



March 16, 2023

Ms. Victoria Kelley & Mr. Quinten Vardman
14205 Whispering Valley
Cypress, Texas 77429

Dear Ms. Kelley & Mr. Vardman:

Re: 12911 Cricket Hollow, Cypress, Texas

As requested, we are pleased to send you the attached report for the foundation inspection performed on the above property. We understand the reason for the inspection to be pursuant to a prepurchase contract for the property. This property may have many positive qualities, but this report generally includes comments that relate to defects or irregularities.

As pointed out in the stated purpose of the report, all of the comments and observations are strictly my opinions, and they may not necessarily agree with other professionals.

If the building is to be left unoccupied for an extended period of time, provision should be made to have the yard watered frequently during dry periods.

This report concludes all obligations related to inspection work provided for the above property for the fee paid. Thank you for asking PROFESSIONAL ENGINEERING INSPECTIONS, INC. to perform this inspection work. If you have further questions, please feel free to call on us.

Sincerely yours,

Edward Robinson, P.E.
President

EGR/sl
Attachments

PROFESSIONAL ENGINEERING INSPECTIONS, INC.

P. O. BOX 859
FRIENDSWOOD, TEXAS 77549
<http://www.profengineering.com>
Firm Registration #1503
(713) 664-1264

FOUNDATION INSPECTION REPORT

Ms. Victoria Kelley & Mr. Quinten Vardman
12911 Cricket Hollow
Cypress, Texas
March 16, 2023

The report is divided into three sections: an introductory section, an opinion section, and a recommendations section. The introductory section defines the property inspected, the purpose of the inspection, and the scope. The opinion section is intended to provide an opinion of the foundation performance along with observations and/or considerations related to the foundation's performance, which provide a basis for the stated opinion. The recommendations section is intended to provide recommendations to aid in maintaining the building's foundation.

I. INTRODUCTION

A. Property Description

The property inspected is a house, having wood framing, brick veneer and fiber cement siding, a composition shingle roof, and concrete slab on grade foundation. We understand the age of the structure to be 51 years.

B. Purpose

This inspection was to evaluate the condition of the foundation in order to provide information related to its condition and provide an opinion as to whether or not it is in need of repair. The data obtained and included in this report will provide insight into the overall condition of the foundation and information that will assist in maintaining it in the best possible condition during future years. Some of the comments contained in the observations portion of this report are related to need for preventative maintenance and may not indicate need for immediate repair.

C. Scope

The scope of this inspection included visual observations of only those portions of the foundation and structural components readily visible without moving or removing items causing visual obstruction. Observations were made at the exterior and interior of the structure, and the attic was viewed from the readily accessible interior. This information is provided for the use of the person to whom this report is addressed and is in no way intended to be used by a third party, who may have different requirements.

No special testing was performed to determine if leaks existed in the plumbing system below this building's foundation. Below the foundation plumbing leaks which were not detectable as part of a cursory inspection have been attributed to differential movement in the foundation of some buildings in the past. In some cases, the effects of plumbing leaks below a foundation can result in a need for repair of the foundation. If it is determined by the client that they wish to have the plumbing systems tested, then testing should be performed by

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a qualified plumber who can provide cost estimates for repair if it is found to be necessary.

II. FOUNDATION DATA

A. OPINION

There is evidence that the foundation of this building has experienced differential movement that is considered normal for this area and the age of the building. Due to the highly expansive nature of the soil, some amount of differential movement is to be expected as the building ages. In accordance with the stated purpose of this inspection, no observations were made that would indicate that the foundation is not performing its intended function.

Differential movement of building foundations is a common problem in this area because of the highly expansive clay soil and changing weather conditions. As a building resting on the highly expansive soil ages, it is probable the foundation will continue to experience differential movement, regardless of how well it was constructed or its present condition. Most buildings, with average owner foundation maintenance, may require foundation repair in a period of 35 to 40 years. If the building is to be left unoccupied for an extended period of time, provision should be made to have the yard watered frequently during dry periods. Constant care and/or maintenance is necessary to maintain movement to a minimum. See the attached Foundation Care Information for recommendations.

