

### REFRACTORY

**113:** - There are cracks in the refractory (firebricks) in the fireplace. These cracks warrant attention and necessary repairs (which may include replacement) to reduce possible future damage or deterioration. We recommend the further review, advice and services of a professional contractor.



### DAMPER

**114:** - The damper is functional when tested.

**115:** - Blocking open the damper with a clip to keep the damper from closing any time gas log sets or a fuel pipe is/are present is always recommended.

### FUEL AND LOG STARTER

**116:** - The gas line at the fireplace was capped therefore it was not tested.



**117: -** The void / separation around the gas pipe in the sidewall of the fireplace should be sealed with refractory caulk to prevent any possibility of back-drafting a flame beyond the combustion chamber, where it could come into contact with combustible material.



#### **LOG SET & GRATE**

**118: -** The grate which holds the logs within the confines of the firebox safely is deteriorated. Replacement may be necessary.

#### **GLASS DOORS**

**119: -** There are no glass doors installed on the fireplace. This fireplace may have been tested with doors in which case doors would be required, in accordance to manufacturer's standards. Further assessment and advice by a qualified fireplace specialist is advised.



#### **SCREENS**

**120: -** The screens appear to be in generally good condition.

#### **HEARTH & HEARTH EXTENSION**

**121: -** The hearth extension is in acceptable condition.

### **PLUMBING**

Plumbing systems have common components, but they are not uniform. In addition to fixtures, these components include gas pipes, water pipes, pressure regulators, pressure relief valves, shut-off valves, drain and vent pipes, and water-heating devices, some of which we do not test if they are not in daily use.

The best and most dependable water pipes are copper, because they are not subject to the build-up of minerals that bond within galvanized pipes, and gradually restrict their inner diameter and reduce water

volume. Water softeners can remove most of these minerals, but not once they are bonded within the pipes, for which there would be no remedy other than a re-pipe.

The water pressure within pipes is commonly confused with water volume, but whereas high water volume is good high water pressure is not. In fact, whenever the street pressure exceeds eighty pounds per square inch a regulator is recommended, which typically comes factory preset between forty-five and sixty-five pounds per square inch. Regardless of the pressure, leaks will occur in any system, and particularly in one with older galvanized pipes, or one in which the regulator fails and high pressure begins to stress the washers and diaphragms within the various components.

Waste and drainpipes pipes are equally varied, and range from modern ABS ones [acrylonitrile butadiene styrene] to older ones made of cast-iron, galvanized steel, clay, and even a cardboard-like material that is coated with tar. The condition of these pipes is usually directly related to their age. Older ones are subject to damage through decay and root movement, whereas the more modern ABS ones are virtually impervious to damage, although some rare batches have been alleged to be defective. Inasmuch as significant portions of drainpipes are concealed, we can only infer their condition by observing the draw at drains. Nonetheless, blockages will occur in the life of any system, but blockages in drainpipes, and particularly in main drainpipes, can be expensive to repair, and for this reason we recommend having them video-scanned. This could also confirm that the house is connected to the public sewer system, which is important because all private systems must be evaluated by specialists.

All gas related issues should only be repaired by a licensed plumbing contractor since personal safety is involved.

## **MAIN SERVICE**

### **LOCATION**

**122:** - The main water supply line is located inside the garage.

**123:** - The water main located in the garage was not fully accessible nor visible. At the time of the inspection, personal belongings blocked the full and complete view of the main. A complete evaluation is suggested prior to the close of escrow.

### **WATER PRESSURE**

**124:** - The water pressure when taken from the exterior, is typically taken from a hose bib which we believe is regulated because it's connected to the building. Most regulated hose bibs are directly connected to or from the structure. If we take the pressure from the interior, we will typically take the measurement from the laundry area when and only if available. Furthermore, it's common to have unregulated hoses bibs with water pressures that exceed 100 PSI.

**125:** - As the static water pressure of the supply plumbing system exceeds 80 pounds per square inch (psi) it would be wise to (install) or adjust the pressure regulator. Otherwise, the plumbing system may be prone to leaks in piping, fittings or other equipment. The water pressure was taken from the nearest accessible hose bib or at the laundry.

Note: We cannot determine which hose bibs are regulated and which are not regulated.

**608.2 Excessive Water Pressure.** Where static water pressure in the water supply piping is exceeding eighty (80) pounds per square inch (552 kPa), an approved-type pressure regulator preceded by an adequate strainer shall be installed and the static pressure reduced to eighty (80) pounds per square inch (552 kPa) or less.



## **PRESSURE RELIEF VALVE**

**126:** - There was no PRV on the main water service as in accordance with many local authorities having jurisdiction. There may, however, be a pressure relief valve at the water heater.

## **SUPPLY PIPING**

### **COPPER**

**127:** - The visible water supply lines appear to be copper.

**128:** - The residence may have originally been plumbed with an alternative water supply pipe material, but most, if not all, may have been replaced with copper. We cannot view inside the walls to determine if the verticals were removed and replaced. As a result, we suggest that the buyer employ the services of a plumbing contractor to determine the extent of what work was performed and the current state of the pipes which are not visible, as latent defects may exist. Destructive testing may be necessary. We suggest the buyer research these improvements to determine if the work was performed by a licensed professional, as well as, find out if warranties exist. Additionally, the buyer should contact the local building and safety department to see if the work was performed under their jurisdiction and with permits.

### **COPPER SUPPLY PIPING**

**129:** - There is no indication that the supply lines are faulty and appeared to operate properly. The inspection is limited to tests conducted externally. At the time of the inspection, all of the supply lines (between floors, attic, underground, in walls, verticals and laterals) are not fully visible or accessible for inspection.

Note: The replacement of the original piping (repipe) typically requires a building permit to ensure the work was performed in accordance to building standards. If proof of permits is desired, the current owner or the building department should be contacted.



**130:** - Surface corrosion was observed at the copper piping. This is a condition that should be monitored for further corrosion and possible leakage. Future repairs may ultimately be necessary if leaking is discovered. There was no active leaking at the time of the inspection.



## DRAIN, WASTE & VENTS

### GENERAL OBSERVATIONS DWV

**131:** - We attempt to evaluate drain pipes by running the water in the fixtures present. We will flush all toilets while observing the draw and watching for blockages and observe all drains for blockages or slow draining but this is not a conclusive test and only a video-scan of the main line would confirm its actual condition.

You can be sure that blockages will occur, usually relative in severity to the age of the system, and will range from minor ones in the branch lines, or at the traps beneath sinks, tubs, and showers, to major blockages in the main line. The minor ones are easily cleared, either by chemical means or by removing and cleaning the traps. If tree roots grow into the main drain that connects the house to the public sewer, repairs could become expensive and might include replacing the entire main line. For these reasons, we recommend that you ask the sellers if they have ever experienced any drainage problems, or you may wish to have the main waste line video-scanned before the close of escrow. Failing this, you should obtain an insurance policy that covers blockages and damage to the main line, however, most policies only cover plumbing repairs within the house, or the cost of roter service, most of which are relatively inexpensive.

We do not stop-up shower pans for testing in showers with pans and/or on a second floor. Tiled shower pans may be subjected to internal non visible damage beyond the scope of this inspection.

Within the vent piping or other types of vents there may be a material known as Transite. This material was widely used until the mid 1980s. This vent pipe is insulated with a known asbestos-containing material, which we do not endorse nor have the authority to evaluate. Most metal vent material is not allowed to be connected into existing transite vent pipe.

Plastic vents may expand and contract making a "ticking" noise when hot water is in use.

**132:** - At the time of the inspection, we may not have located all of the plumbing clean outs. We therefore recommend the further review, advice and services of a plumbing contractor.

**133:** - Note: We tested around and/or under the shower(s) and bathtub(s) with an infrared scan for any sign of moisture intrusion or leakage. Our findings were negative at the time of the inspection.

**134:** - The visible DWV vents (drain waste vents) viewed (at the roof deck, crawlspace and / or attic) are ABS materials. The water may be run by the inspector from up to, and / or over 1/2 hour at the time of this inspection. The water has been run in all accessible bathtubs and showers for this length of time. After completion of the bathroom inspections, we verify from the underside of the components (bathtubs, sinks and showers) for any indication of leakage, if the structure is raised or second story, by visual observation or via an infrared scan. An infrared scan is non conclusive test as many factors such as interior ambient temperature must be precise for this test to be accurate. The infrared scan is not 100% accurate at detecting anomalies within wall cavities. For this, destructive testing is advised.

The sinks were tested individually for leakage within the cabinet and run for 1-3 minutes, or more, each.

The water test that we perform alone, may not reveal blockage in the sewer drain pipes that result from tree roots which penetrate the piping. Only a camera scan of the pipes will reveal this, and is suggested on all older homes. We suggest that pipes which are located between or adjacent to trees be scoped by a plumbing contractor. All of the waste lines were not completely visible to verify the type or types of material, size, or condition as they are underground and inside wall cavities and are not fully visible.

#### **DRAIN PIPING OBSERVATIONS**

**135:** - A drain that appears to have been added to the system was observed in garage. The added drain appears to have been installed in a substandard manner should be corrected by a professional plumber.



#### **FUEL SUPPLY**

##### **FUEL TYPE**

**136:** - The fuel type is natural gas.

##### **FUEL METER LOCATION**

**137:** - The gas main shut-off is located on the side yard.

##### **FUEL METER OBSERVATIONS**

**138:** - The fuel meter is installed and was observed to be in satisfactory condition. All of the fuel lines installed were not visible for inspection.

**139:** - The gas meter air relief vent is too close to the garage intake vent, according to building standards. A three foot clearance is suggested to be maintained as not to conflict. This meter was obviously installed by the local utility company, who with the AHJ, has complete jurisdiction over the installation of this component.

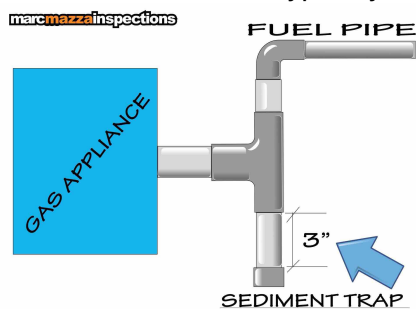


## SEISMIC SHUTOFF

**140:** - The gas main does not have a seismic shut-off valve which is recommended only as an improvement.

## FUEL PIPING

**141:** - There are missing sediment traps at all or some of the fuel piping installed prior to fuel burning appliances e.g. furnace, water heater. A drip leg, also known as a dirt leg, is there to protect the gas train and burner orifices from gas born water and dirt. In a clean piping system, with best quality gas supply, there will never be a need for this. Typically, systems develop some moisture from condensation, as well as some dirt or other contamination. Typically, the drip leg is 3-6 inches in length and prior to the appliance.



## **Code** 142: - 1212.7 Sediment Trap

Where a sediment trap is not incorporated as a part of the gas utilization appliance, a sediment trap shall be installed downstream of the appliance shutoff valve as close to the inlet of the appliance as practical at the time of appliance installation. The sediment trap shall be either a tee fitting with a capped nipple in the bottom outlet, as illustrated, or other device recognized as an effective sediment trap. Illuminating appliances, ranges, clothes dryers, decorative vented appliances for installation in vented fireplaces, gas fireplaces, and outdoor grills shall not be required to be so equipped - NFPA 54-09:9.6.7.

## WATER HEATER

### WATER HEATER LOCATION

**143:** - The water heater is located in the garage.

## WATER HEATER CAPACITY

**144:** - The capacity of the water heater unit is 40 gallons.

## ESTIMATED WATER HEATER AGE

**145:** - The water heater appears to be newer than original and /or replaced therefore, we suggest the buyer inquire as to the possibility of permits for the replacement of this unit.

**146:** - The approximate age of the water heater is 2009. The typical life span of a water heater is approximately 10 to 12 years.



## WATER HEATER OBSERVATIONS

**147:** - The water heater was functional at the time of the inspection, however, other conditions may still exist with specific components listed herein.

## WATER HEATER FUEL

**148:** - The gas control valve and its connector at the water heater are installed but not tested for operation.

## WATER HEATER TPR AND DRAIN

**149:** - The water heater is equipped with a mandated pressure-temperature relief valve and drain. We assume the drain pipe terminates in accordance with minimum building standards, unless otherwise noted.

