Precision Home Inspections, LLC

Property Inspection Report

LMNOP Road, Happy, CO 81500
Inspection prepared for: Inspector Daily
Real Estate Agent: Crystal Zimmerman - One Stop Realty

Date of Inspection: 8/20/2019 Time: 8:00
Age of Home: 26 Size: 6300
Weather: Clear

Inspector: Ben Gare
NACHI#18042422
Phone: 507-202-3333
Email: inspectgj@gmail.com
inspectgj.com

PRECISION HOME INSPECTIONS
YOUR HOME IS MY FOCUS

Report Summary

Exterior		
Page 10 Item: 10	Grading-Surface Drainage-Vegetation	• The home had areas of significant erosion visible beneath hose bib at south and south/east walkway will continue unless action is taken to prevent it. I recommend that you consult with a qualified landscape contractor to gain an idea of options and costs for correction.
Roofing		
Page 11 Item: 3	Roof Covering	• The roof had cracked and/or broken cement roof tiles that should be replaced to help prevent damage from moisture intrusion to the home materials, the roof structure and to prevent development of microbial growth such as mold. I recommend that you consult with a qualified contractor to discuss options and costs for repairs. • Roof ridge cap tiles were loose, displaced, or missing at the time of the inspection. This condition appeared to be due to failed mortar bond, which means that the mortar bonding other ridge cap tiles to the roof is weak. The Inspector recommends an evaluation and any necessary work be performed by a qualified roofing contractor.
Page 12 Item: 4	Flashings	• The home had no kick-out flashing installed where walls extended past roof edges. Kick-out flashing is designed and installed to divert water from behind the exterior wall covering at areas of the home where a sidewall extends out past a connecting roof eve. This condition may allow moisture intrusion of the exterior wall covering. Moisture intrusion of the wall structure can damage home materials and encourage the growth of mold. Long term moisture intrusion can cause structural damage from wood decay. I recommend that you consult with a qualified roofing contractor to discuss options and costs for replacement.
Structural Components		
Page 15 Item: 1	Foundation Type	• A crack visible at the foundation wall had an ascending closure (wider at the bottom). This condition is typical of cracks caused by soil movement. Depending on the cause of soil movement, this condition may now be stable, or movement may continue in the future. I recommend that you consult with a structural engineer to more accurately determine the cause and the likelihood of continuing foundation damage from this condition. • Cracks and displaced areas of the concrete slab in garage indicated the possible presence of expansive soil beneath the slab. The home is located in an area known to have expansive soils. Expansive soils are soils that increase to many times their original volume in response to increases in soil moisture levels, creating forces that can easily damage home structural components such as foundations and floor slabs. If damage was caused by expansive soils, damage may continue, and stabilization measures may be expensive. I recommend that, soils testing be performed by a soils engineer to determine the source of damage and likelihood of continuing damage. • In a basement or crawlspace, digging too close to the foundation footings can compromised the Cone of Compression. The Cone of Compression is the area of soil beneath a foundation that supports the weight of the foundation and the home structure above. This soil should remain undisturbed to avoid compromising its structural integrity. The profile of the weight-bearing soil beneath the foundation is roughly cone-shaped, sloping down and out from the bottom corners of the foundation footing at an angle of approximately 45 degrees. This condition can lead to undermining of the foundation and loss of foundation support leading to structural failure in the affected areas. Inspectors should identify such areas and mention whether they observe signs of failure connected to this condition, and that the possibility for future damage exists. Recommend that the client consult with a structural engineer or qualified foundation contractor to determine the necessity, options and costs for stabilization.
Heating and Air Conditioning		
Page 20 Item: 2	Heating Systems	• Dirty furnace blower vanes visible at the time of the inspection should be cleaned to avoid blower damage and increased operation costs. I recommend service by a qualified heating service technician.
Page 22 Item: 3	Cooling System	• The A/C Unit condenser fins are heavily clogged impairing the units ability function properly and efficiently (recommend cleaning by qualified licensed contractor).
Electrical		
Page 28 Item: 8	Wiring Methods	• Exposed wiring observed at north lower level. All exposed active wiring under 8' or at exterior of home is required to be in the appropriate conduit material (recommend repair by qualified licensed electrical contractor).
Page 28 Item: 9	Lighting-Fixtures-Switches-Outlets	• "Open hot" observed at north/west living room. This indicates that the hot conductor for the outlet has been disconnected and possibly affecting other outlet(s) (recommend repair by qualified licensed electrical contractor). No switch for the outlet was located. • Light(s) at north exterior lower level and bathroom #2 water closet did not operate as expected (possible light bulbs burned out, recommend asking seller).
Page 29 Item: 10	GFCI	• No GFCI located at west, ADU balcony exterior outlets, required when the home was built (exterior GFCI outlets requirement established 1973). I recommend correction by a qualified electrical contractor. • No GFCI located at ADU kitchen outlets, required when the home was built (kitchen GFCI outlets requirement established 1987). I recommend correction by a qualified electrical contractor.
Page 29 Item: 12	Smoke-Heat Detector(s)	• SAFETY CONCERN: The smoke alarm(s) at Bedroom #4 and lower level main living area did not operate when tested. You need to be alerted in case of a fire. Recommend repair or replacement of the smoke alarms.

Page 29 Item: 13	Carbon Monoxide (CO) Detector(s)	• SAFETY CONCERN: A carbon monoxide detector is not located within the required distance to each bedroom. Colorado law requires that an operational carbon monoxide alarm be installed within 15 feet of the entrance to each bedroom (or other room lawfully used for sleeping purposes), or in any location otherwise specified by a state or local building code.
Plumbing		
Page 31 Item: 4	Water Supply Distribution Systems	• Water supply pipe fittings visible in the crawlspace beneath shower in bathroom #1 had heavy corrosion visible at the time of the inspection and may begin leaking soon. Consider replacing fittings before active leakage begins. I recommend that an evaluation and any necessary work be performed by a qualified plumbing contractor.
Page 32 Item: 8	Water Heater(s)	• When tested the expansion tank appears to have lost its charge. I recommend recharge or replacement by qualified licensed plumbing contractor. The expansion tanks purpose is to deal with thermal expansion of water as it heats up in the water heater to prevent water pressure from getting too high. If water pressure gets high enough it can damage valves in plumbing fixtures, joints in supply pipes and even the water heater.
Bathrooms		
Page 34 Item: 3	Toilet(s)	• Toilet was loose at Bathroom #2, #3, and #4(recommend repair).
Appliances		
Page 39 Item: 7	Dryer	• The combustible air supply to the laundry room is blocked when the door to the room is closed. An air vent needs to be provided to rooms that have gas burning appliances.

Dear Client, Thank you for choosing Precision Home Inspections, LLC (PHI) to perform your home 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. PHI endeavors to perform all inspections in substantial compliance with the Standards of Practice of the International Association of Certified Home Inspectors (InterNACHI). As such, we inspect the readily accessible, visually observable, installed systems and components of a home as designated in the InterNACHI Standards (except as may be noted in the "Limitations of Inspection" sections within this report). This Property Inspection Report contains observations of those systems and components that, in the professional judgment of the inspector, are not functioning properly, significantly deficient, unsafe or are near the end of their service lives. If the cause for the deficiency is not readily apparent, the suspected cause or reason why the system or component is at or near end of expected service life is reported, and recommendations for correction or monitoring are made as appropriate. When systems or components designated in the InterNACHI Standards are present but are not inspected, the reason(s) the item(s) were not inspected is reported as well. A copy of the InterNACHI Standards of Practice is available at https://www.nachi.org/sop.htm. These standards define the scope of a home inspection. Clients sometimes assume that a home inspection will include may things that are beyond the scope. We encourage you to read the InterNACHI Standards of Practice so that you clearly understand what things are included in the home inspection and report. 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. If conditions change, we are available to revisit the property and update our report. The report has been prepared for your exclusive use, as our client. It is not intended for use by third parties. We will not be responsible to any parties for the contents of the report, other than the party named herein. The report itself is copyrighted, and may not be used in whole or in part without Precision Home Inspections, LLC's express written permission. Again, thanks very much for the opportunity to conduct this inspection for you. We are available to you throughout the entire real estate transaction process. Should you have any questions, please call or email us. Sincerely, Ben Gare InterNACHI Inspector #18042422 Precision Home Inspections, LLC 507-202-3333 inspectgj@gmail.com

Conventions and Terms used in this Report

USE OF PHOTOS:

Your report includes many photographs. 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.

TEXT COLOR SIGNIFICANCE:

BLUE text: Denotes general/descriptive comments on the systems and components installed at the property. Limitations, if any, that restricted the inspection associated with each area, are listed here as well.

GREEN text: Denotes observations and information regarding the condition of the systems and components of the home. These include comments of deficiencies which are less than significant; or comments which further expand on a significant deficiency; or comments of recommendations, routine maintenance, tips, and other relevant resource information.

ORANGE text: Denotes a brief comment of significant deficient components or conditions which need
relatively quick attention, repair or replacement. These comments are also duplicated in the Report Summary page(s).

COMMENT KEY or DEFINITIONS:

INSPECTED: I visually inspected the item, system, or component and if no other comment is made, then it appeared to be functioning sufficiently allowing for normal wear and tear.

NOT INSPECTED: I did not inspect this item, system, or component and make no representation of whether or not it was functioning as intended and will state a reason for not inspecting.

NOT PRESENT: This item, system or component is not in this home or building,

REPAIR AS NEEDED: I recommend that the item, system or component be repaired or replaced and suggest a second opinion or further inspection by a qualified contractor or individual.

SAFETY CONCERN: A condition, system or component that is considered harmful or dangerous due its presence or absence.

DEFERRED COST: Denotes a system or component that is near or has reached its normal service life expectancy or show indications that it may require repair or replacement anytime within the next five (5) years.

MAINTENANCE: Recommendations for the proper operation and routine maintenance of the home.

RECOMMENATION: Denotes improvements which are recommended but not required. These may be items
identified for upgrade to modern construction and safety standards.