B. OBSERVATIONS

The following observations are indicative of the conditions considered or existing at the time of the inspection and should not be considered a total list of irregularities but a representative list of items considered.

1. Drainage at the perimeter of the foundation, which can have an effect on the rate of differential movement in a building foundation, was poor at a portion of the perimeter of the building foundation, where it appears that water stands or runs alongside the foundation during or immediately after rains. The more significant locations included: at the southwest exterior of the building adjacent to the bedrooms at the rock bed, at the northwest exterior of the building at the bedrooms, at the northwest exterior of the garage, and at the northeast side of the garage. The recommendations contained in the attached Foundation Care Information should be implemented to maintain the rate of differential movement to a minimum.
2. Sheetrock cracks above doors, windows, and in the ceiling, usually associated with differential movement, were observed in the following locations: in the ceiling at the master bedroom bathroom.
3. Out-of-levelness of door tops, window sills, built-in furniture, and other horizontal surfaces was normal and acceptable in degree.
4. Some cracks were observed in the exterior brick veneer. The degree was acceptable for structures in this age group. Locations included: at the southwest exterior of the building at the southwest center bedroom

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window; at the northwest exterior of the building at the master bedroom window; at the southeast exterior of the building at the kitchen window and at the window at the living room; and at the brick fence adjacent to the kitchen.

5. Some of the cracks in the brick veneer that were repaired have re-opened subsequent to the repair. Re-opening of the cracks indicate additional differential movement, which may be differential movement. The size and/or number of the cracks do not indicate significant, additional differential movement.
6. Cracks were observed in the foundation concrete. These cracks were hairline in size with little, if any, serious detrimental effect on the function of the foundation at this time. Locations included: at the brick fence adjacent to the kitchen and at the northeast exterior of the dinette.
7. The corner was chipped off the concrete grade beam of the foundation at the west corner of the west bedroom, which is usually caused by differential movement that has caused shearing between the brick veneer and the concrete grade beam. The chipped corner(s) indicate differential movement but do not affect the performance of the foundation.
8. Small cracks were observed in the concrete floor at the garage. Cracks such as these are not unusual in flat concrete work and can be observed in most concrete floors in buildings resting on expansive clay soil within 1 to 2 years after construction is completed.
9. Doors with tapered gaps between the door and door casing at the top, indicating differential movement in the foundation of the building, were observed, including: at the utility room entry to the dinette.
10. Differential movement has caused the concrete driveway to crack and break up. This is pointed out even though the drive is not a part of the building foundation because it is indicative of the type of movement caused by the highly expansive soil on which the building rests.
11. Construction research has indicated that large trees, such as those observed during the inspection, which grow closer than their mature height to a building with a foundation resting on highly expansive soil, can cause rapid and severe differential movement, which can result in the need for foundation repair.
12. Some of the foundation reinforcing bar was exposed at locations along the exterior grade beam of the building. The bar should be painted or coated with a rust preventative to prevent corrosion that leads to spalling of the surface concrete.
13. The gutter downspouts lacked splash blocks at some areas, including: at the northwest exterior of the master bedroom, at the north exterior of the west bedroom, at the northeast exterior of the garage, at the east exterior of the dining room, and at the southwest side of the brick fence.

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KELLEY

Downspouts without proper splash blocks can result in differential movement in the building foundation.

14. Even though there was evidence of differential movement of the building foundation, there were no significant separations between construction materials or failure of structural components observed during the course of this inspection that could be related to differential movement of the building foundation.
15. The walk at the front wall of the building had been upset by the highly expansive clay soil and the roots of the large trees growing near it. This is indicative of the effect that the soil and trees can have on the building foundation if not properly maintained.
16. The fireplace firebox leaned back away from the masonry face of the fireplace. It was not evident that this was related to differential settlement at the fireplace chase but appears to be related to the performance of the firebox.
17. Mineral deposits could be observed at the surface of the foundation concrete at the garage, at the return chase, and at the tile joints at the living room floor. This is an indication of moisture migration through the foundation concrete, which can be exacerbated by poor drainage around the building.
18. There was a rock bed along the foundation at its southwest side. Draining water along the foundation is not desirable since it may result in differential settlement at the foundation.