## WATER HEATER BASE

**150:** - The water heater base is functional.

**151:** - The water heater pan is suggested to drain according to manufacturer's specifications.

## WATER HEATER STRAPS

**152:** - The water heater lower strap is too close to the gas controls. In accordance of the Department of General Services Division of the State Architect and the California plumbing code, the water heater straps must maintain a 4 inch clearance from the gas controls at the lower strap.

Code Reference CPC 508.2

Strapping shall be at a point within the upper 1/3 and the lower 1/3 of the water heater's vertical dimensions. At the lower point, a minimum distance of four (4) inches shall be maintained above the controls to the strap.



## WATER HEATER VENT

**153:** - The ribs of the vent pipe are visible at the water heater. The vent pipes should connect together in such a manner that the ribs or material should be tight. Improving the vent, which may include replacement, is suggested.

**154:** - Screws (minimum of 3) were not observed in the water heater vent at each of the connections. Improvements are recommended.



**155:** - The vent off the water heater is dented or damaged, which may restrict or alter the flow of exhaust.



**156:** - We are unable to determine if the water heater vent is a SW (single wall) vent from our vantage. Should the vent be in fact a SW vent, clearance to combustibles is no less than 6" to combustibles which this vent is not.



#### **WATER HEATER DRAIN**

**157:** - The drain valve of the gas water heater is in place and presumed to be functional, no active leaking was noted.

#### **WATER HEATER SHUT-OFF AND CONNECTORS**

**158:** - The connectors were not visible for inspection because they were covered by foam.



#### **WATER HEATER COMBUSTION CHAMBER**

**159:** - The combustion chamber is clean, and there is no evidence of a leak.

### **GARAGE**

It is common for moisture to penetrate garages, because their slabs are on-grade. Evidence of this is typically apparent in the form of efflorescence, or salt crystal formations that result when moisture penetrates the sidewalls or the slab. This is also quite common if a garage is below grade, and some sidewalls are even cored to relieve the pressure that can build up behind them, and which actually promotes drainage through the garage. Also, if there is living space above the garage, it will be seismically vulnerable. Ideally, the columns and beams around the garage door will be made of structural steel, but in many residences these components are made of wood but could include some structural accessories, such as post-straps and hold-downs, and plywood shear paneling. Regardless, we are not engineers, and recommend that you read about this in a booklet that should have been given to you by the realtors, and you may wish to discuss this further with a structural engineer. Garage door openings are not standard, and you may wish to measure the opening to ensure that there is sufficient clearance to accommodate your vehicles.



## GENERAL CONDITIONS

**160:** - Garage interior permanent mounted cabinets block the view of the garage walls and floor. Additionally, the cabinets are not entered or tested. The interior of the cabinets are beyond the scope of this inspection.

**161:** - At the time of the inspection most all of the garage was not accessible for inspection. The garage walls, the electrical, vents, doors, portions of the ceiling and floor may not have been completely visible due to personal belongings, storage or vehicles.

**162:** - A portion of the garage appears to have been converted into a mechanical room. The work was performed in a substandard manner and likely may not possess permits for the work performed. We omit any work performed without the endorsement of the authority having jurisdiction from this inspection.



## NUMBER OF VEHICLES

**163:** - The garage was constructed to house 2 vehicles

## SLAB

**164:** - The garage slab was not fully visible due to the personal belongings blocking view.

## FIREWALL

**165:** - Holes and / or missing wall separation wall covering were noted in the fire rated wall that connects the garage to the main structure. The walls and ceilings of the attached garages should be well sealed where they abut the interior of a house to maintain the integrity of the fire rated materials. Dwelling/garage opening/penetration protection. Openings and penetrations through the walls or ceilings separating the dwelling from the garage shall be in accordance with Sections R302.5.1 through R302.5.3.



**166:** - The garage separation wall, or firewall, which may include the wall which separates the living quarters horizontally, or by the ceiling, was not completely visible due to personal belongings or storage blocking view at the time of this inspection.

**167:** - The cabinets block ur full view of the garage firewall therefore the wall was not fully inspected for damage.

**168:** - There are recessed lights installed into the fire separation ceiling within the garage. This ceiling is suggested to be maintained with no penetrations except for those rated for such an installation if the garage ceiling connects to the attic of the structure with holes or penetrations.



### **WALLS AND CEILING**

**169:** - The visible portions of the garage walls and ceiling are acceptable, however, there were many areas of the walls in the garage which were not completely visible due to personal belongings or storage which block the view.

**170:** - Moisture stains, which may indicate a past or even present leak, were observed on the ceiling of the garage at the time of the inspection. We do suggest that the buyer inquire with the current owners or representatives for information regarding this condition.



**171:** - Drywall damage noted in the west wall in the garage. Repairs are recommended and are primary cosmetic in nature.



**172:** - Evidence of prior repairs / patching was observed at the garage ceiling / walls. Further investigation may be desirable as to the reason for the patching / repairs.

### **VENTILATION**

**173:** - There are ventilation ports in the garage wall that have been blocked, covered. When there is a water heater and/or furnace installed in a garage, it/they require fresh air ventilation for combustion make-up air. This air replaces the air used during combustion and exhausted. At the time of the inspection we were unable to locate any vents in the garage to the exterior. Vents are suggested for this make up air and should be provided.



### **FIREDOOR**

**174:** - The entry door from the garage into the house has a pet door installed into the door. This door is required to be solid-core, to maintain the necessary firewall separation between a garage and living quarters, and should be replaced.



### **SIDE EXIT DOOR**

**175:** - The door to the side exit of the garage is significantly weathered and is in need of service.

**176:** - A pet door is installed into the garage side entry door. Pet doors are suggested to be monitored as they may allow access to pests or other intruders.

### **VEHICLE DOOR TYPE**

**177:** - The garage vehicle door is a roll up type.

### **VEHICLE DOOR A**

**178:** - The garage vehicle door was functional when tested.

## **AUTOMATIC OPENER A**

**179:** - The garage door opener is functional when tested by the use of normal controls provided. Hand held remote controls are not tested.

**180:** - The lower retracting device was functional, however, the retracting device that senses pressure was not. We suggest this feature be serviced to function properly.

## **ELECTRICAL**

**181:** - GFCI (Ground Fault Circuit Interrupter) is recommended to be installed at all of the garage receptacles as a safety upgrade. This would serve as protection for individuals using electrical appliances or machinery - NEC 2014 §210.8.

**182:** - Most all of the electrical components in the garage were not fully visible or tested at the time of the inspection due to personal belongings or storage.

## **ELECTRICAL**

There are a wide variety of electrical systems with an even greater variety of components and any one particular system may not conform to current standards or provide the same degree of service and safety. What is most significant about electrical systems is that the national electrical code [NEC] is not retroactive, and therefore many residential systems do not comply with the latest safety standards. Regardless, we are not electricians and in compliance with our standards of practice we only test a representative number of switches and outlets and do not perform load-calculations to determine if the supply meets the demand. In the interests of safety, we regard every electrical deficiency and recommended upgrade as a latent hazard that should be serviced as soon as possible, and that the entire system be evaluated and certified as safe by an electrician. It is essential that any recommendations that we may make for service or upgrades should be further evaluated or repaired before the close of escrow because an electrician could reveal additional deficiencies or recommend some upgrades for which we would disclaim any further responsibility.

We typically recommend upgrading outlets to have ground fault protection, which is a relatively inexpensive but essential safety feature. These outlets are often referred to as GFCI, or ground fault circuit interrupters, generally speaking, have been required in specific locations for more than thirty years, beginning with swimming pools, exterior outlets in 1971, and the list has been added to ever since: bathrooms in 1975, garages in 1978, spas and hot tubs in 1981, hydro tubs, massage equipment, boat houses, kitchens, and unfinished basements in 1987, crawlspaces in 1990, wet bars in 1993, and all kitchen countertop outlets with the exception of refrigerator and freezer outlets since 1996.

Similarly, AFCI or arc fault circuit interrupters, represent the very latest in circuit breaker technology, and have been required in all bedroom circuits since 2002. However, inasmuch as arc faults cause thousands of electrical fires and hundreds of deaths each year, we categorically recommend installing them at every circuit as a prudent safety feature.

All electrical related issues should be repaired by a licensed electrical contractor since personal safety is involved.

## ELECTRICAL SERVICE

### SERVICE LOCATION

**183:** - The main service equipment panel is located on the south side of the building.

### SERVICE PANEL COVER

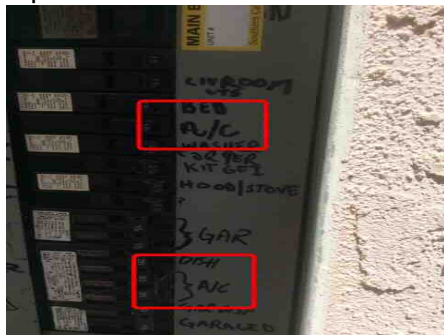
**184:** - The main panel cover was observed to be in good condition at the time of the inspection.

### DEAD FRONT COVER

**185:** - There are voids and / or open knockouts in the panel box of the main electrical panel that should be covered with a rigid material as a safety precautionary measure.



**186:** - The electric panel appears to be obviously mis-labeled. Other disconnects would require the services of a professional to determine the remaining labeling system.



### SERVICE SIZE

**187:** - The residence is served by a 100 amp, 240 volt panel.

**188:** - The panel rating is not to exceed 175 amps.

### WIRING METHODS

**189:** - The service wiring appears to be via copper and the branch wiring appears to be copper.

## SERVICE PANELBOARD OBSERVATIONS

**190:** - We observed openings within the service equipment panel. Openings in the panel are not suggested and should be closed or sealed off by a professional.

Code reference NEC 110.12(A) Unused Openings. Unused openings, other than those intended for the operation of equipment, those intended for mounting purposes, or those permitted as part of the design for listed equipment, shall be closed to afford protection substantially equivalent to the wall of the equipment. Where metallic plugs or plates are used with nonmetallic enclosures, they shall be recessed at least 6 mm ( $\frac{1}{4}$  in.) from the outer surface of the enclosure.



## SERVICE PANEL BUS BAR(S)

**191:** - There is visible damage within the panel on the feeder bar. It is our suggestion the buyer employ the services of an electrician who can remove and inspect the bus for any permanent damage. The reason for the scorching is not evident. We should note that this bus stab is not suggested to be used.



## INFRARED

**192:** - The panel was tested via infrared and there were no anomalies noted, at this time. This can change at any time.

## CIRCUIT BREAKERS

**193:** - The main plug-in-type over current protection device (main breaker) or plug-in type main lug assemblies that are back-fed or vertically fed. The supply conductors should be secured in place by an additional fastener that requires other than a pull to release the device from the mounting means on the panel, thus, reducing the potential for the breaker to release or become loose and remain energized. Plug-in-type overcurrent protection devices or plug-in type main lug assemblies that are backfed and used to terminate field-installed ungrounded supply conductors shall be secured in place by an additional fastener that requires other than a pull to release the device from the mounting means on the panel. NEC 2014 §408.36.



**194:** - We observed multi wired branch circuits that do not possess handle ties to connect the two breakers together (so they can trip simultaneously) in accordance with building standards.

NEC 210.4 The 2008 NEC has a new requirement for multiwire branch circuits. The new requirement is for a common handle tie or multi-pole breaker rather than separate single-pole breakers. For example, devices that are wired with a common or shared neutral can no longer be served from single phase breakers. The breakers must have a handle tie or be a multi-pole breaker. The motivation for this added requirement in the NEC is to assure that all the energized conductors which may be present at a device or outlet box are deenergized during maintenance or fault.

**195:** - There are loose circuit breakers which have been noted. These disconnects are suggested to be replace or repaired.

### **PANEL WIRING**

**196:** - The wiring within the panel board appears typical.

**197:** - The wiring installed (as pictured) is installed with a radius or bend which appears to be too tight and may cause unnecessary stress at the connection.



### **PANEL CIRCUITS**

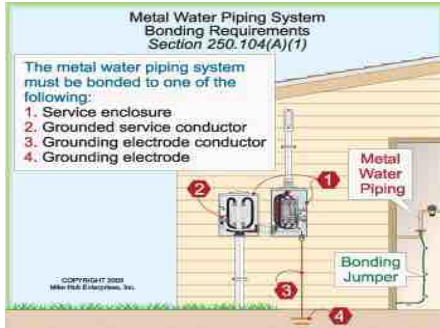
**198:** - The lights in the kitchen went dim when other lights were tested which may suggest the circuits in the may be tied together or otherwise overloaded. Additional troubleshooting of this condition is needed and if necessary, improvements are recommended and should be carried out by a qualified licensed individual.