FYI: For Your Information: Denotes additional general information and/or explanation of conditions; Safety information; Cosmetic issues; and useful tips or suggestions for home ownership. May also include additional reference information with web links to sites with expanded information on your specific installed systems/components and important consumer product information.

Inspection Site and Details

1. Start

Start: 8:00

Finish: 2:30

2. Inspection Attendance

Client present- Tom Githens
Client present- Molly Githens

3. Residence Type or Style

Attached
Single Family
Ranch
Two Level

4. Garage/Carport

Attached 3 Car Garage

5. Additional Structures

Structure(s): Greehouse

Inspected: No-Out of the scope of Inspection

6. Year Built

Year Built: 1994

Age in Years: Approximately 26 Years Old

7. Square Footage of Residence

6348

8. Front of Residence Faces

For the purpose of this report the building is considered to be facing South.

9. Room Count and Designations

Bedrooms: 4
Bedroom #1 Master (East)
Bedroom #2 (South/West)
Bedroom #3 (North/West)
Bedroom #4 (North/West-lower level)
Bedroom #5 (North/West-ADU)

Bathrooms: 6
Bathroom #1-Bedroom #1
Bathroom #2-Bedroom #2
Bathroom #3-Bedroom #3
Bathroom #4-Bedroom #4
Bathroom #5-Bedroom #5
Bathroom #6-South/East-exterior entrance

10. Occupancy

Vacant

11. Utilities

Materials: All utilities were on at the time of the inspection.

12. Temperature

Temperature: 83 Degrees

Weather: During the inspection the weather was clear.

13. Resent Precipitation

Materials: Weather on the day preceding the inspection was clear. • During the 2 days preceding inspection the weather was partly cloudy.

Materials: Ground conditions were dry at the time of the inspection.

Exterior

1. Driveway

Materials:
• Gravel driveway with concrete apron

Observations:
• Few deficiencies observed in the condition of the driveway at the time of the inspection. Notable exceptions will be listed in this report.
• Common cracks (1/4-inch or less) were visible in the driveway. Cracks exceeding 1/4 inch should be filled with an appropriate material to avoid continued damage to the driveway surface from freezing moisture.
• The joint at which concrete walkways met the exterior walls was protected by a sealant. Sealants eventually dry, shrink and crack, creating an avenue for water to enter the soil next to the home foundation. Saturation of soil near the foundation can create a variety of problems depending on soil type. The Inspector recommends that the sealant at this joint be maintained as necessary to prevent water entry.

2. Walkways

Materials:
• Pavers
• Gravel
• Crushed rock
• Stamped Concrete

Observations:
• At the time of the inspection, few deficiencies observed in the condition of the walkways. Notable exceptions will be listed in this report.
• Common cracks (1/4-inch or less) were visible in the walkways. Cracks exceeding 1/4 inch should be filled with an appropriate material to avoid continued damage to the walkway surface from freezing moisture.
• Trip hazards in the walkways appeared to be the result of the expansion or contraction (heaving or settling) of underlying soil. This condition should be corrected by a qualified contractor.

Undermining of soil beneath east aspect of front walkway

3. Steps-Stoops-Porches

Materials:
• Concrete
• Stamped Concrete
• Stone

Observations:
• At the time of the inspection, few deficiencies observed in the condition of the front stoop. Notable exceptions will be listed in this report.
• IMPROVE: The joint at which concrete stoops met the exterior walls were not sealed. Saturation of soil near the foundation can create a variety of problems depending on soil type. I recommend that the joint at which concrete stoops meet the exterior walls should be protected by a sealant that will need to be maintained.

Loose stone observed at stoop to ADU unit

4. Exterior Doors

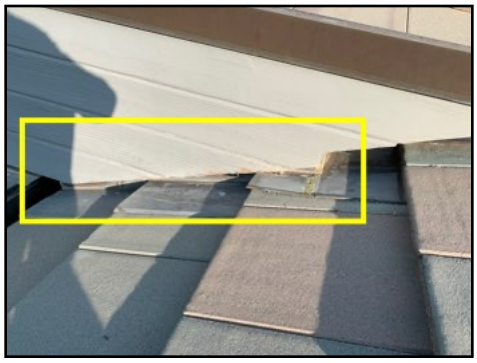
Materials:
- Steel insulated
- Wood
- Sliding Glass

Observations:
- Few deficiencies observed in the condition of the exterior doors at the time of the inspection. Notable exceptions will be mentioned in this report.
- Door at Front entrance needs adjustment to close properly.
- A lock set mechanism at Bedroom #1 patio door is absent and should be repaired as needed.
- FYI: All exterior painted surfaces should be annually examined and sealed, re-caulked and re-painted as needed.

5. Exterior Cladding

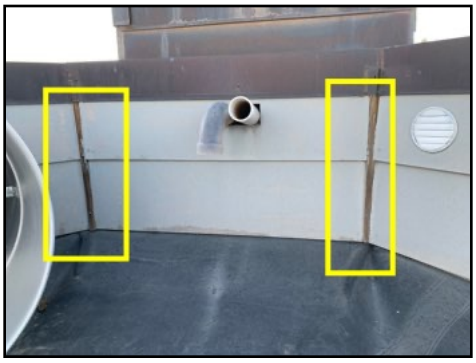
Materials:
- Wood
- Brick Veneer
- Cultured Stone Veneer

Observations:
- Few deficiencies observed in the condition of wood siding covering the exterior walls of the home. Notable exceptions will be listed in this report. Inspection of wood siding typically includes visual examination of installation practices and condition.
- Deterioration of the lower portions of wood siding covering exterior walls appeared to be inadequate clearance from the roof-covering material. Good building practice requires a gap of 1.5 inches minimum between the bottom of exterior wall-covering material and the top of the roof-covering material to avoid damage from decay caused by moisture absorption.
- Areas of loose or sagging wood siding covering exterior walls indicated failure of the fastening method. Wood siding in these areas should be re-fastened or replaced to prevent damage to the siding and to prevent potential damage from moisture intrusion to the home materials, the exterior wall structure and to prevent development of microbial growth such as mold. All work should be performed by a qualified contractor.
- Wood siding covering exterior walls had inadequate clearance from grade. This condition may result in damage to lower courses of shingles from wood decay caused by moisture absorption. Wood siding should have a minimum clearance of 6 inches from grade.
- Deferred painting maintenance at north. I recommend repair as needed.
- At the time of the inspection, no deficiencies observed in the condition of artificial stone veneer covering exterior walls. Inspection of artificial stone typically includes examination of installation practices and visible condition.
- FYI: It is recommend sealing holes & gaps in the siding to keep water infiltration from causing further damage.
- FYI: All exterior painted surfaces should be annually examined and sealed, re-caulked and re-painted as needed.

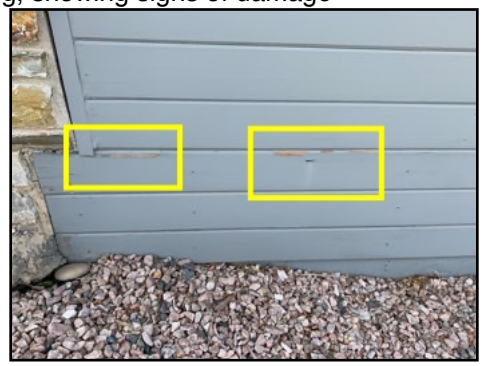


Wood cladding covering the exterior walls at south/west aspect has inadequate clearance from roof covering, showing signs of damage

Inadequate clearing from grade at north patio



Deferred paint maintenance



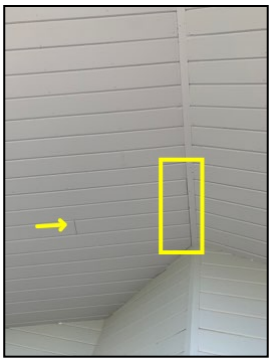
Deferred paint maintenance at north aspect

Loose wood cladding at south garage

6. Eaves-Soffits-Fascias

Materials:
• Wood

Observations:
• Few deficiencies observed in soffit or fascia at the time of the inspection. Notable exceptions will be listed in this report.
• Deferred caulking maintenance at front covered entrance. I recommend repair as needed.
• FYI: All exterior painted surfaces should be annually examined and sealed, re-caulked and re-painted as needed.



Deferred caulk maintenance at front covered entrance

7. Door-Window Frame Trim

Materials:
• Wood

Observations:
• No deficiencies in door or window frame trim at the time of the inspection.
• FYI: All exterior painted surfaces should be annually examined and sealed, re-caulked and re-painted as needed.

8. Patio-Flatwork

Materials:
• Stamped Concrete

Observations:
• At the time of the inspection, few deficiencies observed in the condition of the patio or flatwork. Notable exceptions will be listed in this report.
• Common cracks (1/4-inch or less) were visible in the patio or flatwork. Cracks exceeding 1/4 inch should be filled with an appropriate material to avoid continued damage to the walkway surface from freezing moisture.
• Trip hazards in the patio flatwork appeared to be the result of the expansion or contraction (heaving or settling) of underlying soil. This condition should be corrected by a qualified contractor.
• IMPROVE: The joint at which concrete patio or flatwork met the exterior walls was not sealed. Saturation of soil near the foundation can create a variety of problems depending on soil type. I recommend that the joint at which concrete flatwork met the exterior walls should be protected by a sealant that will need to be maintained.

9. Deck-Balcony

Materials:
• East balcony-wood

Observations:
• No deficiencies observed in the condition of the deck/balcony. Inspection of deck/balcony typically includes visual examination of installation practices and condition.
• The horizontal guardrail assembly at east balcony had components that made it climbable by children. This condition is a potential fall hazard. I recommend that steps be taken to alter the guardrail assembly so that it is no longer climbable by children. All work should be performed by a qualified contractor.
• FYI: All exterior painted/stained surfaces should be annually examined and sealed, re-caulked and re-painted/re-stained as needed.