III. RECOMMENDATIONS

The following recommendations are not to be considered a specific design but guidelines related to maintaining the foundation. Specific design of soil grading should be obtained from professional landscaping companies, who are familiar with the drainage requirements of buildings resting on the highly expansive clay soil in this area.

- A. As with any foundation, if not properly maintained, the need for foundation repair can become necessary. Differential movement of foundations in this area will normally continue because of the highly expansive clay soil. The suggestions contained in the attached Foundation Care Information should be implemented to maintain the rate of differential movement to a minimum.
- B. Gutter downspout splash blocks should be properly installed at each of the gutter downspouts to prevent soil erosion adjacent to the foundation. To eliminate the effect of water running against the side of the foundation, the gutter downspout splash blocks should carry water runoff at least 2 to 3 feet from the edge of the foundation.
- C. Consideration should be given to cutting and capping the roots between the trees and the building; if capping is not practical, trees should be removed if they grow closer to the building than their mature height. If the roots are to be

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cut and capped, then a qualified tree expert should be employed to determine where the roots should be cut, since cutting too much may be hazardous to the health of the tree.

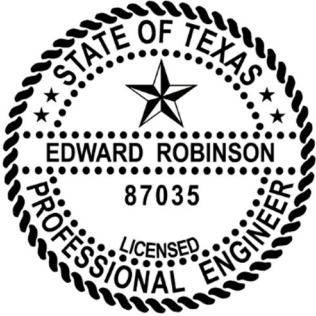
- D. Because the building is believed to be resting on highly expansive soil which exists in this area, it is recommended that an automatic watering system be installed to maintain uniform moisture content in the soil.
- E. Drainage should be improved at portions of the building's foundation where water may run or stand alongside the building during or after rains. Water should drain away from the foundation as soon as possible to reduce the potential for it to adversely affect the performance of the foundation.

IV. SPECIAL NOTICE

Opinions and comments contained in this report are based on observations of apparent performance of the foundation of the building inspected. Performance standards are based on knowledge gained through experience and professional studies of the inspector. Opinions related to compliance with specifications, legal, and/or code requirements are specifically excluded as being a part of our agreement to perform this inspection since the method of foundation fabrication could not be viewed. There is no guarantee or warranty as to future performance, life, and/or need for repair of the building or its foundation, nor should same be assumed as a result of Professional Engineering Inspections, Inc. performing this inspection.

PREPARED BY:

	<p><i>The seal appearing on this document was authorized by Edward Robinson, P.E. 87035 on 3/17/2023. Alteration of a sealed document without proper notification to the responsible engineer is an offense under the Texas Engineering Practice Act. The digital seal is found on the cover page.</i></p>
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Edward Robinson, P. E.
Registered Professional Engineer, #87035

ER/sl
Attachment

This document package has been digitally signed. The digital signature is found on the cover page. The signature on this document package can be validated electronically by obtaining a validation certificate from Professional Engineering Inspections, Inc. This signature and subsequently this document is no longer valid if unauthorized modifications are made to it.

FOUNDATION CARE INFORMATION

Maintenance Recommendations For Foundations On Expansive Clay Soil

INTRODUCTION

Differential movement of building foundations is a common problem in this area, because of the highly expansive clay soil and changing weather conditions, and costs owners thousands of dollars a year in repair bills. As the building ages, it is probable the foundation will continue to experience differential movement, regardless of how well it was constructed or its present condition. This differential movement does not stop as buildings become older; older structures with a history of minimal differential movement have been known to develop foundation problems in a very short time due to changing conditions at the perimeter of the building foundation.

REASON FOR FOUNDATION PROBLEMS

The primary reason for foundation problems is the highly expansive nature of the clay soil on which the building rests. The clay expands or contracts as its moisture content changes with the weather. Depending on the area, the amount of contraction or shrinkage ranges from minimal to upwards of 65% of the total wet volume. The average amount of shrinkage that can be expected in this region is approximately 35%, with wide variation depending on the location. For example, a sample of water-saturated clay will shrink up to an average of 35% when dried completely. This shrinkage accounts for the large cracks that form in the soil after an extended dry period. The more expansive the clay, the larger the cracks.