### **PANELBOARD BOND**

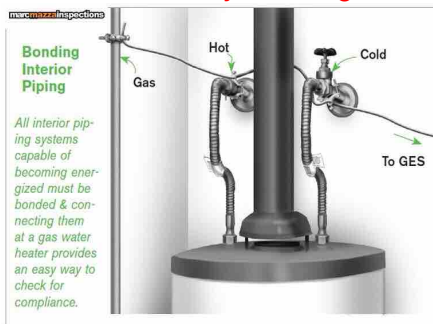
**199:** - We observed a direct connection of the ground bus to case (bond) connection.

## EQUIPOTENTIAL BONDING

**200:** - What is metal water pipe bonding? Section 250.104(A) of the NEC (National Electric Code) requires a metallic piping system installed in or attached to a building to be bonded back to the electrical service. To remove dangerous voltage on metal parts from a ground fault, electrically conductive metal water piping, metal fire sprinkler piping, metal gas piping or other metal piping systems as well as any metal structural members that are likely to become energized must be bonded to an effective ground fault current path. [250.4(A)(4)]. The main purpose of this bond is to ensure that the metal water pipe is at the same zero voltage to ground as the service grounded conductor. A secondary purpose is to ensure that there is a path back to the service for electrical current flow if the metal pipe becomes energized.



**201:** - We were unable to verify a cold (and hot) water bond at the main water supply, or supply piping. In accordance to building standards; the bond is suggested to be installed in or attached to a building structures metal piping system(s) including hot water, cold water and the gas piping, that are likely to become energized. These aforementioned components should be bonded to the service equipment enclosure in accordance to building standard. The bonding jumper(s) should be sized in accordance with the NEC, using the rating of the circuit that is likely to energize the piping system(s).



**202:** - 250.104 Bonding of Piping Systems and Exposed Structural Steel.

(A) Metal Water Piping. The metal water piping system shall be bonded as required in (A)(1), (A)(2), or (A)(3) of this section. The bonding jumper(s) shall be installed in accordance with 250.64(A), (B), and (E). The points of attachment of the bonding jumper(s) shall be accessible.

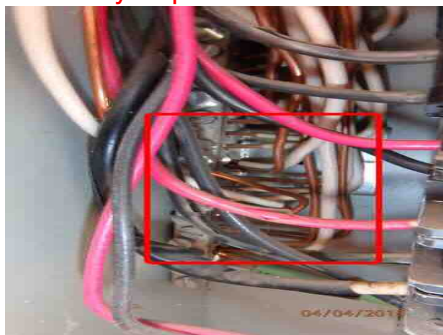
(1) General. Metal water piping system(s) installed in or attached to a building or structure shall be bonded to the service equipment enclosure, the grounded conductor at the service, the grounding electrode conductor where of sufficient size, or to the one or more grounding electrodes used. The bonding jumper(s) shall be sized in accordance with Table 250.66 except as permitted in 250.104(A)(2) and (A)(3).

## WIRING TYPE

**203:** - The house is wired with a non metallic sheathed conduit known as Romex, however, all of the wiring was/is not visible inside the walls. We can only comment on what type of wiring is visible and accessible to us at the time of the inspection.

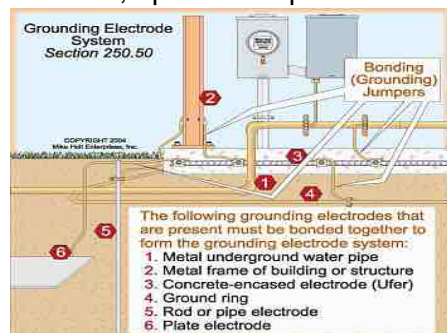
## PANEL GROUNDING

**204:** - There are mixed ground / neutral conductors within the service equipment panel, inserted under one terminal lug at the ground bus bar. Current building standard requires all grounded conductors to be inserted into individual terminals. Furthermore, neutral conductors and ground conductors should not be intertwined under one terminal. For a more in-depth examination of this condition, we suggest further assessment and advice by a qualified electrician.



## GROUNDING SYSTEM

**205:** - Service equipment ground or grounding conductors may have been observed inside the service equipment panel, however, a definitive system ground (complete view of grounding conductor & electrode and / or conductor connected directly onto a grounding source i.e. water piping, rebar, grounding rod etcetera) were/was not visible for complete verification at the time of the inspection (except otherwise noted). In many cases, the ground is connected to one or more locations within the structure and bonded together. We do not, however, open cover plates or remove wall covering materials to verify bonds / grounds.



## INTERIOR ELECTRICAL

### GENERAL COMMENTS

**206:** - It should be noted that at the time of the inspection, a majority of the residence was occupied and / or furnished and as a result, we were unable to locate and test a majority of the receptacles. Personal belongings and furniture may have blocked these areas.

### DOORBELL

**207:** - The doorbell was operational when tested.

## LUMINARIES

**208:** - The lights that were accessible and tested were found to be functional (unless otherwise noted).

**209:** - There were multiple light bulbs that were tested but failed to operate in various locations within the south bedroom. As a result, the inspector cannot determine if the fixture is operational. In many cases the bulb is usually missing or blown, however, it is recommended that each of the bulbs be replaced and the fixtures be once again checked for proper operation prior to the close of escrow. As a consequence, we were unable to confirm the operation of various switches throughout the residence where inoperable lights exist. For additional information or an explanation regarding this condition, we suggest the buyer attempt to contact the current or past occupants, owners or bank asset manager for specific details.

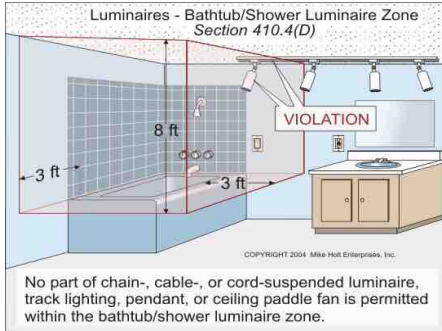
Note: It is safe to assume that if a light was inoperable, then the switch or switches were also, not verified. All of which are suggested to be tested and verified prior to the close of this escrow.



**210:** - There are recessed light fixtures which appear to have been added after the initial construction of the house. Recessed light fixtures (sometimes known as "can lights") which are installed into insulated ceilings, can represent a potential fire hazard if they are not suitably rated for this application. A licensed electrical contractor is recommended to be engaged to verify the safeness of the installation. Lights rated for this installation in insulated ceilings are marked as "direct-contact-insulated-ceilings" or "DCIC" or marked as "thermally protected". Insulation should be pulled back from the unprotected lights and proper bulbs should be installed to avoid a fire risk. Furthermore, the addition of these types of lights may require a new circuit be added to the panel as not to overload an existing circuit. This we cannot verify. Many electrical installations require building permits. Therefore, we suggest the buyer contact the local building authority to determine if the work required a building permit. Furthermore, the light buckets installed are suggested to possess insulation barriers around the newly installed fixture. this will keep insulation away from the light fixture.



**211:** - The ceiling lights installed in the common bathroom does not possess a wet type fixture trim kit and appeared to be installed within the 8 x 3 shower spray zone of the shower enclosure. For some older structures, this may not have been a code requirement, however, improvements are always suggested as old or new code is the minimum standard and is always suggested to be exceeded - Reference from NEC 410.10-(D).



**212:** - There was a can light (bucket) that is damaged in the common bathroom and suggested to be replaced.



## SWITCHES

**213:** - The inspector was unable to determine the function of multiple light switches, throughout the house (entrance, living room, kitchen, common bathroom and master bedroom). Switches may energize either a ceiling light fixture, ceiling fan/light combination or a wall receptacle, typically known as "half-hot receptacles" or bulbs which are not operational. Further evaluation may be necessary in identifying the operation of these light switches, including the replacement of various light bulbs, which may be defective.

## RECEPTACLES

**214:** - Although the installation of Ground Fault Circuit Interrupter (GFCI - a safety device for outlets on islands, laundry sinks, kitchens, bathrooms, locations close to water, closets, garage and all exterior receptacles, etcetera) receptacles may not have been required to be installed at the time of the initial construction of this structure, the installation of the GFCI receptacle is recommended at all interior and exterior outlets which may be within 6 feet of, or in direct contact with water. They are also required to be installed at all wet locations when the receptacle is replaced. In the event receptacles in the bathrooms, kitchen or any area where water is present are replaced or remodeled, the new receptacle must be installed as a GFCI.

These outlets may be used for small tools and appliances, but should not be used for refrigerators or freezers. Such larger appliances use a greater amount of electrical current, and since these plugs have a very minimum tolerance for overload, they generally cause the GFI to trip, which is its designed purpose. Therefore, we recommend that you do not use these outlets for your refrigerator or freezer. In most cases when improvements are performed in bathrooms and kitchens, GFCIs must be installed even though the structure may not have been equipped with GFCI receptacles when it was initially constructed. The bathrooms are suggested to possess at least one 20amp circuit in accordance with minimum building standards - NEC 2014 §210.8. Local jurisdictions to some extent, may offer a different version of this standard.



**215:** - A ground fault circuit interrupter (GFCI) outlet in the bathrooms did not respond correctly when tested. This receptacle should be replaced as a safety precautionary measure.

### NOTE

**216:** - NOTE: Multiple receptacles appear to have been replaced or updated with newer modern receptacles. As an improvement and where a receptacle is removed and replaced, that receptacle should be replaced with an AFCI protected receptacle or AFCI circuit breaker and be tamper resistant also where applicable, this in accordance with NEC sections 406.4(D) and 406.12 of the NEC code. It should be further noted that this is only necessary when your local authority having jurisdiction has adopted the 2014 version of the NEC. Some jurisdictions may not have adopted this standard at this time.



**217:** - There are light switch and / or receptacle cover plates that are damaged or missing. Replacement of the cover plates is suggested to reduce the potential of shock - NEC 2014 §406.6 & 410.22. Local jurisdictions to some extent, may offer a different version of this standard.

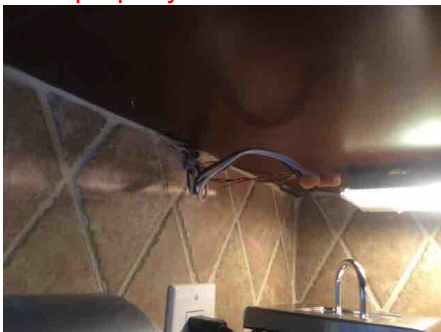


**218:** - Ungrounded three prong receptacles was/were identified in the common and master bathrooms. In many cases, the original two prong receptacle was replaced with the new three prong type without adding a grounding conductor or grounding to the metal junction box (if applicable). Or in a modern house, the grounding conductor is not attached to the receptacle (providing the conductor is present). The receptacles should be upgraded to include grounding conductors where necessary and all wet areas by GFI protection.



## WIRING

**219:** - Exposed electrical conductors were observed in the kitchen, which represents a potential safety hazard if not properly terminated/covered. Improvements are recommended as a safety precautionary measure.



**220:** - NM cable wiring (I.E. Romex, cord etc..) exposed to physical damage or contact was observed in the kitchen which is within harms reach should be relocated or protected from damage or contact by the use of conduit. Improvements are recommended for safety.



### **CEILING FANS**

**221:** - The ceiling fan(s) (except noted otherwise) appeared to operate when tested by the use of normal controls. The inspector cannot determine how the units were installed as the use of specialized brackets are needed for post-new construction installations. The buyer is recommended to inquire as to the installation of the fans and any possible warranties.

## **INTERIOR**

Our inspection of the interior of the living space includes the visually accessible areas of walls, floors, cabinets and closets, and includes the testing of a representative number of windows and doors, switches and outlets. We do not evaluate window treatments, nor move furniture, lift carpets or rugs, empty closets or cabinets, and do not comment on cosmetic deficiencies.

We may comment on the cracks that appear around windows and doors, or which follow the lines of framing members and the seams of drywall and plasterboard. These cracks are a consequence of movement, such as wood shrinkage, common settling, and seismic activity, and will often reappear if they are not correctly repaired. Such cracks can become the subject of disputes, and are therefore best evaluated by a geologist or a structural engineer.