10. Grading-Surface Drainage-Vegetation

Grading Description:
• Satisfactory Grading/Surface Drainage-Few defects observed

Vegetation Description:
• Tree(s)
• Plants and bushes

Observations:
• Few deficiencies observed in the grading and surface drainage at the time of the inspection. Notable exceptions will be listed in this report.
• Roots from trees growing between the home and the street may pose a threat to the main sewer pipe. Tree roots can damage or invade and form blockages in sewer pipes. Consider having the main sewer line inspected by video camera to discover any damage that may have occurred.
• FYI: Keeping water away from the structure is a key factor in helping prevent moisture related problems
• FYI: Lot grading and drainage have a significant impact on the building, simply because of the direct and indirect damage that moisture can have on the foundation. It is very important, therefore, that surface runoff water be adequately diverted away from the home. Lot grading should slope away and fall a minimum of one (1) inch every foot for a distance of six (6) feet around the perimeter of the building.
• MAINTENANCE TIP : When landscaping, keep plants, even at full growth, at least a foot (preferably 18 inches) from house siding and windows. Keep trees away from foundation and roof. Plants in contact or proximity to home can provide pathways for wood destroying insects, as well as abrade and damage siding, screens and roofs.

• The home had areas of significant erosion visible beneath hose bib at south and south/east walkway will continue unless action is taken to prevent it. I recommend that you consult with a qualified landscape contractor to gain an idea of options and costs for correction.

11. Fencing

Materials: Stone

Observations:
• Few deficiencies observed in the condition of the fences at the time of the inspection. Notable exceptions will be listed in this report.
• Loose cap stone observed at west retaining wall. Repair as needed.

Loose stone at west retaining wall

12. Limitations of Exterior Inspection

• Awnings, or similar seasonal accessories, recreational facilities, outbuildings, water features, hot tubs, statuary, pottery, fire pits, patio fans, heat lamps, and decorative low-voltage landscape lighting are not inspected unless specifically agreed upon and documented in this report.
• A representative sample of exterior components were inspected rather than every occurrence of components.
• While performance of lot drainage and water handling systems may appear serviceable at the time of inspection, the inspector cannot always accurately predict this performance as conditions constantly change. Furthermore, items such as leakage in downspout/gutter systems are very difficult to detect during dry weather. Inspection of foundation performance and water handling systems, therefore, is limited to visible conditions and evidence of past problems.
• Inspection of the home exterior typically includes: exterior wall covering materials, window and door exteriors, adequate surface drainage, driveway and walkways, window wells, exterior electrical components, exterior plumbing components, potential tree problems, and retaining wall conditions that may affect the home structure. Note: The General Home Inspection does not include inspection of landscape irrigation systems, fencing or swimming pools/spas unless prearranged as ancillary inspections.

Roofing

1. Roof Style

Style:
• Hip
• Valley

Pitch:
• The roof pitch was approximately 4:12
• The valleys were made using the open valley methods with valley metal flashing installed down the valley centerline.

2. Method of Roof Inspection

Method of Inspection: Walked Roof

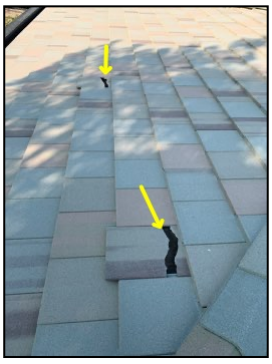
3. Roof Covering

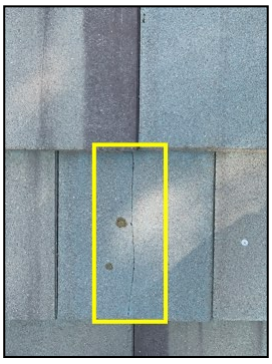
Materials:
• Tile
• Ethylene Propylene Diene Monomer (EPDM)

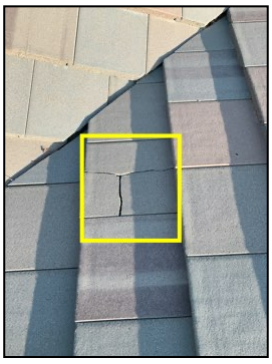
Age:
• Approximately 10-20 years old
• ACTUAL AGE UNKNOWN

Observations:
• At the time of the inspection, no deficiencies observed in the installation of concrete tiles covering this roof.
• At the time of the inspection, few deficiencies observed in the condition of the clay tile roof-covering material. Notable exceptions will be listed in this report.
• I did not directly view the fasteners and disclaims responsibility for confirming proper fastening of the asphalt shingles. Fasteners used to connect asphalt composition shingles to the roof deck were not visible. At the time of the inspection the shingle adhesive strips were fully bonded. Because a fully bonded roof is the most important factor in the wind resistance of an asphalt shingle roof, breaking shingle bonds to view fasteners would constitute damage to the roof. Destructive testing lies beyond the scope of the General Home Inspection. Lack of damage to the roof indicated that fasteners were performing as designed.
• Many different types, brands and models of clay tiles have been installed over the years, each with specific manufacturer's installation requirements. In addition, most tiles have underlayment requirements that cannot be visually confirmed once the tiles have been installed. For this reason, the Inspector disclaims responsibility for accurate confirmation of proper roof tile installation. The Inspector's comments will be based on- and limited to- installation requirements common to many tile types, brands and models. Accurate confirmation of compliance with manufacturer's installation recommendations, or identification of any violations of applicable building codes, exceeds the scope of the General Home Inspection, and will require the services of a qualified roofing contractor.

• The roof had cracked and/or broken cement roof tiles that should be replaced to help prevent damage from moisture intrusion to the home materials, the roof structure and to prevent development of microbial growth such as mold. I recommend that you consult with a qualified contractor to discuss options and costs for repairs.
• Roof ridge cap tiles were loose, displaced, or missing at the time of the inspection. This condition appeared to be due to failed mortar bond, which means that the mortar bonding other ridge cap tiles to the roof is weak. The Inspector recommends an evaluation and any necessary work be performed by a qualified roofing contractor.


Cracked/broken tile at southern slope


Cracked tile at south/east


Broken tile at south/western slope


Ridge cap installed at south/west has left gaps exposing roof to moisture intrusion


Broken ridge cap at north/east hip


Rolled rubber roof covering

4. Flashings

Observations:
• Few deficiencies observed in the condition of roof flashing. Notable exceptions will be listed in this report.

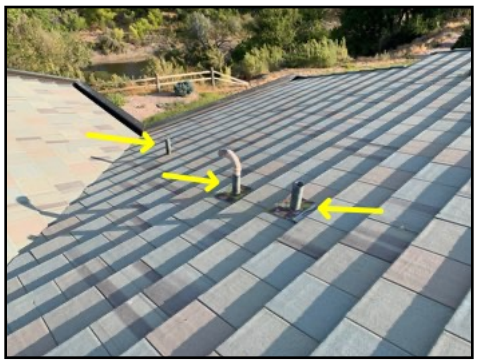
• The home had no kick-out flashing installed where walls extended past roof edges. Kick-out flashing is designed and installed to divert water from behind the exterior wall covering at areas of the home where a sidewall extends out past a connecting roof eve. This condition may allow moisture intrusion of the exterior wall covering. Moisture intrusion of the wall structure can damage home materials and encourage the growth of mold. Long term moisture intrusion can cause structural damage from wood decay. I recommend that you consult with a qualified roofing contractor to discuss options and costs for replacement.


Kick - out flashing absent at south/east

5. Roof Penetrations

Description:
• Steel piping for plumbing vent stack(s)
• Stone Chimney
• Roof Drainage

Observations:
• Satisfactory installations, appeared functional at time of inspection.
• Venting appeared serviceable.
• Moderate cracking visible in the chimney cap should be filled with an appropriate sealant to prevent worsening damage caused by moisture in the cracks expanding as it freezes. All work should be performed by a qualified contractor.
• IMPROVE: The chimney(s) had no spark arrestor. I recommend that all chimneys have an approved spark arrestor installed by a qualified contractor to prevent pest entry and to help protect the roof-covering materials from potential chimney-source ignition.


Metal plumbing vents


Metal plumbing vent


Stone chimney


Metal plumbing vent


Roof drainage

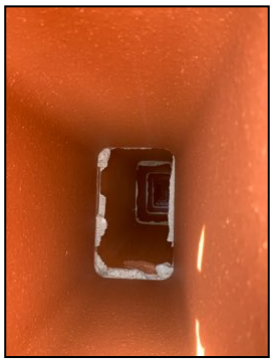

Evaporative cooler


Kitchen exhaust vent


Stone chimney


Moderate cracking of chimney cap-south


Moderate cracking of chimney cap – north


Lined chimney flue

6. Roof Drainage System

Materials: Copper gutter system-The home had gutters made from copper. Properly installed copper gutter systems have the longest service life of any commonly-used material and are generally considered to be high-quality.

Observations:
• Full system installed - Appeared serviceable.
• The home had a relatively flat roof sloped to route roof drainage to scuppers installed in parapet walls. Scuppers routed drainage to downspouts installed to route roof runoff away from soil near the foundation.
• Few deficiencies observed in the condition of the roof drainage system. Notable exceptions will be listed in this report.
• Debris visible in the gutters at the time of the inspection should be removed to encourage proper drainage.
• The home had downspouts designed to discharge roof drainage missing at the time of the inspection.
• FYI: Improper drainage issues at the foundation can lead to excessively high moisture levels in soil at the foundation and can cause damage related to soil/foundation movement. Excessive moisture levels in soil near the foundation can effect the ability of the soil to support the weight of the structure above and can cause damage related to soil/foundation movement. I recommend the installation of downspout extensions to discharge roof drainage a minimum of 6 feet from the foundation.
• FYI: There were portions of the roof drainage system that terminated at an underground drains. It could not be determined where the discharge for this system takes place or the condition of the underground drains.