EFFECT OF PLANTS ON FOUNDATION PERFORMANCE

Because of the highly expansive nature of the soil, trees and other large plants can significantly contribute to differential settlement of a foundation. The roots of trees and large plants consume the moisture from the soil, causing the soil to shrink much faster than other soil areas exposed to the weather. The soil where the moisture is lost more rapidly will sink lower than the surrounding soil, causing evidences and consequences of differential settlement in building structures. Research studies indicate that a tree should be at least as far away from a building as the mature height of the tree to minimize the effect of drying caused by the tree.

EFFECT OF WET SPOTS AT THE SIDE OF A FOUNDATION

Wet spots caused by dripping faucets, leaking drains, air conditioning condensate drains, leaking water pipes, etc., can cause differential settlement at the location where the soil has been kept wet. The foundation may sink into the soil at a wet area while the soil dries and shrinks at other locations because the drying soil allows the foundation to move downward and overload the wet area.

EFFECT OF POOR DRAINAGE AT THE PERIMETER OF A FOUNDATION

Water standing or running alongside a foundation after rains may cause differential settlement of a foundation. If soil grading is such that water runs alongside a foundation during rains, the water will run under the edge of the foundation and carry away soil supporting the foundation. The effect is much more pronounced if the soil was very dry prior to the beginning of the rain. In addition, if water is allowed to stand alongside a foundation, it will flow below the foundation and dissolve the clay supporting the foundation, carrying it into the cracks that develop in the yard outside the foundation area during extended dry periods. This problem is more severe if the soil in the general area has been very dry, but it is less severe if the soil has been maintained moist.

FOUNDATION CARE
PROFESSIONAL ENGINEERING INSPECTIONS

FOUNDATION MAINTENANCE RECOMMENDATIONS

An owner can significantly reduce the rate of differential settlement by observing the following recommendations:

1. Try to maintain a constant moisture content in the soil around the foundation. Water the soil evenly and around the entire foundation during extended dry periods. This should prevent a gap from opening between the soil and foundation edge. However, if a gap does appear, water frequently (at least daily) around the entire foundation during extended dry periods (6 to 7 days in the summer). Do not apply water directly into the gap. Instead, water 1 to 2 feet away from the foundation edge. Some homeowners choose to install a fully automated foundation watering system to eliminate the need to remember to water. It is best to add water about three times per day to insure that the applied water has time to soak into the soil.
2. Cut and cap the roots of any large trees growing closer to the foundation than the mature height of the trees. The roots from a large tree or several medium size trees can consume more water from the soil than can be added with a watering system. This will limit the consumption of water from the soil below the foundation and may prevent excessive differential settlement and cracks in the structure. It is recommended that a professional tree expert be used to prevent damage to the trees. When a tree grows too close to a building to allow cutting and capping of the roots, it is advisable to remove the tree or make special provision for watering the soil below the foundation.
3. Properly grade the soil by filling in low spots and leveling off high spots adjacent to the foundation so that the surface of the soil slopes gradually away from the building. A recommended slope is 1 inch per foot for a distance of 3 to 4 feet from the foundation.
4. Control roof water runoff and help prevent soil erosion by using a gutter and downspout system. This is especially important if a building has no eaves which overhang the walls or if the eaves are less than 1 foot wide.
5. Water trees and shrubs growing near a building during extended dry periods as they cause shrinking of the soil due to their high water consumption. Keep in mind that moderate to large trees consume 50 to 75 gallons of water from the soil every day.

SUMMARY

Remember: the intent of foundation maintenance is to maintain a constant moisture content in the soil around and below the entire foundation and to prevent soil erosion that can result from water flowing off the roof or other large flat surfaces near the building.

Edward Robinson
Registered Professional Engineer, #87035
PROFESSIONAL ENGINEERING INSPECTIONS, INC.
<http://www.profengineering.com/>
(713) 664-1264

Summary Only

Quinten Vardman Victoria Kelley

Property Address:

12911 Cricket Hollow Lane

Cypress Texas 77429



RSCH One Inspections
Christopher Newby Texas 24503
(281) 221-8932

This is not the complete home inspection report. It is only the Summary Items.