There are a number of environmental pollutants that can contaminate a home, such as asbestos, carbon monoxide, radon, and a variety of molds and fungi that require specialized testing equipment, which is beyond our expertise and the scope of our service. There are also lesser contaminants, such as odors that are typically caused by moisture penetrating concealed slabs, or those caused by household pets. And inasmuch as the sensitivity to such odors is not uniform, we recommend that you make this determination for yourself, and particularly if domestic pets are occupying the premises, and then schedule whatever service may be deemed appropriate before the close of escrow.

## **GENERAL OBSERVATIONS**

**222:** - The residence was occupied, furnished and / or filled with personal belongings at the time of the inspection. We do not move personal belongings or furniture. As a result, many areas within the structure were not accessible for inspection. For example there may be walls and floors which are blocked from full view. There may be occupants belongings which will not allow us to see inside closet spaces, within cabinets (especially under sinks and bedrooms), and in some cases attic spaces. We therefore suggest that upon removal of the occupants belongings which blocked our access, the area be re evaluated prior to the close of this escrow.

## **ENTRANCE DOOR**

**223:** - The front entry door is functional.

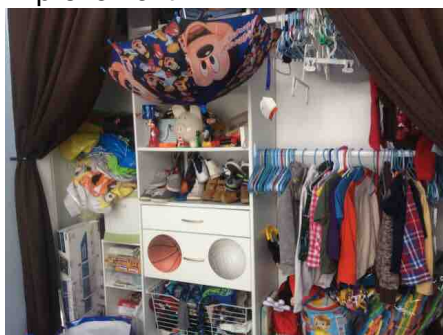
## **INTERIOR DOORS**

**224:** - The interior doors are in acceptable condition. Other individual conditions may exists in various doors and noted herein.

## **CLOSET OBSERVATIONS**

**225:** - Visually, the closets appear to be in generally good condition. There were various closet interiors that were not accessible to inspect due to personal belongings, which blocked the access / view.

**226:** - The bedroom and hall closet doors are not installed. Replacement of the doors is primarily a cosmetic improvement.



## **SLIDING GLASS DOORS**

**227:** - The screen door in the master bedroom was missing.

**228:** - The kitchen sliding glass door(s) are difficult to slide and latch when tested. Repairs are recommended for safety as these doors are exit doors.

**229:** - The sliding glass door sill in the master bedroom appears to be sloped towards the structure as opposed to being sloped away for proper drainage. Improvements of this condition are suggested.

**230:** - The sliding glass doors appeared to be high centered which cause the doors to operate with difficulty.



**231:** - The sliding glass door was very dirty at the time of the inspection. It was in fact so dirty that we were unable to verify whether or not the double pane glass has a broken harmonic seal.



#### **WINDOW MATERIAL & TYPE**

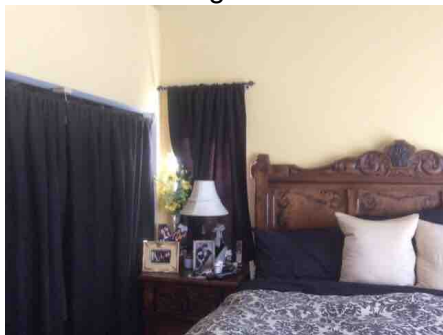
**232:** - The windows are constructed of aluminum or steel.

## WINDOWS

**233:** - The dual pane window(s) at the south side has lost its seal (or is very dirty) judging by the discoloration observed within the glass panes (condensation / staining developing between the panes of glass). This "fogging" of the glass is primarily a cosmetic concern, and need only be improved for cosmetic as well as energy efficiency reasons. Although double-paned windows appear to be stable, they actually experience a daily cycle of expansion and contraction caused by thermal pumping. Sunlight heats the air space between the panes and causes the gas there to heat up and pressurize. Expanding gas cannot leave the chamber between the panes, and the trapped gas causes the glass to bulge outward during the day and contract at night to accommodate the changing pressure. This motion acts like the bellows of a forge, pumping minute amounts of air in and out of the air space between the panes. Over time, the constant pressure fluctuations caused by thermal pumping will stress the seal and challenge its ability to prevent the flow of gas in and out of the window chamber. Incoming humid air has the potential to condense on the window surface, if it is cold enough. It should be known that if one window performs in this manner, more may follow in time as they may have been constructed in the same "batch".



**234:** - There were multiple interior windows which were not tested due to personal belongings or furniture which blocked the access to the windows at the time of the inspection. These windows are suggested to be tested once accessible and prior to the close of escrow to ensure that proper egress is available and, there is no visible damage.



**235:** - Sash cords / balancers (the ropes that hold up the windows) are inoperable on the window(s) in the master bedroom. Repairs are suggested for proper operation of single and double hung windows and should be performed by a professional contractor. All of the inaccessible single hung windows are suggested to be tested once they are made accessible and prior to the close of escrow.

Note: In many cases when there are defective single hung windows detected, it is common that others may exist. There may be some windows that were inaccessible and not tested.



## **WINDOW SCREENS**

**236:** - Window screens are missing from various windows. The window screens showed signs of wear that would be considered normal for the age of the house. Wear may include but not limited to small holes, old torn mesh, loose frame etcetera.

## **WALLS**

**237:** - The general condition of the walls, which were visible and accessible, were observed to be in good condition.

**238:** - The interior walls were not completely visible for inspection due to the personal belongings, furniture or storage blocking full view.

**239:** - Cracks were noted at the interior walls. These cracks suggest that some type of movement within the structure has occurred. It is well beyond our scope as well as our expertise to attempt to draw a definitive conclusion as to the cause of these cracks without additional investigations which may include destructive testing. In light of these findings, we must suggest the buyer employ the services of a contractor who is familiar with structural movement and cracking. At the very least, the buyer should monitor the cracks for further movement.

## **CEILING**

**240:** - The general condition of the ceilings was observed to be in good condition (unless otherwise noted ) with signs of normal wear at the time of the inspection. There were no visible stains observed at the time of the inspection.

## **FLOORING**

**241:** - The interior floors were not completely visible for inspection due to personal belongings, floor coverings, furniture or storage which is blocking full view. Once these items are removed, verification of the condition of the flooring is recommended.

**242:** - The laminate flooring appeared to be somewhat spongy when walked on within the master bedroom.



**243:** - We observed indications within the laminate flooring which resembled an amateurish installation, such as the image pictured for example.



### **SMOKE ALARMS**

**244:** - The smoke detectors (which are installed and tested) were found to be in operational condition when inspected, unless otherwise noted.

**245:** - Smoke alarms and smoke detectors shall not be installed within a 36 in. (910 mm) horizontal path from the supply registers of a forced air heating or cooling system and shall be installed outside of the direct airflow from those registers.



## CARBON MONOXIDE DETECTORS

**246:** - Carbon monoxide detectors are required to be installed in all homes as of July 1, 2011.

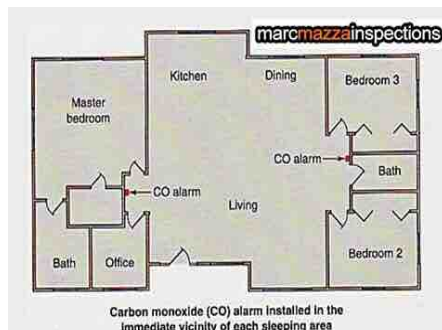
According to the 2005 edition of the carbon monoxide guidelines, NFPA 720, published by the National Fire Protection Association, sections 5.1.1.1 and 5.1.1.2, all CO detectors 'shall be centrally located outside of each separate sleeping area in the immediate vicinity of the bedrooms, (LA county suggests having one on each floor level, in the hallway) and each detector "shall be located on the wall, ceiling or other location as specified in the installation instructions that accompany the unit".

When carbon monoxide detectors were introduced into the market, they had a limited life span of 2 years. However technology developments have increased this and many now advertise 5 or even 6 years. Newer models are designed to signal a need to be replaced after that time span although there are many instances of detectors operating far beyond this point.

CO detectors do not serve as smoke detectors and vice versa. However, dual smoke/CO detectors are also sold. Smoke detectors detect the smoke generated by flaming or smoldering fires, whereas CO detectors can alarm people about faulty fuel burning devices to prevent carbon monoxide poisoning. Carbon monoxide is produced from incomplete combustion of fossil fuels. In the home CO can be formed, for example, by open flames, space heaters, water heaters, blocked chimneys or running a car inside a garage.

Since CO is colorless, tasteless and odorless (unlike smoke from a fire), detection and prevention of carbon monoxide poisoning in a home environment is impossible without such a warning device. Homeowners should remember not to install carbon monoxide detectors directly above or beside fuel-burning appliances, as appliances may emit a small amount of carbon monoxide upon start-up. A detector should not be placed within fifteen feet of heating or cooking appliances or in or near very humid areas such as bathrooms.

When considering where to place a carbon monoxide detector, keep in mind that although carbon monoxide is roughly the same weight as air (carbon monoxide's specific gravity is 0.9657, as stated by the EPA; the National Resource Council lists the specific gravity of air as one), it may be contained in warm air coming from combustion appliances such as home heating equipment. If this is the case, carbon monoxide will rise with the warmer air.



**247:** - The carbon monoxide detector is in operational condition when tested. We do not endorse the location of the carbon monoxide detector(s) as the location and height of installation is determined by the manufacturer's specifications.

## LAUNDRY

In accordance with industry standards, we do not test clothes dryers, nor washing machines and their water connections and drainpipes. When appliances are present we cannot disconnect the appliance to test receptacles. If the water is installed to the appliances we cannot disconnect the water or test the angle stops. However, there are two things that you should be aware of. The water supply to washing machines is usually left on, and their hoses can leak or burst under pressure and continue to flow. Therefore, we recommend replacing old rubber hoses with modern braided stainless steel types that are much more dependable. You should also be aware that modern washing machines discharge a greater volume of water than many of the older drainpipes can handle, which causes the water to back up and overflow. The only remedy for this is to enlarge the drainpipe.

### **LAUNDRY AREA LOCATION**

**248:** - The laundry area is located in the garage.

### **LAUNDRY PIPING - WATER AND WASTE**

**249:** - The piping, water and waste which were visible at the time of the inspection are not tested and presumed functional. It should be noted that when washing machines are removed and mostly when they have been connected to the water supply for a long period of time, the angle stop will sometimes leak in which case, replacement may be necessary.

### **ELECTRICAL OUTLET 120 VOLT**

**250:** - The 120 receptacle for the laundry components is in place but may not have been tested if there were appliances plugged in at the time of the inspection.

**251:** - The receptacle in the laundry room is suggested to be a 20 amp designated receptacle per some building standards.



### **ELECTRICAL OUTLET 240 VOLT**

**252:** - A 240 volt receptacle is not visible in the laundry area. This is not to say that there may not be a receptacle installed, just not accessibly visible at the time of the inspection due to the washing machine and dryer present.

### **GAS VALVE AND CONNECTOR**

**253:** - The gas valve and fuel line if installed, was not completely visible or accessible due to the washing machine and dryer present, which blocked the complete view.

## DRYER DUCT

**254:** - The dryer duct is a flexible type that is suggested to be replaced with a smooth wall vent.dryer Section 504.3.2.1 Clothes dryer vent ducts shall be metal and shall have a smooth interior surface. An approved "flexible duct connector" of not more than 6 feet in length may be used to connect the dryer to the dryer vent pipe. "Flexible duct connectors shall not be concealed within the construction." (Flex duct connectors shall not pass into or through a concealed space. This includes cabinets, walls and attic spaces).

## GENERAL COMMENTS

**255:** - A bollard is suggested to be installed in the front of the laundry components.



**256:** - An 18" clearance to the garage floor is suggested when the dryer is a gas unit.

## KITCHEN

Kitchen appliances are tested for their functionality, and cannot be evaluated for their performance nor for the variety of their settings or cycles, however, if they are older than ten years, they may well exhibit decreased efficiency. Life expectancy is not predicted for appliances or fixtures. The following items are not within the scope of this inspection: free-standing appliances, refrigerators, trash-compactors, built-in toasters, coffee-makers, can-openers, blenders, wine coolers, instant hot-water dispensers, water-purifiers, barbecues, grills, or rotisseries, timers, clocks, thermostats, the self-cleaning capacity of ovens, and concealed or under cabinet lighting, which is convenient but often installed after the initial construction and powered by extension cords or ungrounded conduits. Some Granite counter tops have been know to emit radon. We do not test for radon. If this test is desired, a contractor who specializes in this field is suggest to perform this task.