Dirt/debris observed in gutter at north/west aspect

7. Limitations of Roofing Inspection

• It is highly recommended to ask the seller about the age & history of the roof and obtain roof documentation (if available).
• Roofs may leak at any time. Leaks often appear at roof penetrations, flashings, changes in direction or changes in material. A roof leak should be addressed promptly to avoid damage to the structure, interior finishes and furnishings. A roof leak does not necessarily mean the roof has to be replaced. We recommend an annual inspection and tune-up to minimize the risk of leakage and to maximize roof life.
• It is impossible to inspect the total underside surface of the roof sheathing for evidence of leaks. Evidence of prior leaks may be disguised by interior finishes. Leakage can develop at any time and may depend on rain intensity, wind direction, ice buildup, and other factors.
• Estimates of remaining roof life are approximations only and do not preclude the possibility of leakage.
• The roof inspection portion of the General Home Inspection will not be as comprehensive as an inspection performed by a qualified roofing contractor. Because of variations in installation requirements of the huge number of different roof-covering materials installed over the years, the General Home Inspection does not include confirmation of proper installation. Home Inspectors are trained to identify common deficiencies and to recognize conditions that require evaluation by a specialist. Inspection of the roof typically includes visual evaluation of the roof structure, roof-covering materials, flashing, and roof penetrations like chimneys, mounting hardware for roof-mounted equipment, attic ventilation devices, ducts for evaporative coolers, and combustion and plumbing vents. The roof inspection does not include leak-testing and will not certify or warranty the roof against future leakage. Other limitations may apply and will be included in the comments as necessary.

Structural Components

1. Foundation Type

Description:
• Poured concrete with basement and crawl space

Observations:
• Foundation not fully visible due to floor coverings, wall coverings or at inaccessible areas and below soils.

• A crack visible at the foundation wall had an ascending closure (wider at the bottom). This condition is typical of cracks caused by soil movement. Depending on the cause of soil movement, this condition may now be stable, or movement may continue in the future. I recommend that you consult with a structural engineer to more accurately determine the cause and the likelihood of continuing foundation damage from this condition.
• Cracks and displaced areas of the concrete slab in garage indicated the possible presence of expansive soil beneath the slab. The home is located in an area known to have expansive soils. Expansive soils are soils that increase to many times their original volume in response to increases in soil moisture levels, creating forces that can easily damage home structural components such as foundations and floor slabs. If damage was caused by expansive soils, damage may continue, and stabilization measures may be expensive. I recommend that, soils testing be performed by a soils engineer to determine the source of damage and likelihood of continuing damage.
• In a basement or crawlspace, digging too close to the foundation footings can compromised the Cone of Compression. The Cone of Compression is the area of soil beneath a foundation that supports the weight of the foundation and the home structure above. This soil should remain undisturbed to avoid compromising its structural integrity. The profile of the weight-bearing soil beneath the foundation is roughly cone-shaped, sloping down and out from the bottom corners of the foundation footing at an angle of approximately 45 degrees. This condition can lead to undermining of the foundation and loss of foundation support leading to structural failure in the affected areas. Inspectors should identify such areas and mention whether they observe signs of failure connected to this condition, and that the possibility for future damage exists. Recommend that the client consult with a structural engineer or qualified foundation contractor to determine the necessity, options and costs for stabilization.

Ascending closure crack observed at north/east corner of projector room

Loose soil beneath footing at south/west

Crack observed at stoop in garage, signs of displacement

2. Crawl Space

Observations:
• Entered crawl space - Visually inspected - Access at mechanical room
• Vapor retarder installed.
• No deficiencies noted.
• Soil in the crawlspace was visibly damp or wet. This condition may be the result of rising ground water or may result from surface runoff seeping under and/or through the foundation walls. The source of the moisture should be identified and the condition corrected by a qualified contractor.
• I found stains on the crawlspace floor indicating that significant amounts of water pooling have occurred in the past. This condition may result from surface runoff seeping under and/or through the foundation walls, but can also be caused by rising groundwater and you should discuss this condition with the seller. The source of the moisture should be identified and the condition corrected by a qualified contractor.
• Dry moisture stains were observed in some areas of the crawlspace. After further testing with a moisture meter, there was a low level of active moisture.
• Some vents were closed/obstructed restricting proper ventilation.
• Thermal insulation was loose or missing in the crawlspace. Insulation should be secured properly in place to help reduce heating costs.
• FYI: Mold requires moisture to survive, so protecting lumber and wood structures from moisture will help prevent mold growth. Mold growth can be limited if the MC of wood can be kept below 20%. An MC below 17% means that virtually no microbial growth will occur on even the most susceptible materials. Southern pine dimensional lumber is typically kiln-dried to a maximum 19% MC or less. The moisture content is indicated on the grade stamp. Moisture content is related directly to particular substrates or materials. Microbial growth is limited when the MC of gypsum board is below 0.6%, when brick is below 0.8%, when wallpaper is below 10.5%, and when concrete is below 5%. One study showed that a moisture content greater than 5% permitted the growth of Penicillium glabrum and Aspergillus versicoloron ceiling tiles in a laboratory.
• FYI: Evidence of rodent droppings in crawlspace and attic. I recommend consulting pest professional for further evaluation.


Loose insulation at north/east aspect


Loose/absent insulation at south/east


A low level of active moisture was present beneath shower #1 as indicated by moisture meter during the time of inspection


Rodent droppings beneath crawlspace furnace

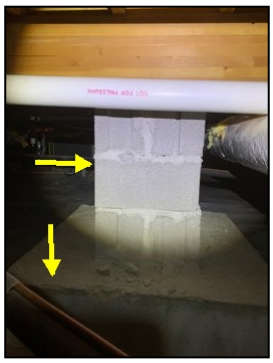
3. Column - Piers - Beams

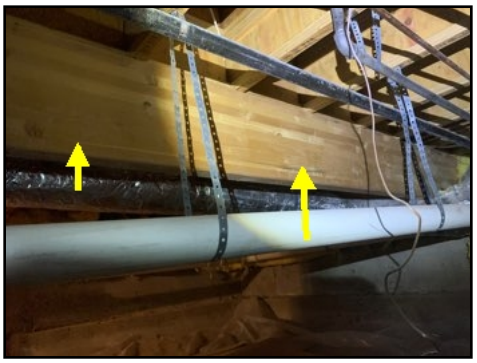
Observations:
- Posts and beams are properly installed.
- Concrete piers-no visible deficiencies at time of inspection.
- Floor joists lapped on top of and were supported by built-up wood beams that rested in pockets in the perimeter foundation walls. The built-up wood beams consisted of layers of nominal 2x lumber nailed together to form a single framing member and were supported by posts resting on concrete pads.

4. Flooring Structure

Materials:
- Engineered floor joists
- Plywood

Observations:
- Floor framing is sound.
- No deficiencies noted.
- Virtually all of the structural floor components are covered and structural members are not visible.


Flooring support structure at south


Flooring support structure at north

5. Wall Structure

Materials:
• Wood Studs
• OSB Sheathing

Observations:
• Virtually all of the walls and ceilings are covered and structural members are not visible.
• No signs of significant movement.

6. Ceiling - Roof Structure

Materials:
• Engineered Wood Truss

Observations:
• No deficiencies noted in roof sheathing.
• No significant cracks observed at time of inspection.
• Dry moisture stains observed at garage sheathing (evidence of prior roof leaks).
• Purlin support has been added to the truss system. This can be considered typical for the age of the home (this item warrants monitoring, attention or repair as needed). The inspector cannot confirm proper placement or attachment. Structural alterations should be reviewed by a qualified licensed engineer.
• The hip rafter at the south/west appeared to be improperly supported. I recommend further evaluation by a qualified framing contractor.


Roof structure at east

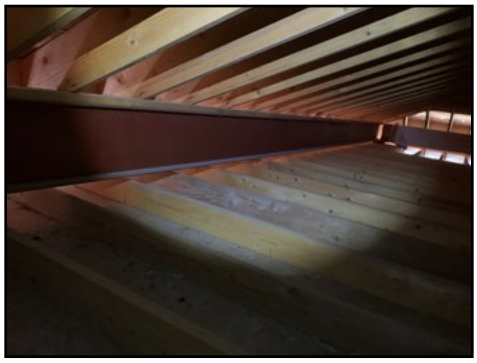

Roof structure at south/west garage


Purlin support added above kitchen exhaust hood


Roof structure above main entrance


Roof structure at south/west hip


Inadequate support of hip rafter at south/west


Roof structure at north patio


Roof structure at east aspect rear patio


Roof structure at north/east

7. Limitations of Structural Components Inspection

• Engineering or architectural services such as calculation of structural capacities, adequacy, or integrity of any structural system or component are not part of a home inspection.
• Full inspection of all structural components (posts/girders, foundation walls, sub flooring, and/or framing) is not possible in areas/rooms where there are finished walls, ceilings and floors.
• The General Home Inspection includes inspection of the home structural elements that were readily visible at the time of the inspection. This typically includes the foundation, exterior walls, floor structures and roof structure. Much of the home structure is hidden behind exterior and interior roof, floor, wall, and ceiling coverings, or is buried underground. Because the General Home Inspection is limited to visual and non-invasive methods, this report may not identify all structural deficiencies. Upon observing indications that structural problems may exist that are not readily visible, the inspector may recommend inspection, testing, or evaluation by a specialist that may include invasive measures.

Attic and Insulation

1. Attic Access

Method of Observation:
• Entered and Inspected

Observations:
• Access located in garage.
• Access located in Bedroom #3 closet.
• No deficiencies noted.
• Dry moisture stains observed at south/east valley (signs of prior roof leaks).
• Inspector could not safely enter or fully view - ducting, insulations and architectural design prevented full access and inspection.

Dry moisture stains observed at south/east valley

2. Insulation in Unfinished Spaces

Materials:
• Blown Fiberglass

Observations:
• Depth varies somewhat.
• Approximately 14" (13-14" is a standard approximate depth in newer homes). To maximize savings on heating and cooling costs, insulation levels should comply with local energy codes
• R-Value for Blown Fiberglass (Attic) ranges between 2.2 and 2.9 per inch.
• IMPROVE: The insulation should be evenly redistributed to perform to it's intended R-Value.

3. Ventilation

Materials:
• Soffit vents

Observations:
• Attic is well ventilated to reduce condensation and prevent excessive heat.
• No ventilation fans or thermostatic controls present.
• Soffit baffles detached in the attic, wind may displace insulation in the attic blocking soffit vents (recommend installing vent baffles).
• MAINTENANCE: Over time debris can build up at soffit baffles. It is recommended to periodically check these baffles and clean when necessary.