## GENERAL COMMENTS

**257:** - The kitchen appears to have been remodeled. Therefore, you should obtain documentation for your records so that you can be assured that the work was done with permit to professional standards, because we do not approve of, or tacitly endorse, any work that was done without permit, as latent defects could exist.

## COUNTER TOP MATERIALS

**258:** - The countertop materials consist of granite.

## COUNTER TOP

**259:** - The visible areas of the kitchen counters were observed to be in generally good condition.

**260:** - The counter top area was not completely visible for inspection due to personal belongings blocking view.

### **KITCHEN SINK**

**261:** - The kitchen sink is functional.

### **KITCHEN FAUCET**

**262:** - The kitchen sink faucet is functional, unless otherwise stated.

### **GARBAGE DISPOSAL**

**263:** - The garbage disposal was in operational condition when tested. Other specific conditions may also be commented on.

### **KITCHEN CABINETS**

**264:** - The visible areas of the kitchen cabinets were observed to be in generally good condition with signs of normal to moderate wear and tear for the age of the structure.

**265:** - The view within the cabinets was restricted due to personal belongings blocking full view. As a result, the plumbing connections, pipes, etcetera, were not accessible to inspect.

### **GAS COOK TOP**

**266:** - The gas cook top is functional.

### **ELECTRIC OVEN**

**267:** - The electrical oven is functional, but was neither calibrated nor tested for performance. After testing the oven, we made sure the unit was off and non operational before we left. We do not determine demand factors as part of this inspection. For this a licensed electrician should be employed.

**268:** - The door on the built-in, electrical, oven does not seal effectively, which could affect its performance, and should be serviced.



### **EXHAUST VENTILATION / LIGHT**

**269:** - The kitchen exhaust and light are both functional.

### **BUILT-IN MICROWAVE**

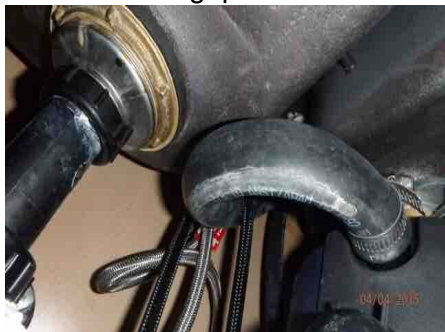
**270:** - The built-in microwave was tested by pressing the buttons on the face. The unit appeared to be functional but we do not test them for leakage, nor was anything inserted into the unit and heated up.

## **DISHWASHER**

**271:** - The dishwasher was in operational condition when tested using the normal wash cycle. Determining the adequacy of washing and drying functions of dishwashers is not within the scope of this inspection.

**272:** - The dishwasher was filled with the occupant's dishes at the time of the inspection. This restricts the full view of the interior components, therefore, the inspection is limited.

**273:** - The air gap line was kinked and is suggested to be repaired.



## **BATHROOMS**

In accordance with industry standards, we do not comment on common cosmetic deficiencies, and do not evaluate window treatments, steam showers, bidets, and saunas. We do not leak-test shower pans on upper floors without consent of the representing agent, owners or occupants.

### **Master Bathroom**

#### **TOILET**

**274:** - At the time of the inspection, the toilet was in operational condition. No visible leaks were detected.

**275:** - The toilet tank is loose at the base. This deficiency may be easily corrected with minor adjustments to the bolts at the bottom of the tank of the toilet.

#### **SINK - FAUCET - PLUMBING**

**276:** - At the time of the inspection, the sink, faucet and plumbing tested were in operational condition. No visible leaks were detected. Other specific conditions may also be commented on.

**277:** - The view below the sink is restricted due to personal belongings blocking view. Inspection of the plumbing and cabinet is limited.

#### **BATHROOM VENTILATION**

**278:** - At the time of the inspection, the bathroom ventilation, exhaust fans and / or window tested were in operational condition.

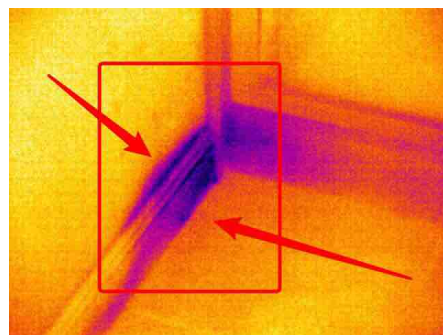


**279:** - The bathroom ventilation fan is recommended to be cleaned for adequate ventilation.



## SHOWER

**280:** - The shower pan was tested and appears to be leaking. Repairs are suggested at the pan so the shower enclosure may function without leaking. It should be noted that shower pans should hold water for an indefinite amount of time without losing water. Further assessment is advised.



## BATHROOM GENERAL COMMENTS

**281:** - The bathroom appears to have been remodeled. It is recommended That the buyer contact a the local building and safety department to determine if the addition was completed with permits.

**282:** - Based on the tile and how it appears to have been installed onto the wall, may suggest that the tile is without an appropriate backing sub straight such as hardi backer or concrete. These sub straights are necessary to maintain a water tight assembly and without it, the unit may leak. The buyer is suggested to ask the seller if such a material was installed prior to the tile being installed.



## Common Bathroom

### TOILET

**283:** - At the time of the inspection, the toilet was in operational condition. No visible leaks were detected.

**284:** - The toilet tank is loose at the base. This deficiency may be easily corrected with minor adjustments to the bolts at the bottom of the tank of the toilet.

### **SINK - FAUCET - PLUMBING**

**285:** - At the time of the inspection, the sink, faucet and plumbing tested were in operational condition. No visible leaks were detected. Other specific conditions may also be commented on.

**286:** - There is evidence of corrosion on angle stops supply valves below the sink. This may be evidence of prior leaks / problems.

**287:** - The sink drain stopper did not operate properly when tested. Recommend repair or replacement for proper operation of the sink.

### **BATHROOM VENTILATION**

**288:** - At the time of the inspection, the bathroom ventilation, exhaust fans and / or window tested were in operational condition.

**289:** - The bathroom ventilation fan is recommended to be cleaned for adequate ventilation.



### **BATHTUB**

**290:** - At the time of the inspection, the bathtub and faucet tested were in operational condition.

**291:** - The enclosure is worn excessively. This may include cracked or chipped fiberglass, cracked tile, missing grout and severe discoloration. Improvements are suggested but because these repairs (excluding cracks) are primarily cosmetic, they are suggested to be improved at the buyers convenience.

### **SHOWER**

**292:** - At the time of the inspection, the shower and faucet tested were in operational condition.

**293:** - The shower diverter was working at 50% when tested ( half of the water was coming from the tub spout and half was coming from the shower head). Recommend repair / replacement for improved operation.



## ATTIC

In accordance with industry standards, we will not attempt to enter an attic that has less than thirty-six inches of headroom, is restricted by ducts, or in which the insulation obscures the joists and thereby makes mobility hazardous, in which case we will inspect the attic as best we can from the access point. In evaluating the type and amount of insulation on the attic floor, we use only generic terms and approximate measurements, and do not sample or test its composition for a specific identification. Also, we do not move or disturb any portion of the insulation, which may well obscure water pipes, electrical conduits, junction boxes, exhaust fans, and other components.

### **ATTIC LOCATION(S)**

**294:** - An attic access is located in the hallway.

### **ATTIC GENERAL COMMENTS**

**295:** - In accordance with industry standards, we will not attempt to enter an attic that has less than thirty-six inches of headroom, is restricted by ducts, or in which the insulation obscures the joists and thereby makes mobility hazardous, in which case we will inspect the attic as best we can from the access point. In evaluating the type and amount of insulation on the attic floor, we use only generic terms and approximate measurements, and do not sample or test its composition for a specific identification. Also, we do not move or disturb any portion of the insulation, which may well obscure water pipes, electrical conduits, junction boxes, exhaust fans, and other components. Personal items are not moved and may limit the inspection.

### **ATTIC ACCESS**

**296:** - The attic was accessed and entered for inspection. There were, however, areas which were not accessed due to the limited accessibility as a result of us not walking over various ceiling joists for fear of falling off and damaging the ceiling.

**297:** - The majority of the attic space is not accessible due to the lack of accessibility and / or complete coverage and depth of the insulation. Standards of practice and company policy prohibits us from crawling through insulation, under framing less than 48" and over joists, around and over and / or under ductwork, pipes, personal belongings or other objects to gain access to confined spaces. Furthermore, attempting to crawl through, around, over or under objects or insulation may result in the damaging of ceiling when walking across the framing system buried in insulation. All areas which are inaccessible for a complete and thorough evaluation are suggested to be inspected once made accessible.

## **INSULATION**

**298:** - The attic floor is insulated with approximately 9 - 12 inches plus of fiberglass insulation, only where it is visible.

**299:** - Loose / poor coverage / missing or compressed insulation was observed in the attic. This is to say, that there were areas of the ceiling which were not covered by insulation. Re-disbursement of the insulation is suggested.

## **ATTIC VENTILATION**

**300:** - The ventilation of the attic area appears acceptable. Note: Not all ventilation was visible from our vantage point.

## **ATTIC ELECTRICAL**

**301:** - There are open electrical junction boxes, which should be sealed to contain any arching or sparking that might occur. The installation of cover plates is suggested.



**302:** - There are loose/exposed wires inserted into the junction box of the pictured light fixture in the attic at the time of the inspection.



## **ATTIC PLUMBING VENTS**

**303:** - The plumbing vents that are visible from the vantage point described and not covered by insulation or blocked are in acceptable condition.

## **HEATING**

We evaluate heating systems in accordance with state or industry standards, which includes identifying, testing, and evaluating systems and their components. There are a wide variety of systems, which range from older floor, wall, and gravity furnaces to newer forced-air furnaces. Older ones, such as gravity furnaces and most floor and wall furnaces, are the least energy-efficient and the most dangerous. Therefore, it would be prudent to consider replacing them with more economical and reliable forced-air units. However, if they are not replaced, you should be aware that many of them and their parts may no longer be available, and you should also be aware of common safety concerns associated with their use.

We do test and describe each system, but we do not attempt to dismantle any portion of it, nor do we evaluate the following concealed components: the heat exchanger, or firebox, electronic air-cleaners, humidifiers, and in-line duct motors or dampers. Similarly, we do not check every register, at which the airflow may well be uneven and will decrease proportionate to its distance from the furnace. The airflow and the efficiency of any system can be compromised by poor maintenance, such as by the filters not being changed regularly, which will contaminate the ducts and have an adverse effect on air quality.

Regardless, the sellers or the occupants of a property are often the best judges of how well a system works, and it would be prudent to ask them about its maintenance history and if they have been satisfied with its performance, or you may wish to have a comprehensive evaluation by a specialist.

Most heating systems have a design life of twenty years, but if any system is more than ten years old, or if poor maintenance is suspected, it would be wise to schedule a comprehensive service that includes cleaning motors, fans, and ducts. Then, change the filters every two to three months, and schedule biannual maintenance service.

We do not evaluate or endorse any heating device that utilizes fossil fuels and is not vented. The presence and use of these within a residence commonly indicates the inadequacy of the primary heating system or of its distribution. However, these and every other fuel burning appliances that are not vented are potentially hazardous. Such appliances include open flames or heated elements, which are capable of igniting any of the myriad flammable materials found in the average home. Also, even the most modern of these appliances can produce carbon monoxide, which in a tightly sealed modern home or a poorly ventilated room can result in sickness, debilitating injury, and even death.

We perform a conscientious evaluation of heating systems, but we are not specialists and cannot see inside ducts. Therefore, it is imperative that any recommendation that we may make for service or a second opinion be scheduled well before the close of escrow, because a specialist could reveal additional defects or recommend further upgrades that could affect your evaluation of the property.

The installation of a carbon monoxide detector close to interior furnaces is recommended as a safety precautionary measure.

The Heating Vent System is not sized according to the BTU of the furnace at the time of the inspection

## LOCATION AND TYPE

**304:** - Central heat is provided by a vertical gas forced-air furnace that is located in the garage.

## HEATING SYSTEM VINTAGE APPRAISAL

**305:** - The forced air unit appears to be of the same vintage as the structure.

## HEATING SYSTEM OBSERVATIONS

**306:** - The furnace was tested by the use of normal controls and was functional.

**307:** - It cannot be determined whether or not the heating unit (fan, burner chamber, etcetera) has been serviced recently. Therefore, a thorough cleaning, servicing is strongly advised. This service may reveal latent defects within the system. During this service and especially for older furnaces, an inspection of the heat exchangers for cracks within the heating unit is recommended prior to usage. A regular scheduled maintenance program is also recommended as it will help prolong the life of your appliances.