4. Limitations of Attic and Insulation Inspection

• While the inspector makes every effort to find all areas of concern, some areas can go unnoticed.
• Venting of exhaust fans or clothes dryer cannot be fully inspected and bends or obstructions can occur without being accessible or visible (behind wall and ceiling coverings).
• Only insulation that was visible was inspected.

Heating and Air Conditioning

1. Thermostat(s)

Description:
• Heating and Cooling-Digital programmable thermostat

Observations:
• No deficiencies noted.
• Thermostats are not checked for calibration or timed functions.
• Recommend the client have the homeowner provide the instructions for programming or show the client how to do so.

2. Heating Systems

Description:
• Manufacturer - Trane
• Manufacturer - Trane
• Forced air furnace
• Gas/LP fireplace

Age and Capacity:
• Approximately 8 years
• Approximately 8 years
• Manufacture Date: 4/2012(mechanical room)
• Manufacture Date: 4/2012(crawlspace)
• Appliance Serial Number: 12153PUU7G-Mechanical room
• Appliance Serial Number: 12153PLW7G - crawlspace
• Appliance Model Number: TUH2C10089V4VAC - mechanical room
• Appliance Model Number: TUH2C10089V4VAC - crawlspace
• Approximately 100,000 BTU Capacity(mechanical room)
• Approximately 100,000 BTU Capacity(crawlspace)

Observations:
• The heating system was operated during the inspection. I recommend consulting with the seller regarding the service history of the system.
• Filter was inspected and appeared clean (filter located return air plenums).
• Visible rusting in the heating system indicates that an evaluation by a qualified HVAC contractor is recommended to include the heat exchanger which is not readily visible. You should also ask the seller for the systems service records.
• FYI: The National Fire Protection Association (NFPA) recommends a Level 2 inspection of chimneys and fireplaces during the sale of a house. Also, an annual inspections of all chimneys, fireplaces, solid fuel-burning appliances, and vents is recommended. A qualified chimney sweep should fully evaluate and make all necessary repairs.
• MAINTENANCE: The heating system was functional during the inspection. I recommend consulting with the seller regarding the service history of the system. An annual/seasonal professional HVAC inspection and cleaning service contract is recommended.
• NOT INSPECTED: The furnace was a high-efficiency system and had a sealed combustion chamber which would require invasive measures which lie beyond the scope of the General Home Inspection to inspect. I recommend that an evaluation be performed by a qualified HVAC contractor.

• Dirty furnace blower vanes visible at the time of the inspection should be cleaned to avoid blower damage and increased operation costs. I recommend service by a qualified heating service technician.

Wood-burning fireplace bedroom #3

Wood-burning fireplace at main level living room

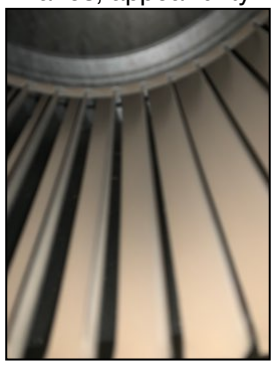
Kitchen wood-burning fireplace


Wood-burning fireplace at lower level living room

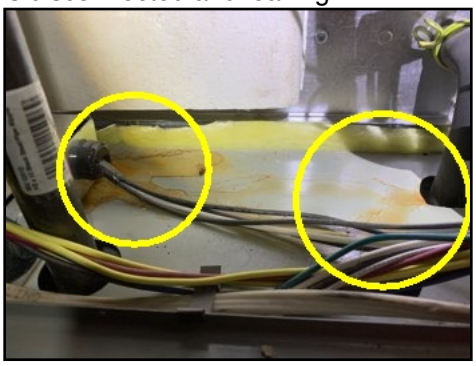

Furnace in mechanical room blower vanes, appear dirty

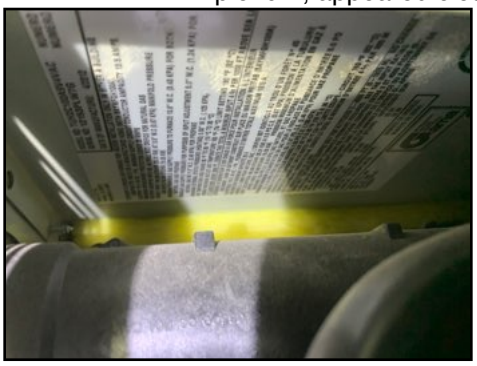

Furnace in mechanical room manufacturer data plate


Exhaust condensation for crawlspace furnace is disconnected and leaking


Crawlspace furnace blower vanes, appear dirty


Crawlspace furnace filter at return air plenum, appeared clean


Rust observed in burner compartment of crawlspace furnace


Crawlspace furnace manufacturer data plate

3. Cooling System

Description:
• Manufacturer - Trane
• Manufacturer - Trane
• A/C-Compressor/Condenser unit

Age:
• Approximate age-9 years
• Manufacture Date: 8/2011(north)
• Manufacture Date: 7/2011(south)
• Appliance Serial Number: 11314R814 F – North
• Appliance Serial Number: 11301L7U4F - South
• Appliance Model Number: 2TTB304881000BA-north
• Appliance Model Number: 2TTB3048A1000BA-south

Observations:
• The cooling system was operated during the inspection. I recommend consulting with the seller regarding the service history of the system.
• The insulation on the exterior refrigerant line by the AC unit has some damage (recommend repair).
• FYI: A/C refrigerant utilized is R-22. R-22 refrigerant has been slowly phased out and can be costly to charge the system. I recommend consulting a qualified HVAC contractor for more information about R-22 refrigerant and cost of A/C split unit replacement.
• MAINTENANCE: The cooling system was functional during the inspection. I recommend consulting with the seller regarding the service history of the system. An annual/seasonal professional HVAC inspection and cleaning service contract is recommended.

• The A/C Unit condenser fins are heavily clogged impairing the units ability function properly and efficiently (recommend cleaning by qualified licensed contractor).

Inside evaporative cooler

Insulation on A/C condenser unit refrigerant line at north is damaged

A/C condenser unit manufacturer data plate - North

Insulation on A/C condenser unit refrigerant line for south unit is damaged

A/C condenser unit manufacturer data plate - South

4. Condensation Line

Materials: Condensation line termination located at floor drain in mechanical room.

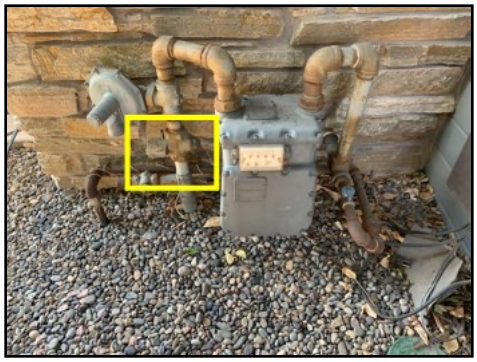
Observations:
• The condensate drain inspection can be limited by insulation and finishing material. It is prudent to ensure that there are no holes or disconnections in the line which is difficult to determine in the heating season when the cooling system is not operating.

5. Energy Source

Heating:
• Natural gas

Cooling:
• Electric - 120/240 Volt

Observations:
• The main gas shut-off was located at the gas meter located at the north of the home.
• FYI: Some occasional gas odor near the meter is normal. The gas system contains a pressure regulator that is designed to release gas into the outdoor air when pressure in the pipe rises above a certain level.



Main gas shut - off

6. Safety Switches

Description:
• Furnace electric safety switch
• A/C electric safety switch

Observations:
• Furnace electric safety switch installed on wall within sight of furnace unit
• Fuel supply shut off valve provided for furnace.
• A/C electric safety switch provided at main service panel and is within sight of A/C unit
• No deficiencies noted.

7. Distribution Systems

Heating:
• Ducts and registers

Cooling:
• Ducts and registers

Observations:
• Registers appeared functional and in working order
• Heating supply appeared serviceable at the time of inspection and was observed to be greater than 25 degrees above heating return air.
• Cooling splits (cooling supply vs. cooling return) appeared serviceable and were observed to be at a differential range between 14-22 degrees.
• Duct work was not fully visible.
• FYI: HVAC supply distribution vents were closed at areas of the home. Closing HVAC distribution vents can cause issues with the interior ductwork and HVAC equipment. I recommend keeping vents open for proper HVAC functionality.


ADU unit cooling return air


ADU cooling supply air


Bedroom #1 cooling return air


Bedroom #1 cooling supply air


Bedroom #2 cooling return air


Bedroom #3 cooling return air


Bedroom #2 cooling supply air


Bedroom #3 cooling supply air


Main living area cooling return air

Main level living room cooling supply air

Bedroom #4 cooling return air

Bedroom #4 cooling supply air

Bedroom #1 heating return air

Bedroom #1 supply heat

Main level heating return air

Bedroom #2 heating return air

Bedroom #2 supply heat

Bedroom #3 heating return air

Bedroom #3 supply heat

Bedroom #4 heating return air

Bedroom #4 supply heat

ADU heating return air

ADU supply heat

8. Combustion Air

Location:
• Mechanical Room -Appeared typical per Mesa County code enforcement

Observations:
• Combustion air venting furnace/water heater: There are two gas fuel-burning appliances in the LOCATION. All fuel-burning appliances must be provided with enough fresh air for proper combustion and ventilation of flue gases.

9. Venting-Flue(s)-Chimney(s)

Materials:
• PVC (Polyvinyl Chloride)

Observations:
• Unable to fully inspect vent pipe.
• No deficiencies noted.

10. Additional Components

Observations:
• No additional components.