**308:** - The furnace is located in a closet which houses or stores occupants belongings. Fuel fired appliances are not supposed to be (in accordance to building standard) installed in closets used for storage.

G2406.2 (303.3)

**309:** - The furnace lacks necessary clearance to the front of the unit for service.



## COMBUSTION CHAMBER

**310:** - We observed what may be a crack in the heat exchanger. To error on the side of caution, we feel it prudent that until this condition is inspected by a HVAC technician the furnace should not be used for fear of interior contamination and carbon monoxide poisoning.





## VENTING AND DRAFT HOOD

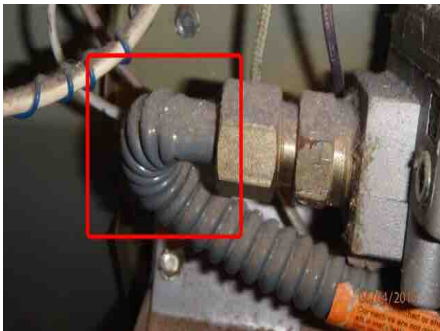
**311:** - The furnace vent pipe is not well seated at the transition between the FAU and the roof vent (reducer), which not only could inhibit the bi-products of combustion from being vented beyond the residence but which could contaminate the residence, and should be serviced by an HVAC contractor.



## FUEL SYSTEM

**312:** - You should be aware that the gas feed line that passes through the furnace sidewall is flexible, but is required by current standard to be rigid until it passes beyond the furnace cabinet, and then flexible can be installed to the point where it connects to the gas valve. This condition should be corrected by an HVAC contractor.

**313:** - The fuel line to the furnace is kinked and suggested to be replaced or improved.



## COMBUSTION / MAKEUP AIR

**314:** - The combustion-air ventilation for the gas furnace is functional.

## RETURN / PLENUM AIR COMPARTMENT

**315:** - The air filter is dirty and a new one is suggested to be installed and changed every 3 months.

**316:** - The filter hold down was missing and suggested to be replaced or installed.

**317:** - Sealant / tape is recommended at the air handler / plenum. Conditioned air appears to be leaking from this area. Sealing this area will reduce energy loss, as well as, the infiltration of airborne contaminants within the attic space. A professional HVAC contractor is recommended to perform this task.



### **CIRCULATING FAN / BLOWER**

**318:** - The circulating fan is functional.

**319:** - The circulating fan and motor is moderately dirty, which is indicative of poor maintenance. In some cases, the dirt and or lint on the fan blades may in fact result in overheating of the fan and may represent a potential hazard. The fan is suggested to be cleaned and the filters changed regularly as part of a scheduled maintenance service.

### **THERMOSTAT**

**320:** - The thermostat appears to be functional when tested.

### **PRIMARY CONDENSATE**

**321:** - The primary condensate pipe appears to be installed (where visible) at the FAU appropriately. We did not, however, witness any condensation at the time of the inspection. We also do not perform water tests for confirmation.

**322:** - We were unable to determine the point at which the primary condensate pipe discharges, which should be traced. We do not water test condensate drain pipes. The discharge point is suggested to be extended to the exterior and away from the house.

## **AIR CONDITIONER**

We evaluate air-conditioning systems in accordance with state or industry standards, including identifying and testing them and their components. However, there are a wide variety of heating and air-conditioning systems, which range from newer high-efficiency ones to older low efficiency ones.

Also, there are an equally wide variety of factors besides the climate that can affect their performance, ranging from the size of the house, the number of stories, orientation to the sun, the type of roofing material, ventilation system, thermal value of insulation and window glazing. This is why our contract specifically disclaims the responsibility of evaluating the overall efficiency of any system, because only a specialist can credibly do so. You should also be aware that we do not evaluate or endorse any heating device that utilizes fossil fuels and is not vented. The presence and use of these within a residence commonly indicates the inadequacy of the

primary heating system or its distribution, however, these and every other fuel burning device that is not vented are potentially hazardous. Such appliances include open flames or heated elements, which are capable of igniting any of the myriad of flammable materials found in the average home. Even the most modern of these units can produce carbon monoxide, which in a sealed or poorly ventilated room can result in sickness, debilitating injuries, and even death.

We attempt to identify and test every component, but we do not attempt to determine tonnage, match evaporator coil to condenser or dismantle any portion of a system. We do not evaluate the following concealed components: the heat exchanger, or firebox, the interior of ducts, electronic air-cleaners, humidifiers, and in-line duct motors or dampers. Similarly, we do not check every register, at which the airflow may well be uneven and which will decrease proportionate to its distance from the blower fan on the furnace. The airflow and the efficiency of any system can be compromised by poor maintenance, such as by the filters not being changed regularly, which will contaminate components within the systems. The sellers or the occupants of a property are often the best judges of how well a system works, and it is always a good idea to ask them about maintenance history and if they have been satisfied with its performance. You may also have a comprehensive evaluation completed by a specialist. Most systems have a design life of twenty years, but if any system is more than ten years old, or if poor maintenance is suspected, it would be wise to schedule a comprehensive service that includes cleaning motors, fans, ducts, and coils. Then, change the filters every two to three months, and schedule biannual maintenance service.

We perform a conscientious evaluation of heating and air-conditioning components, but we are not specialists. Therefore, it is imperative that any recommendation that we may make for service or a second opinion be completed well before the close of escrow, because a specialist could reveal additional defects or recommend further upgrades that could affect your evaluation of the property.

## **TYPE AND SIZE**

**323:** - Central heat and air-conditioning are provided by a single split-system, consisting of a furnace or electric heater with an evaporator coil and a condensing coil.

**324:** - We estimate the size of this unit to be between 1.5 and 2 tons. This is merely an estimation based on the unit's model number information. For a definitive size of the condenser, we suggest the buyer employ the services of an HVAC contractor.

## **AIR CONDITIONER**

**325:** - The air conditioning unit appears to have been manufactured in 1990.

**326:** - The split-system is operational and by operational we mean it was functional when tested. There may be, however, issues which may exist within this system and will be commented on within this section. Such systems are designed to last approximately twenty years, but they should be serviced biannually and have their filters changed every two to three months. As a precautionary measure, a home warranty is suggested to be obtained after the close of escrow as one cannot predict potential malfunctioning condenser components.

**327:** - The split-system is in the range, or approaching the age of its design life and will need to be more closely monitored, serviced bi-annually, and should have its filter changed every two to three months.

**328:** - According to the information provided on the manufacturer's specifications plate, it appears the condenser may be considered slightly smaller than what is suggested for this size structure. Information played only provides a number which is taken and converted into a crude method of determining an approximate size to square footage ratio. There are, however, many factors which go into determining the precise square footage to condenser tonnage ratio. We do not possess the tools necessary nor the time to conduct such an comprehensive test during this somewhat brief home inspection. This test should be conducted by a licensed heating and air conditioning contractor.

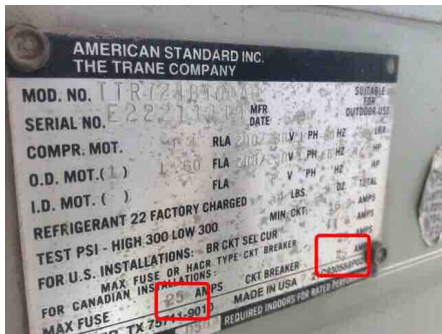
### AIR CONDITIONER CONDENSING COIL

**329:** - The condensing coil is located directly beneath the drip line of the roof, which will subject it to unnecessary moisture contamination.

**330:** - The condenser is suggested to be better secured to a solid sub straight or base. Improvements are recommended.

### AIR CONDITIONER SERVICE COIL ELECTRICAL

**331:** - The air condition service disconnect which possesses 30 amp fuses and breaker which are too large for this condenser.



### AIR CONDITIONER REFRIGERANT LINES

**332:** - The foam insulation is missing from the refrigerant lines, either at the condenser and/or FAU. Replacement is suggested.



**333:** - The point in which the refrigerant lines pass into the structure at the flashing, is in need of some type of sealant such as expandable foam. The missing material could potentially allow for pest intrusion or moisture.

## **AIR CONDITIONER DIFFERENTIAL TEMPERATURE READINGS**

**334:** - The air-conditioning responded and achieved an acceptable differential temperature split between the air entering the system and that coming out, of eighteen to twenty one degrees. A temperature difference is only one method of testing the cooling system as there are many. It is a snap shot of the systems performance. For a more advanced inspection, which may include voltage testing or require the dismantling of parts, an HVAC contractor should be contacted prior to the close of this escrow.

## **DUCTS & REGISTERS**

### **FLEXIBLE DUCTS**

**335:** - There are ducts installed that are a modern flexible type. They are comprised of an outer plastic sleeve and a clear inner liner that contains fiberglass insulation.

**336:** - The ducts in the attic are recommended to be better sealed to the registers and at various connections as typical maintenance. Significant loss was observed throughout the residence within ceiling cavities and chases when viewed via infrared. Over time, the tape used to make these connections becomes brittle and loses its ability to grip. The vapor barrier of the ducts are also suggested to be inspected further and sealed as necessary. The repairs are recommended to be completed to ensure proper volume and should be completed by an HVAC contractor.

**337:** - One of the flexible ducts in the attic appears to have been terminated or disconnected. Although we do our best in an attempt to determine why certain conditions exists we may not have intimate details regarding specific components and conditions. We therefore suggested to inquire with the seller regarding this condition and who may be able explain this condition in full detail.



### **REGISTERS**

**338:** - The registers are functional except where otherwise noted. The volume of air, nor the cleanliness of the registers, can be tested during this inspection. There may have been registers which were closed at the time of the inspection, therefore, the temperature of these registers will be different than others which are open.

**339:** - There was a noticeable difference in the temperature of the registers when examined. The difference is between 5 and 12 degrees collectively and or individually. There are many variables which may dictate the heating or cooling efficiency of a duct system, many of which may require specialized testing (HERS rating) which we have no access to during this home inspection.

## ENVIRONMENTAL CONCERNS

Most homes built after 1978, are generally assumed to be free of asbestos and many other common environmental contaminants. As a courtesy to our clients, we are including some well documented, and therefore public, information about several environmental contaminants that could be of concern to you and your family, all of which we do not have the expertise or the authority to evaluate, such as asbestos, radon, methane, formaldehyde, termites and other wood-destroying organisms, pests and rodents, molds, microbes, bacterial organisms, and electromagnetic radiation, to name some of the more commonplace ones. Nevertheless, we will attempt to alert you to any suspicious substances that would warrant evaluation by a specialist. However, health and safety, and environmental hygiene are deeply personal responsibilities, and you should make sure that you are familiar with any contaminant that could affect your home environment. You can learn more about contaminants that can affect your home from a booklet published by The environmental Protection Agency, which you can read online at [www.epa.gov/iaq/pubs/insidest.htm](http://www.epa.gov/iaq/pubs/insidest.htm).

Mold is one such contaminant. It is a microorganism that has tiny seeds, or spores, that are spread on the air then land and feed on organic matter. It has been in existence throughout human history, and actually contributes to the life process. It takes many different forms, many of them benign, like mildew. Some characterized as allergens are relatively benign but can provoke allergic reactions among sensitive people, and others characterized as pathogens can have adverse health effects on large segments of the population, such as the very young, the elderly, and people with suppressed immune systems. However, there are less common molds that are called toxigens that represent a serious health threat. All molds flourish in the presence of moisture, and we make a concerted effort to look for any evidence of it wherever there could be a water source, including that from condensation. Interestingly, the molds that commonly appear on ceramic tiles in bathrooms do not usually constitute a health threat, but they should be removed. However, some visibly similar molds that form on cellulose materials, such as on drywall, plaster, and wood, are potentially toxigenic. If mold is to be found anywhere within a home, it will likely be in the area of tubs, showers, toilets, sinks, water heaters, evaporator coils, inside attics with unvented bathroom exhaust fans, and return-air compartments that draw outside air, all of which are areas that we inspect very conscientiously. Nevertheless, mold can appear as though spontaneously at any time, so you should be prepared to monitor your home, and particularly those areas that we identified. Naturally, it is equally important to maintain clean air-supply ducts and to change filters as soon as they become soiled, because contaminated ducts are a common breeding ground for dust mites, rust, and other contaminants. Regardless, although some mold-like substances may be visually identified, the specific identification of molds can only be determined by specialists and laboratory analysis, and is absolutely beyond the scope of our inspection. Nonetheless, as a prudent investment in environmental hygiene, we categorically recommend that you have your home tested for the presence of any such contaminants, and particularly if you or any member of your family suffers from allergies or asthma. Also, you can learn more about mold from an Environmental Protection Agency document entitled "A Brief Guide to Mold, Moisture and Your Home," by visiting their web site at: <http://www.epa.gov/iaq/molds/moldguide.html/>, from which it can be downloaded.