11. Limitations of Heating and Air Conditioning Inspection

• Heat gain calculations, adequacy, efficiency, or the balanced distribution of air throughout the home are not performed as part of a home inspection. These calculations are typically performed by designers to determine the required size of HVAC systems. As a very rough rule of thumb -- Air conditioning adequacy is 600-800 sq. feet of living area per ton (12,000 BTU) of A/C cooling capacity.
• Interior surfaces of a chimney liner/flue are not inspected. Due to the small size of the flue, angles, soot, and lack of lighting, a visual inspection is not possible. While accessible parts of the chimney may appear functional, hidden problems could exist that are not documented in this report.
• Combustion air calculation is outside the scope of this inspection. Consult with qualified licensed contractor or for more information visit http://www.houseofcraig.net/combustion_air_calc.html to calculate combustion requirements for gas burning appliance combined BTU ratings.
• To gain access and inspect the heat exchanger in Mid and High Efficiency furnaces requires a significant dismantling and disassembly of the unit and is therefore outside the scope of a home inspection.
• Humidifiers, dehumidifiers, and electronic filters are not inspected. An annual HVAC service contract should include servicing these items.
• Firescreens, fireplace doors, appliance gaskets and seals, automatic fuel feed devices, mantles and fireplace surrounds, combustion make-up air devices, and heat distribution assists (gravity or fan-assisted) are not inspected.
• Determining heating and cooling supply adequacy or distribution balance is not part of this inspection.
• The general home inspection does not include any type of heating system warranty or guaranty. Inspection of heating systems is limited to basic evaluation based on visual examination and operation using normal controls. Report comments are limited to identification of common requirements and deficiencies. Observed indications that further evaluation is needed will result in referral to a qualified heating, ventilating, and air-conditioning (HVAC) contractor.

Electrical

1. Service Drop

Description:
• Underground service lateral
• 120/240 Volt

Meter Location:
• East exterior of home next to service panel

Observations:
• No deficiencies noted.

Electrical service meter

2. Service Entrance Conductors

Description:
• Copper
• 4 AWG wire

Observations:
• No deficiencies noted.

3. Main Disconnect

Description:
• 400 amp breaker on main service panel

Observations:
• No deficiencies noted.

4. Main Service Panel(s)

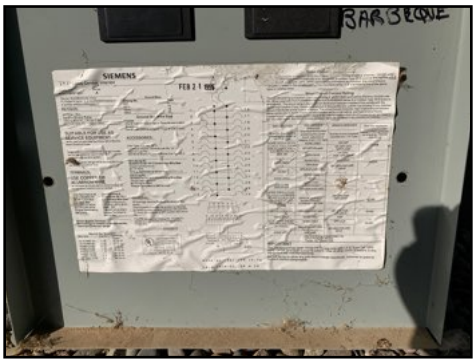
Manufacturer:
• Siemens

Location: East exterior of home

Observations:
• Breaker are wired correctly with adequate gauge wires.
• Wiring within the panel appeared satisfactory - No deficiencies noted.


Main electrical service panel


Inside main electrical service panel



Main electrical service panel manufacturer data plate

5. Remote Distribution Panel(s)

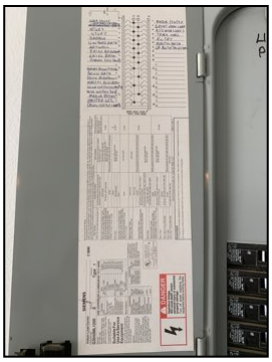
Manufacturer:
- Siemens
- Siemens

Location:
- North interior wall of garage
- North interior wall of garage

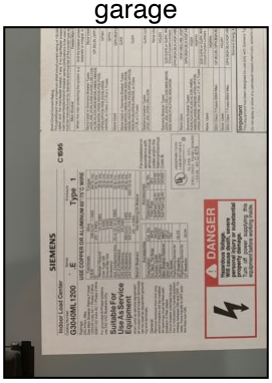
Observations:
- 200 amp service
- 200 amp service
- No deficiencies noted.
- Wiring within the panel appeared satisfactory - No deficiencies noted.
- Breaker are wired correctly with adequate gauge wires.

Lighting remote distribution panel in the garage

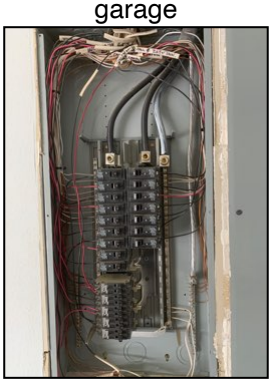
Power remote distribution panel in the garage



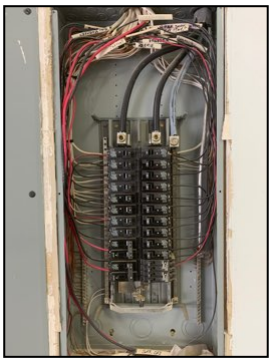
Lighting manufacturer data plate



Power manufacturer data plate



Inside lighting remote distribution panel in garage



Inside power distribution panel in garage

6. Service Grounding/Bond

Description: Copper

Observations:
- The method for ground was not visible, a ground wire was noted exiting the panel. This is not uncommon, but the grounding method could not be verified.
- Primary grounding system is not fully visible.

Water pipe bond at water heater supply

7. Overcurrent Protection

Description: Breakers

Observations:
• No deficiencies noted.

8. Wiring Methods

Description:
• Non-metallic sheathed cable "Romex"

Materials:
• Wiring conductors are copper
• Wiring conductors are copper and multi strand aluminum (OK on 220/240 volt circuits)

Observations:
• Visible wiring appeared functional.
• Miscellaneous abandoned wiring visible in at north and east should be evaluated by a qualified electrical contractor to determine whether any wiring is still energized. Improperly terminated, energized wiring is a shock/electrocution hazard.

• Exposed wiring observed at north lower level. All exposed active wiring under 8' or at exterior of home is required to be in the appropriate conduit material (recommend repair by qualified licensed electrical contractor).

Abandoned electrical wiring at north/west aspect

Exposed electrical wiring at north lower level

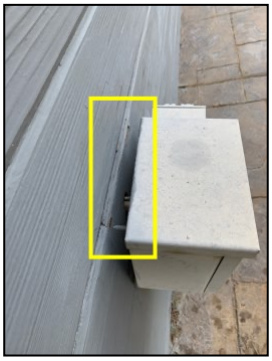
Abandoned electrical wiring at east aspect

9. Lighting-Fixtures-Switches-Outlets

Description:
• Grounded

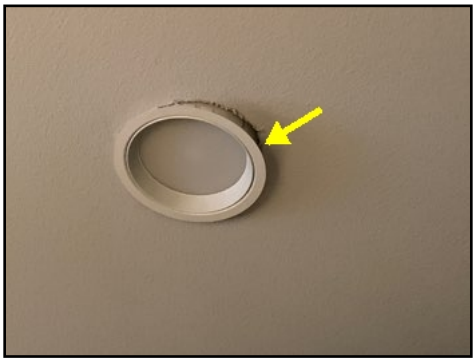
Observations:
• A representative number of receptacles, switches and lights were tested and are generally serviceable, unless otherwise noted.
• One or more electrical receptacles in the home were improperly secured and moved when plugs were inserted. Receptacles should be securely installed to prevent fire, shock and/or electrocution hazard. Loose outlets should be corrected by a qualified electrical contractor. Electrical outlet(s) loose at; East wall of front entrance, West wall bedroom #2, south wall of kitchen, West wall of lower level living area, south wall of stairwell.
• Loose light fixture(s) should be secured to prevent damage to wiring or personal harm. Fixtures loose at bathroom #3 shower.
• Exposed junction box(es) at rear exterior stairwell. This condition is shock/electrocution hazard (recommend covering all exposed electrical connections).

• "Open hot" observed at north/west living room. This indicates that the hot conductor for the outlet has been disconnected and possibly affecting other outlet(s) (recommend repair by qualified licensed electrical contractor). No switch for the outlet was located.
• Light(s) at north exterior lower level and bathroom #2 water closet did not operate as expected (possible light bulbs burned out, recommend asking seller).



Junction box at west exterior is improperly fastened

Exposed junction box at rear exterior stairwell



Loose light fixture above shower in bathroom #3

10. GFCI

Definition: Ground Fault Circuit Interrupter - GFCI - is an electrical safety device that cuts power to an individual outlet and/or entire circuit when as little as .005 amps is detected leaking--this is faster than a person's nervous system can react! Kitchens, bathrooms. whirlpools/hot-tubs, unfinished basements, garages, and exterior circuits are normally GFCI protected. This protection is from electrical shock.

Observations:
• Sample tested appeared serviceable.
• FYI: Recommend review of the Consumer Product Safety Commission publication at the following web site: http://www.cpsc.gov/CPSCPUB/PUBS/99.html
• FYI: Test GFCIs monthly to ensure proper operation.
• IMPROVE: Modern electrical codes require branch circuits at all kitchens, bathrooms, garages and unfinished spaces to be GFCI protected. The electrical code at the time this house was built may not have required GFCI protection at these circuits. Nonetheless, we strongly recommend they be added to all required circuits as an extra preventive fire safety measure. Licensed electrician recommended.

• No GFCI located at west, ADU balcony exterior outlets, required when the home was built (exterior GFCI outlets requirement established 1973). I recommend correction by a qualified electrical contractor.
• No GFCI located at ADU kitchen outlets, required when the home was built (kitchen GFCI outlets requirement established 1987). I recommend correction by a qualified electrical contractor.

11. AFCI

Materials: Arc Fault Circuit Interrupter -AFCI - is an electrical safety device that helps protect against fires by detecting arc faults. An arc (or sparking) fault is an electrical problem that occurs when electricity moves from one conductor across an insulator to another conductor. This generates heat that can ignite nearby combustible material, starting a fire. At a minimum, all bedroom circuits are normally AFCI protected. Soon, all electrical circuits in new homes will require AFCI protection.

Observations:
• Absent-Not required when house constructed
• FYI: Recommend review of the Consumer Product Safety Commission publication at the following web site: http://www.cpsc.gov/CPSCPUB/PUBS/AFCI.html
• IMPROVE: Modern electrical codes require branch circuits at all bedrooms to be AFCI protected. The electrical code at the time this house was built may not have required AFCI protection at these circuits. Nonetheless, we strongly recommend they be added to all bedroom circuits as an extra preventive fire safety measure. Licensed electrician recommended.

12. Smoke-Heat Detector(s)

Location:
• Each bedroom
• Hallways
• Main living area

Observations:
• Properly installed smoke detectors responded to test button.
• FYI: Smoke detectors last 6-10 years and it is recommended to periodically test them. Ten year old detectors are less than 50% effective.