Asbestos is a notorious contaminant that could be present in any home built before 1978. It is a naturally occurring mineral fiber that was first used by the Greek and Romans in the first century, and it has been widely used throughout the modern world in a variety of thermal insulators, including those in the form of paper wraps, bats, blocks, and blankets. It can also be found in a wide variety of other products too numerous to mention, including duct insulation and acoustical materials, plasters, siding, floor tiles, heat vents, and roofing products. Although perhaps recognized as being present in some documented forms, asbestos can only be specifically identified by laboratory analysis. The most common asbestos fiber that exists in residential products is chrysotile, which belongs to the serpentine or white-asbestos group, and was used in the clutches



and brake shoes of automobiles for many years. A single asbestos fiber is said to be able to cause cancer, and is therefore a potential health threat and a litigious issue. Significantly, asbestos fibers are only dangerous when they are released into the air and inhaled, and for this reason authorities such as the Environmental Protection Agency [EPA] and the Consumer Product Safety Commission [CPSC] distinguish between asbestos that is in good condition, or non-friable, and that which is in poor condition, or friable, which means that its fibers could be easily crumbled and become airborne. However, we are not specialists and, regardless of the condition of any real or suspected asbestos-containing material [ACM], we would not endorse it and recommend having it evaluated by a specialist.

Radon is a gas that results from the natural decay of radioactive materials within the soil, and is purported to be the second leading cause of lung cancer in the United States. The gas is able to enter homes through the voids around pipes in concrete floors or through the floorboards of poorly ventilated crawlspaces, and particularly when the ground is wet and the gas cannot easily escape through the soil and be dispersed into the atmosphere. It cannot be detected by the senses, and its existence can only be determined by sophisticated instruments and laboratory analysis, which is completely beyond the scope of our service. However, you can learn more about radon and other environmental contaminants and their affects on health, by contacting the Environmental Protection Agency (EPA), at [www.epa.gov/radon/images/hmbuygud.pdf](http://www.epa.gov/radon/images/hmbuygud.pdf), and it would be prudent for you to enquire about any high radon readings that might be prevalent in the general area surrounding your home.

Lead poses an equally serious health threat. In the 1920's, it was commonly found in many plumbing systems. In fact, the word "plumbing" is derived from the Latin word "plumbum," which means lead. When in use as a component of a waste system, it is not an immediate health threat, but as a component of potable water pipes it is a definite health-hazard. Although rarely found in modern use, lead could be present in any home build as recently as the nineteen forties. For instance, lead was an active ingredient in many household paints, which can be released in the process of sanding, and even be ingested by small children and animals chewing on painted surfaces. Fortunately, the lead in painted surfaces can be detected by industrial hygienists using sophisticated instruments, but testing for it is not cheap.

If this residence, or portions of it were constructed prior to 1978, in which case, there may be lead based paint on painted surfaces such as wall and ceilings. We do not test for the presence of lead based paint during our inspection, and specifically disclaim it in our pre-inspection agreement. On April 22, 2008, EPA issued a rule requiring the use of lead-safe work practices aimed at preventing lead poisoning in children. On April 22, 2010, the rule became effective and firms performing renovation, repair and painting projects that disturb lead-based paint in homes built before 1978 must be certified. Individual renovators must be trained by an EPA-accredited training provider, and the firms and renovators must follow specific work practices to prevent lead contamination. Violators of this law may be subject to fines up to \$37,500 per day. Lead-based paint affects more than one million children today. Adverse health effects include learning disabilities, behavioral problems, and speech delays. If not done in a lead-safe manner, renovations and repair activities that disturb lead-based paint can expose children, as well as adults, to harmful levels of lead dust. More information about lead poisoning, and how this law may affect you as a home owner can be found at <http://www.epa.gov/lead>

There are other environmental contaminants, some of which we have already mentioned, and others that may be relatively benign, however, we are not environmental hygienists, and as we stated earlier we disclaim any responsibility for testing or establishing the presence of any environmental contaminant, and recommend that you schedule whatever specialist inspections that may deem prudent within the contingency period.



INSPECTIONS CERTIFICATIONS

## Roof Inspection Report

LOCATED AT:  
XXXX

PREPARED EXCLUSIVELY FOR:  
XXX

INSPECTED ON:  
Saturday, April 4, 2015  
1:30 PM



Inspector, Robert Wasson  
**CA ROOFING CONTRACTOR**  
Mazza Inspection Group  
(866) 996-2992  
Robert@mazzainspections.com

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## DISCLOSURE

Thank you for choosing the Mazza Inspection Group to perform your inspection. The goal of this inspection and report is to put you in a better position to make an informed real estate decision. This report is a general guide and provides you with some objective information to help you make your own evaluation of the overall condition of the home and is not intended to reflect the value of the property, or to make any representation as to the advisability of purchase. Not all improvements will be identified during this inspection. Unexpected repairs should still be anticipated. This inspection is not a guarantee or warranty of any kind. The report is effectively a snapshot of the house – recording the conditions on a given date and time. Home Inspectors cannot predict future behavior, and as such, we cannot be responsible for things that occur after the inspection.

The observations and opinions expressed within this report are those of the inspection company and supersede any alleged verbal comments. We inspect all of the systems, components, and conditions described in accordance with the standards of NACHI, and those that we do not inspect, are clearly disclaimed in the contract and/or in the aforementioned standards. However, some components that are inspected and found to be functional, may not necessarily appear in the report, simply because we do not wish to waste our client's time by having them read an unnecessarily lengthy report about components that do not need to be serviced.

In accordance with the terms of the contract, the service recommendations that we make in this report should be completed by licensed specialists, who may well identify additional defects or recommend some upgrades that could affect your evaluation of the property.

Many comments on components or systems observed as defective, damaged or otherwise may be followed by a comment which suggests the buyer to have an additional inspection of that listed component or system by a specialist. We make these suggestions to ensure our client has ample time to have that specific item evaluated by a specialist of that particular component or system who can then make specific recommendations of repair or replacement and provide our customers with real costs associated with that component or system.

Your report includes many digital photos and may include infrared images as well. Some pictures are intended as a courtesy and are added for your information. Some are to help clarify where the inspector has been, what was looked at, and the condition of the system or component at the time of the inspection. Some of the pictures may be of deficiencies or problem areas, these are to help you better understand what is documented in this report and may allow you to see areas or items that you normally would not see. Not all problem areas or conditions will be supported with photos.

Again, Thanks very much for the opportunity of conducting this inspection for you. We are available to you throughout the entire real estate transaction process and beyond. Should you have any questions, please do not hesitate to call or email us.

**NOTICE:** This report should not be used by anyone other than the individual who has signed the inspection agreement and purchased this report. The conditions affecting this property may have changed since the time of this inspection, as many often do under various circumstances. Do not rely on this inspection report as a basis for a real estate transaction decision. It is advised that new parties involved in any transaction concerning the above property, complete a more current evaluation with a qualified inspector.

**SCOPE OF WORK:** You have contracted with the Mazza Inspection Group to perform a generalist inspection in accordance with the standards of practice established by NACHI, a copy of which is available upon request or on our website. Generalist inspections are essentially visual and distinct from those of specialists, inasmuch as they do not include the use of specialized instruments, the dismantling of equipment, or the sampling of air and inert materials. Consequently, a generalist inspection and the subsequent report will not be as comprehensive, nor as technically exhaustive, as that generated by specialists, and it is not intended to be. The purpose of a generalist inspection is to identify significant defects or adverse conditions that would warrant a specialist evaluation. Therefore, you should be aware of the limitations of this type of inspection, which are clearly indicated in the standards. However, the inspection is not intended to document the type of cosmetic deficiencies. Similarly, we do not inspect for vermin infestation, which is the responsibility of a licensed pest control company.

## GENERAL INFORMATION

### **INSPECTION TIME**

1: - 1:30 pm

### **PRESENT AT INSPECTION**

2: - Client(s), Buyer's Agent

### **TYPE OF RESIDENCE / LEVELS**

3: - The residence is a single family residence and is a one story.

### **WEATHER CONDITIONS**

4: - The weather was clear and sunny.

## EXTERIOR

Our evaluation of the exterior of a property conforms to state or industry standards. Certain detached structures, such as storage sheds, barbecues, above ground spas, gazebos or stables are not within the scope of this inspection. Landscape components, such as trees, shrubs, fountains, ponds, statuary, pottery, fire pits, patio fans, heat lamps, and ornamental or decorative lighting are not evaluated. Surface coatings or cosmetic deficiencies and the wear and tear associated with usage or the passage of time that would be readily apparent to the average person are not commented on. The inspection of the exterior and grounds as described may be limited if not fully visible due to foliage or storage of personal belongings. Trees / foliage may have an impact on site, structure, drainage and waste.

### **Trim**

#### **TRIM MATERIALS**

5: - The trim material is wood.

#### **EAVES**

6: - Damaged eave boards were observed at the back side of the structure.





## ROOF

There are many different roof types, which we evaluate by walking on their surfaces. If we are unable or unwilling to do this for any reason (such as rain or snow presence), we will indicate the method that was used to evaluate the roof.

Every roof will wear differently relative to its age, the number of its layers, the quality of its material, the method of its application, its exposure to direct sunlight or other prevalent weather conditions, and the regularity of its maintenance. Regardless of its design-life, every roof is only as good as the waterproof membrane beneath it, which is concealed and cannot be examined without removing the roof material, and this is equally true of almost all roofs.

There are two basic roof types, pitched and flat. Pitched roofs are the most common, and the most dependable. They are variously pitched, and typically finished with composition shingles that have a design life of twenty to twenty-five years, or concrete, composite, Spanish, or metal tiles that have a design-life of forty to fifty years, and gravel roofs that have a lesser pitch and a shorter design-life of ten to fifteen years. These roofs may be layered, or have one roof installed over another, which is a common practice but one that is never recommended because it reduces the design-life of the new roof by several years, can impede emergency service by fire department personnel, and requires a periodical service of the flashings. These roofs are serviced with mastic, which eventually shrinks and cracks and provides a common point of leakage. Among the pitched roofs, gravel ones are the least dependable, because the low pitch and the gravel prevent them from draining as readily as other roofs. For this reason, they must be conscientiously maintained. In this respect, the least dependable of all roofs are flat or built-up ones. Some flat roofs are adequately sloped toward drains but many are not, and water simply ponds and will only be dispersed by evaporation.

The most common cause of leakage results when roofs are not serviced, and foliage and other debris blocks the drainage channels. In fact, the material on the majority of pitched roofs are not designed to be waterproof only water-resistant. However, what remains true of all roofs is that, whereas their condition can be evaluated, it is virtually impossible for anyone to detect a leak except as it is occurring or by specific water tests, which are beyond the scope of our service. Even water stains on ceilings or on the framing within attics, could be old and will not necessarily confirm an active leak without some corroborative evidence, and such evidence can be deliberately concealed.

Consequently, only the installers can credibly guarantee that a roof will not leak, and they do. We evaluate every roof conscientiously, and even attempt to approximate its age, but we will not predict its remaining life expectancy, or guarantee that it will not leak. Naturally, the sellers or the occupants of a residence will generally have the most intimate knowledge of the roof and of its history. Therefore, we recommend that you ask the sellers about it, and that you either include comprehensive roof coverage in your home insurance policy, or that you obtain a roof certification from an established local roofing company.

## **GENERAL ROOFING**

**7:** - Concrete tile roofs are among the most expensive and durable of all roofs, and are guaranteed by the manufacturer to last for forty years or more, but are usually only guaranteed against leaks by the installer from three to five years. Like other pitched roofs, they are not designed to be waterproof, only water resistant, and are dependant on the integrity of the waterproof membrane beneath them, which cannot be seen without removing the tiles, but which can be split by movement, deteriorated through time, or by ultra-violet contamination. Significantly, although there is some leeway in installation specifications, the type and quality of membranes that are installed can vary from one installer to another, and leaks do occur. The majority of leaks result when a roof has not been well maintained or kept clean, and we recommend servicing them annually. This is important, because our service does not include any guarantee against leaks. For a guarantee, you would need to have a roofing company perform a water test and issue a roof certification. The sellers or the occupants will generally have the most intimate knowledge of the roof, and you should ask them about its history and then schedule a regular maintenance service. Fortunately, many of these roofs can be walked on without damaging the tiles, but it is important to tread carefully on the first third of each tile.

## **METHOD OF EVALUATION**

**8:** - The roof and its components were evaluated by walking its accessible surface.

## **ROOF AGE**

**9:** - The roof appears to be the same age as the residence.

## **ROOF TYPE**

**10:** - The roof type is a gable and hip roof.

## **SKYLIGHTS**

**11:** - The skylight dome is cracked, could leak, and should be replaced.



## **FLASHINGS & VENT TERMINATIONS**

**12:** - The roof flashings (which are visible) are in acceptable condition. The roof flashing to vent pipe and junctions are recommended to be inspected bi-annually and sealed as necessary.

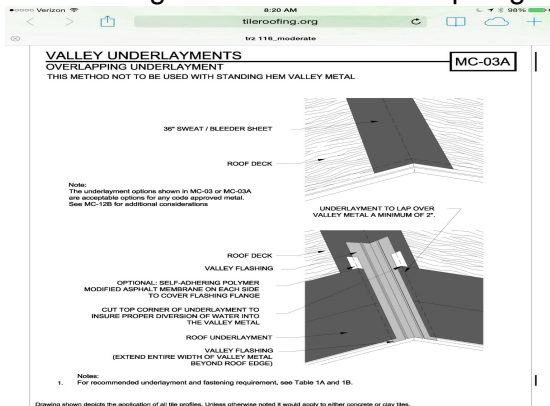
**13:** - The roof flashings that are visible, are suggested to be sealed as part of typical service. They are comprised of metal that seals valleys, plastic or metal vents and other roof / wall penetrations, and are the most common point of leaks. This is particularly true of the flashings on a layered roof, which are covered by the roofing material and are even more susceptible to leaks - Reference Building Code IRC-P3103.3.



**14:** - We observed debris building in the valleys. Debris is suggested to be removed and the valleys monitored.



**15:** - We observed an under-cut valley flashing. This single crown valley flashing appears to be cut short prior to extending over the eave and drip edge flashing.





## CONCRETE TILE OBSERVATIONS

**16:** - The roof that is visible from our vantage point appears to be in acceptable condition, but this is not a guarantee against leaks. For a guarantee, you would need to have a roofing company perform a water-test and issue a roof certification. The roof is recommended to be inspected on a regular basis to ensure that there are no slipped or cracked tiles.

**17:** - Concrete tile roofing material should be replaced by a qualified roofing contractor as walking on this roof material may crack and / or break many tiles and cause more damage than necessary. Regular inspections and maintenance are recommended. This type of roof structure is recommended to be inspected every 2-3 years for any slipped, cracked or missing tiles. It is also recommended that the vents be inspected at this time and sealed as necessary. The tile roof covering material observed is a type that is typically walked on by Mazza Inspections, however, in some cases we may choose not to. For example, the seller may request that we not walk on their roof or the height or weather may represent a hazard. Other examples may be a steep pitch or the roof is a clay tile roof, where the possibility of damage to the tiles is greater. In which case, the roof is inspected from the inside of the house as well as all exterior accessible areas of the roof that are visible. There may be portions of the roof that were viewed from the ground and / or ladder using binoculars. Some sections of the roof may not be viewed at all.

**18:** - There are cracked roof tiles that were observed at the main roof. This should be expected as regular wear and tear, however, the tile should be serviced to maintain the water tight integrity of the roof.



**19:** - We observed prior repairs to the roof covering materials by way of visible sealant exposed between various tiles on the roof deck. We are unable to make any definitive determinations regarding the reason for the repairs, as the roof deck as well as the roofing paper were not fully visible and cannot be accessed without destructive testing (tile removal), which may be necessary.

**20:** - The tile roof has junctions where the ridge (top tiles) and rake (side tiles) tiles meet each other. These junctions are sealed with cement or a bitumen material. Occasionally, the cement cracks or the bitumen material deteriorates or separates which may lead to a vulnerable possible moisture entry point. It is recommended that the junctions be sealed properly by a qualified roofing contractor in order to maintain the water tight integrity of the roofing system.



**21:** - We failed to verify roofing paper which will typically turn down the fascia at least 1-3 inches.

**22:** - There are cracked and missing "rake tile". These tiles are located on the sides of the roof. It is quite common for concrete tiles to become loose and is considered normal. Work is still recommended however, and is suggested to be performed by a qualified roofing contractor.



**23:** - There are loose "rake" tile(s) (tiles on the sides of the roof decks) observed at the roof structure. This is common and is considered normal for this type of roof material. Repairs are considered to be minimal and should be performed by a qualified roofing contractor.



**24:** - The added area on the back of the house has a low pitch and should not be roofed with tile. This area is recommended to be roofed with a torch down or similar membrane that welds at all the seams. Currently, the area has a fiberglass base sheet installed that is not suitable for this application. Furthermore, the laps or "channels" of the tiles have a roof cement in them. This may impede water from draining because when it runs down the channel the water hits the roof cement and runs off the channel and onto the membrane underneath, rather than down the channel. This area appears to be roofed in a substandard manner. Improvements are recommended.



**25:** - There are nails that are driven through the metal at the flat addition portion of the roof that should be sealed.





**26:** - Upon inspection of the addition portion of the roof, we noticed that water may be draining down one side of the roof and underneath the tile on the adjacent side. The membrane appears to be deteriorated in this section. This may be the reason for the damaged wood on the eaves. Pulling the tile up in this area and properly roofing/flashing the area is recommended.



**27:** - There is flashing missing from the fascia boards where they terminate at the roof underneath them.



**28:** - There are tiles under the front of the skylight that have broken channels and may allow moisture to enter under the tile. Repairs are recommended.



## ATTIC

In accordance with industry standards, we will not attempt to enter an attic that has less than thirty-six inches of headroom, is restricted by ducts, or in which the insulation obscures the joists and thereby makes mobility hazardous, in which case we will inspect the attic as best we can from the access point. In evaluating the type and amount of insulation on the attic floor, we use only generic terms and approximate measurements, and do not sample or test its composition for a specific identification. Also, we do not move or disturb any portion of the insulation, which may well obscure water pipes, electrical conduits, junction boxes, exhaust fans, and other components.

### **ATTIC LOCATION(S)**

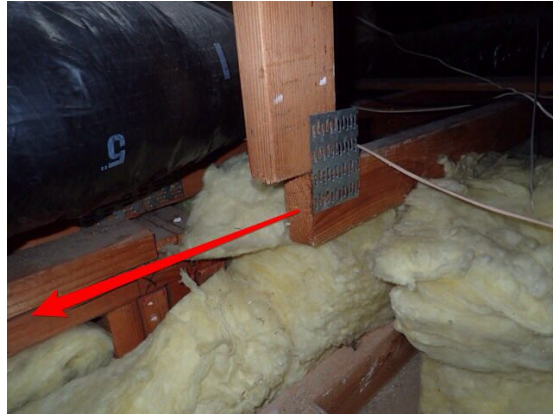
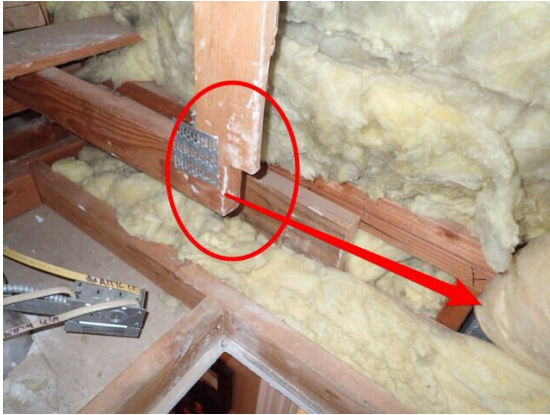
**29:** - An attic access is located in the hallway.

### **ATTIC ACCESS**

**30:** - The attic was accessed and entered for inspection. There were, however, areas which were not accessed due to the limited accessibility as a result of us not walking over various ceiling joists for fear of falling off and damaging the ceiling.

## ATTIC FRAMING

**31:** - A member of a truss was observed to be cut. Damage to the truss system may compromise this stability and make it weak. We suggest repairing this truss member as the truss is engineered for maximum structural stability.





## Estimated Repair Costs

Roof Inspection Performed By California Roofing Contractor

### Cost to repair current conditions:

- Seal all pipes and junctions- \$275
- Replace/repair all broken tiles and rakes, including the damaged tiles under the skylight and tightening the loose rakes- \$350
- Remove the tile and properly roof the flat addition area in the back of the house with a torch down membrane. This includes repairing the area where the water is running under the adjacent side, replacing the damaged eave boards and sealing the exposed nails- \$1400
- Replace the broken skylight \$700
- Clean debris from the valleys \$400
- Remove the rake tiles and install paper that turns down the fascia boards- \$750
- Extend the short valley metal and install flashing where it is missing from the fascias- \$225
- Repair the damaged truss in the attic with permits- \$850
  
- **Total cost to repair current conditions \$4950**

### Cost for annual maintenance

- Seal all of the roof penetrations/junctions, replace broken tiles and clean debris from valleys- \$750
- 10 year cost for maintenance- \$7,500

### Estimated cost for complete RE-PAPER

- Remove the tile on the entire roofing area. Replace any bad wood. Install new tile membrane over the entire roofing surface. Re-install tile back in place replacing broken tiles and rakes as needed. This will include roofing the addition portion properly, as

well as repairing other issues (OMIT: Broken skylight and truss). \$12,500

**The prices shown are only estimates and can change depending on the company used to complete the work, or the materials/methods used for installation. Our estimates are based on the current average price of materials which may change at any time. We DO NOT perform any work.**



## CONCLUSION

### **CONCLUSION**

**340:** - Congratulations on the purchase of your new home. Inasmuch as we never know who will be occupying or visiting a property, whether it be children or the elderly, we ask you to consider following these general safety recommendations: install smoke and carbon monoxide detectors, identify all escape and rescue ports, rehearse an emergency evacuation of the home, upgrade older electrical systems by at least adding ground-fault outlets, never service any electrical equipment without first disconnecting its power source, safety-film all non-tempered glass, ensure that every elevated window and the railings of stairs, landings, balconies, and decks are child-safe, meaning that barriers are in place or that the distance between the rails is not wider than three inches, regulate the temperature of water heaters to prevent scalding; make sure that goods that contain caustic or poisonous compounds, such as bleach, drain cleaners, and nail polish removers be stored where small children cannot reach them; ensure that all garage doors are well balanced and have a safety device, particularly if they are the heavy wooden type; remove any double-cylinder deadbolts from exterior doors, and consider installing child-safe locks or alarms on the exterior doors of all pool or spa properties.

We are proud of our service, and trust that you will be happy with the quality of our report. We have made every effort to provide you with an accurate assessment of the condition of the property and its components and to alert you to any significant defects or adverse conditions. Also because we are not specialists or because our inspection is essentially visual, latent defects could exist. Therefore, you should not regard our inspection as conferring a guarantee or warranty. It does not. It is simply a report on the general condition of a particular property at a given point in time. Furthermore, as a homeowner, you should expect problems to occur. Roofs will leak, drain lines will become blocked, and pool components and systems will fail without warning. For these reasons, you should take into consideration the age of the house and pool and its components and keep a comprehensive insurance policy current. If you have been provided with a home protection policy, read it carefully. Such policies may only cover insignificant costs, such as that of roofer service, and the representatives of some insurance companies may deny coverage on the grounds that a given condition was preexisting or not covered because of a code violation or manufacturer's defect. Therefore, you should read such policies very carefully, and depend upon our company for any consultation that you may need.

Thank you for taking the time to read this report, and call us at 1-866-99-MAZZA or e-mail [marc@mazzainspections.com](mailto:marc@mazzainspections.com) if you have any questions or observations whatsoever. We are always attempting to improve the quality of our service and our report, and we will continue to adhere to the highest standards of the industry and to treat everyone with kindness, courtesy, and respect.

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