• SAFETY CONCERN: The smoke alarm(s) at Bedroom #4 and lower level main living area did not operate when tested. You need to be alerted in case of a fire. Recommend repair or replacement of the smoke alarms.

13. Carbon Monoxide (CO) Detector(s)

Location:
• Absent

Observations:
• FYI: Recommend review the following Consumer Product Safety Commission publication: http://www.cpsc.gov/cpscpub/pubs/5010.html
• FYI: Carbon Monoxide (CO) is a lethal gas--invisible,tasteless, odorless--produced in normal amounts whenever you use an appliance which burns a combustible fuel--gas, oil, kerosene, charcoal, and wood. When proper ventilation becomes blocked or inadequate, CO concentrations build up inside your home and become deadly.

• SAFETY CONCERN: A carbon monoxide detector is not located within the required distance to each bedroom. Colorado law requires that an operational carbon monoxide alarm be installed within 15 feet of the entrance to each bedroom (or other room lawfully used for sleeping purposes), or in any location otherwise specified by a state or local building code.

14. Limitations of Electrical Inspection

• Electrical components concealed behind finished surfaces are not visible to be inspected.
• Labeling of electric circuit locations on Main Electrical Panel are not checked for accuracy.
• Only a representative sampling of outlets, switches and light fixtures were tested.
• The inspection does not include remote control devices, alarm systems and components, low voltage wiring, systems, and components, ancillary wiring, systems, and other components which are not part of the primary electrical power distribution system.
• Furniture and/or storage restricted access to some electrical components which may not be inspected.
• Ground wires not visible due to finished ceilings.
• Even though not part of a general inspection all antenna/cable/phone and doorbell wiring needs to be evaluated for proper installation.

Plumbing

1. Source

Source: Public municipal water supply

Materials: Copper

2. Main Water Shut Off

Location:
• Next to water heater

Observations:
• Located, and client made aware of.

Main water service at south/east crawlspace

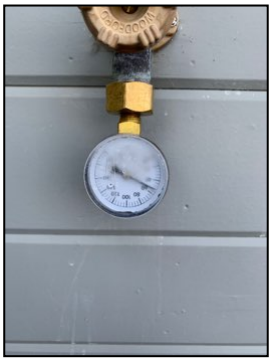
3. Exterior Hose Bibs(Spigots)

Description:
• Standard hose bibs

Observations:
• Hose bib at south and west of house leaks from valve while under pressure.
• Hose bib at west of house is loose from structure. Recommend corrections be made by licensed plumbing contractor.

South exterior hose bib

West exterior hose bib



East exterior hose bib

South/east exterior hose bib

4. Water Supply Distribution Systems

Materials:
• Copper

Observations:
• No deficiencies observed at the visible portions of the supply piping.
• Most of the piping is concealed and cannot be identified.
• IMPROVE: Hot water pipes visible in the unheated crawlspace should be insulated to save on water heating costs and to help prevent freeze damage.

• Water supply pipe fittings visible in the crawlspace beneath shower in bathroom #1 had heavy corrosion visible at the time of the inspection and may begin leaking soon. Consider replacing fittings before active leakage begins. I recommend that an evaluation and any necessary work be performed by a qualified plumbing contractor.

Heavy corrosion observed on water supply pipes in crawlspace beneath shower #1

5. Sinks and Faucets

Locations:
• Kitchen
• Laundry
• Bathroom #1
• Bathroom #2
• Bathroom #3
• Bathroom #4
• Bathroom #5
• Bathroom #6
• Wet bar

Observations:
• No deficiencies observed.
• The fixtures and drains that water was run through showed functional drainage.

6. Flow and Pressure

Location Tested: Front exterior hose bib at 57:00 PSI

Observations:
• The water pressure was tested and was found to be: 57 PSI (normal water pressure range is between 40-65 psi, high water pressure range is between 65-85 psi).

7. Waste - Drain - Vent Piping

Dexcription: Septic

Materials: Thermoplastic PVC (Poly-vinyl Chloride)

Observations:
• The home had a private onsite wastewater sewage treatment (septic) system that typically consists of a tank, leach field, and related components. Inspection of this system lies beyond the scope of the General Home Inspection and the Inspector did not inspect it. I recommend that you have the system inspected by a qualified contractor and acquire the sellers service records.
• Waste drain clean-out(s) located at west.
• isible piping appeared serviceable at the time of the inspection, most WDV pipe is concealed.
• FYI: Evaluation of drain pipes consist of flushing every drain that has an active fixture while observing its draw and watching for blockages or slow drains, but this is not a conclusive test and ONLY A VIDEO-SCAN of the main line would confirm its actual condition.

Waste drain clean-out at west

8. Water Heater(s)

Description:
• Manufacturer - General electric
• Capacity - 72 Gallon
• Power Source - Gas

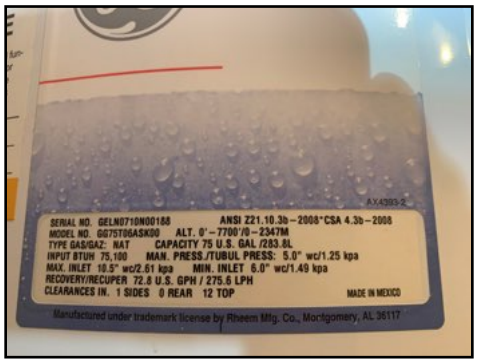
Location and Age:
• Location - Mechanical room
• Age - Approximately 10 years
• Manufacture Date - 7/2010
• Appliance Serial Number: GELN 0710N00188
• Appliance Model Number: GG75T06ASK00
• Approximate 75,100 BTU Capacity

Observations:
• This water heater was gas-fired. Gas water heaters heat water using a gas burner located in a chamber beneath the water tank. The gas control mechanism contains safety features designed to prevent gas from leaking into the living space if the burner should fail for some reason. Gas-fired water heaters must be properly installed so that the gas fuel is safely delivered to the water heater and so that the water heater safely exhausts the products of combustion to the home exterior. Gas-fired water heaters can be expected to last the length of the stated warranty and after its expiration may fail at any time.
• At the time of the inspection, I observed no deficiencies in the condition or operation of the water heater.
• No deficiencies noted with the Temperature Pressure Relief (TPR) valve and discharge pipe.
• Water temperature observed to be: 118 degree F. You should keep the water temperature set at a minimum of 110 degrees Fahrenheit to kill microbes. Recommended temp should be set at 118-122 degrees F to prevent scalding, extend water heater life, and improve energy efficiency and conservation.
• The home had a hot water re-circulation system installed. This system includes a second hot water supply pipe in which hot water circulates through the home. When a hot water valve is opened, hot water supplied by this re-circulation pipe is available almost instantly. This is especially convenient for plumbing fixtures located far from the water heater and at which water normally takes a long time to get hot. The recirculation pump was connected to a timer that shuts off the pump at night when hot water is seldom needed. The system responded to the demand for hot water.

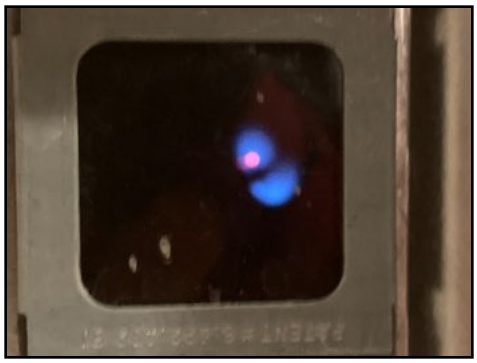
• When tested the expansion tank appears to have lost its charge. I recommend recharge or replacement by qualified licensed plumbing contractor. The expansion tanks purpose is to deal with thermal expansion of water as it heats up in the water heater to prevent water pressure from getting too high. If water pressure gets high enough it can damage valves in plumbing fixtures, joints in supply pipes and even the water heater.

Bathroom #6

Water heater temperature setting during the time of inspection



Water heater manufacturer data plate

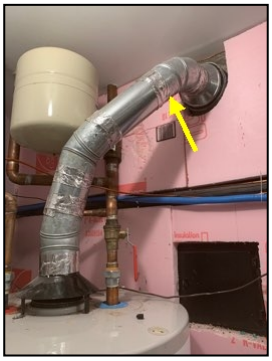


Water heater sealed burner compartment, pilot is lit

9. Water Heater Vent System

Dexcription:
• Vent pipe

Observations:
• Visible portions appeared functional with no discrepancies.
• Combustion air supply appeared typical per Mesa County code enforcement.
• Metal double wall chimney vent pipe
• NOT INSPECTED: The burn chamber of the water heater was sealed and the inspector was unable to evaluate its condition.



Water heater vent pipe exhausts into chimney flue

10. Fuel Distribution System

Materials:
• Black iron pipe used for gas branch/distribution service
• CSST (Corrugated Stainless Steel Tubing)

Location: Main gas shut off located at outside meter

Observations:
• At the time of the inspection, I observed no deficiencies in the condition of the gas supply pipes. Most pipes were not visible due to interior wall coverings.
• All gas appliances have cut-off valves in line at each unit
• No gas odors detected.
• FYI: The photo shows the gas pressure regulator that controls the pressure under which gas is supplied to the home. Gas regulators leak small amounts of gas occasionally. If gas smell is strong and persists, contact your local gas utility provider.

11. Limitations of Plumbing Inspection

• The sections of the plumbing system concealed by finishes and/or storage (below sinks, etc.), below the structure, or beneath the ground surface are not inspected.
• While the inspector makes every effort to find all areas of concern, some areas can go unnoticed. Washing machine drain line for example cannot be checked for leaks or the ability to handle the volume during drain cycle. Older homes with galvanized supply lines or cast iron drain lines can be obstructed and barely working during an inspection but then fails under heavy use. If the water is turned off or not used for periods of time (like a vacant home waiting for closing) rust or deposits within the pipes can further clog the piping system.

Bathrooms

1. Tubs

Description:
• #3 Soaker jetted-tub
• #2 Shower-tub combination surround
• #4 Shower-tub combination surround
• #5 Shower-tub combination surround

Observations:
• No deficiencies noted.

Jetted bathtub test

2. Shower(s)

Description:
• #1 Walk in shower unit
• #3 Walk in shower unit
• #6 Walk in shower unit
• #2 Shower-tub combination surround
• #4 Shower-tub combination surround
• #5 Shower-tub combination surround

Observations:
• Cracked grout-caulk was observed at Shower #6 and Shower #1
• Shower doors in bathroom #5 and #4 are loose from bottom track. Recommend repair as needed.
• The south shower head in bathroom #3 did not operate as expected. Recommend further evaluation and repairs by qualified licensed plumbing contractor.
• FYI: Caulking has been used to seal the base of the tiles around tub and shower, in all bathrooms. This prevents moisture that will migrate behind the tile from weeping out properly where the tile meets the tub.

3. Toilet(s)

Observations:
• Water supply to toilet in bathroom #5 was shut off during the time of inspection.
• FYI: A loose toilet base can damage the wax seal and can allow a lead to occur. A damaged seal should be replaced and the toilet has to be pulled. In some cases, there may be some sub-floor surface damage that can only be seen when the toilet is pulled.

• Toilet was loose at Bathroom #2, #3, and #4(recommend repair).

4. Bathroom Exhaust Fan(s)

Observations:
• Appeared functional, at time of inspection.
• Exhaust fan terminates in attic. (Ok per Mesa County code when home was built)

5. Caulking and Bathrooms

• Water intrusion from bathtubs and shower enclosures is a common cause of damage behind walls, sub floors, and ceilings below bathrooms. As such, periodic re-caulking and grouting of tub and shower areas is an ongoing maintenance task which should not be neglected.
• Areas which should be examined periodically are vertical corners, horizontal corners/grout lines between walls and tubs/shower pans and at walls near floor areas. Also, the underside of shower curbs, the tub lip, tub spouts, faucet trim plates and any other areas mentioned in this report.
• Chose a PVA (polyvinyl acetate) type caulk. These are much more mildew resistant, are longer lasting and can be more thoroughly removed from bathroom surfaces.
• FYI: One of the best is : POLYSEAMSEAL Tub and Tile Ultra Sealant caulk.
• FYI: Refer to the following site: http://polyseamseal.com/ttultra.shtml
• I highly recommend that any caulking issues/deficiencies listed in this inspection report, be addressed and corrected by the client (buyer) and not the seller. The reason is: Old caulk must be removed--the surface meticulously cleaned--THEN new the caulk applied. A seller may not always have the best interest in mind for a thorough job--that will or may have to be re accomplished.

Interior

1. Door Bell

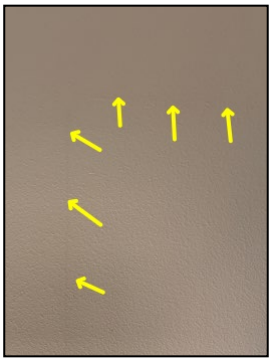
Observations:
• Absent

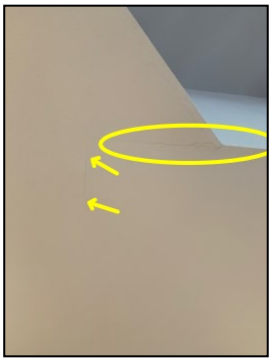
2. Wall and Ceiling Finishes

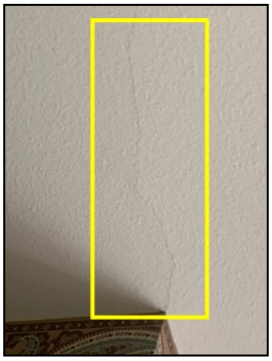
Materials:
• Drywall
• Wallpaper

Observations:
• Wall and ceiling finishes are in satisfactory condition.
• No evidence of water intrusion observed.
• Some cosmetic, common small cracks and typical flaws in drywall finish noted. This is normal wear for age of home.
• Unusual crack pattern at garage ceiling, bedroom #1 ceiling and south living room ceiling. This can be considered normal for the age of the home (recommend monitoring, attention or repair).


Unusual crack pattern at garage ceiling


Unusual crack pattern at ceiling in front entrance


Unusual crack pattern at south/west living room


Unusual crack pattern at bedroom #1 ceiling

3. Floor Finishes Observations

Materials:
• Carpet
• Stone
• Ceramic tile

Observations:
• Floor coverings are in satisfactory condition. Appearance of normal wear and age
• Cracked grout observed near garage service door.

Cracked grout observed near garage service door

4. Windows

Materials:
• Thermal insulated
• Vinyl
• Picture
• Casement
• Awning

Observations:
• Few deficiencies observed in the condition of windows at the time of the inspection. Notable exceptions will be listed in this report.
• Window(s) at North/west living room does not operate as expected. The water feature at the exterior of the home is blocking window from opening.

Water feature obstruction at north/west living room window

5. Interior Doors

Description:
• Raised panel-Solid core wood doors

Observations:
• Tested doors appeared functional at time of inspection (except where noted).
• Some doors need adjustment to operate normally.
• Door(s) at Bedroom #2 and Bathroom #4 pocket door did not latch as expected.
• Door knob(s) at bathroom #2 is damaged. Repair as needed.

6. Stairways-Steps-Railings

Observations:
• Appeared functional, no deficiencies.
• Railings are secure.

7. Counter Tops

Materials:
• Tile
• Granite
• Granite Tile
• Laminate
• Molded solid surface

Observations:
• No deficiencies noted.

8. Cabinets and Vanities

Observations:
• No deficiencies observed.
• Cabinets are in satisfactory condition.

9. Garage Door(s)

Description:
• Insulated Metal

Observations:
• No deficiencies noted.

10. Garage Door Opener(s)

Description: 3 automatic chain drive opener

Manufacturer: Overhead

Observations:
• Appeared functional using normal controls, at time of inspection.

11. Garage Door Safety Features

Safety Reverse: Safety Reverse Present

Safety Sensor: Safety Sensor Present

Observations:
• Safety sensors operated normally, reversing the door when tested.
• The automatic garage door opener(s) reversed direction when met with resistance.

12. Garage Interior

Description:
• Concrete

Observations:
• The garage had moderate storage and personal items at the time of inspection.
• Visible portions of the garage floor appeared sound with minor observable cracks, at time of inspection (normal for age of home).

13. Garage Firedoor

Observations:
• Firedoor present, no deficiencies noted.
• Firedoor present, no deficiencies noted.

14. Garage Firewall-Ceiling

Observations:
• Appeared satisfactory, at time of inspection.

15. Limitations of Interior Inspection

• Recommend thorough review of interior areas during final walk-through inspection prior to closing.
• Home Inspectors cannot determine the integrity of the thermal seal in double-glazed windows. Evidence of failed seals may be more or less visible from one day to the next depending on the weather and inside conditions (temperature, humidity, sunlight, etc.).
• Window treatments, recreational facilities, paint, wallpaper, and other finish treatments are not inspected.
• Determining the heat resistance of firewalls is beyond the scope of this inspection.
• Inspection of the home interior does not include testing for radon, mold, asbestos, lead paint, or other environmental hazards unless specifically requested as an ancillary inspection.

Appliances

1. Dishwasher

Observations:
• Functional-In use by homeowner.

2. Garbage Disposal

Observations:
• No deficiencies, operated as expected.

3. Ranges - Ovens - Cooktops

Observations:
• The middle burner did not operate as expected during the time of inspection. Repair as needed.
• Oven(s) operated when tested.


Cook - top


Left warming drawer


Right warming drawer


Upper oven


Lower oven


Upper broiler


Lower broiler

4. Kitchen Hood - Exhaust Fan

Observations:
• Functioned and operated normally when tested.

5. Refrigerator

Observations:
• Appeared Functional, at time of inspection.

Freezer

Refrigerator

6. Washer

Observations:
• Washing machine connections appeared satisfactory.
• Washing machine tested via rinse cycle and operated as expected.

7. Dryer

Observations:
• Dryer not tested. The dryer vent was clogged with insulation.
• Dryer is connected to dryer vent.
• Dryer vent cover is clogged. Recommend replacement to avoid moisture/pest intrusion.

• The combustible air supply to the laundry room is blocked when the door to the room is closed. An air vent needs to be provided to rooms that have gas burning appliances.

Clogged dryer vent at west

8. Limitations of Appliances Inspection

• Appliances were tested by turning them on for a short period of time.
• Recommend a one-year Homeowner's Warranty or service contract be purchased. This covers the operation of appliances, as well as associated plumbing an electrical repairs -- with a $50-100 deductable. It is further recommended that appliances be operated once again during the final walkthrough inspection prior to closing.
• Oven(s), Range and Microwave thermostats, timers, clocks and other specialized cooking functions and features are not tested during this inspection.

Glossary

Term	*Definition*
A/C	Abbreviation for air conditioner and air conditioning
AFCI	Arc-fault circuit interrupter: A device intended to provide protection from the effects of arc faults by recognizing characteristics unique to arcing and by functioning to de-energize the circuit when an arc fault is detected.
CSST	Corrugated Stainless Steel Tubing (CSST) is a type of conduit used for natural gas heating in homes. It was introduced in the United States in 1988. CSST consists of a continuous, flexible stainless-steel pipe with an exterior PVC covering. The piping is produced in coils that are air-tested for leaks
Combustion Air	The ductwork installed to bring fresh outside air to the furnace and/or hot water heater. Normally, two separate supplies of air are brought in: one high and one low.
Expansion Tank	An expansion tank or expansion vessel is a small tank used to protect closed (not open to atmospheric pressure) water heating systems and domestic hot water systems from excessive pressure. The tank is partially filled with air, whose compressibility cushions shock caused by water hammer and absorbs excess water pressure caused by thermal expansion.
GFCI	A special device that is intended for the protection of personnel by de-energizing a circuit, capable of opening the circuit when even a small amount of current is flowing through the grounding system.
PVC	Polyvinyl chloride, which is used in the manufacture of white plastic pipe typically used for water supply lines.
Valley	The internal angle formed by the junction of two sloping sides of a roof.