GENERAL SUMMARY

RSCH One Inspections
(281) 221-8932

Customer

Quinten Vardman Victoria Kelley

Address

12911 Cricket Hollow Lane
Cypress Texas 77429

The following items or discoveries indicate that these systems or components **do not function as intended or adversely affects the habitability of the dwelling; or warrants further investigation by a specialist, or requires subsequent observation.** This summary shall not contain recommendations for routine upkeep of a system or component to keep it in proper functioning condition or recommendations to upgrade or enhance the function or efficiency of the home. This Summary is not the entire report. The complete report may include additional information of concern to the customer. It is recommended that the customer read the complete report.

I. STRUCTURAL SYSTEMS

A. FOUNDATIONS

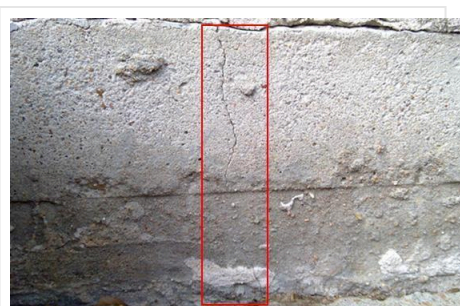
 INSPECTED, DEFICIENT

1) The foundation is slab on grade and may not be performing as intended due to issue #1 noted in the "Walls" portion of this report.

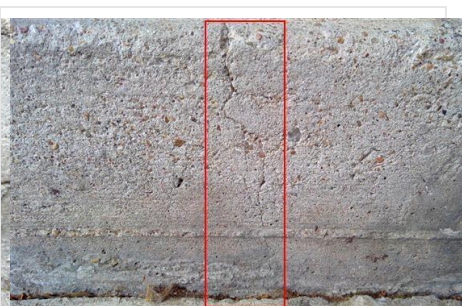
2) Multiple fractures were noted on the foundation at the right (front facing) side of home time of inspection, this is an indicator that the foundation is not functioning as intended. This is considered deficient and does not meet the minimum standard practice.

3) An exposed post tension cable was observed in the foundation at the left (front facing) side of home at the time of inspection. The post tension cables are a supporting member of the foundation. Standard requires that all cable ends be capped and covered, this is to help prevent cables from degrading. This can lead to the foundation not performing as intended over time.

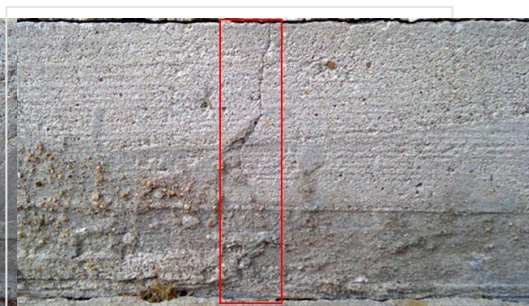
Recommend having these issues looked at further by a licensed foundation company and all required repairs be made.



A. Item 1 (Picture)
Right (front facing) side of home



A. Item 2 (Picture)
Right (front facing) side of home



A. Item 3 (Picture)
Right (front facing) side of home



A. Item 4 (Picture)
Left (front facing) side of home

B. GRADING AND DRAINAGE

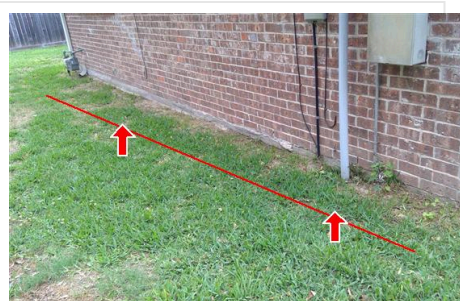
INSPECTED, DEFICIENT

1) The grade at the back and both sides of the home are considered deficient and do not meet the minimum standard required. Standard requires that the grade has a slope of 6 inches of slope away from the foundation within the first 10 feet of grade, unless the width of the grade is less than 10 feet, this is so then the slope must be a minimum of 2% of the width of the grade. The slope must form the swale which forces the water to drain away from the home.

2) Missing splash blocks were noted beneath the gutter downspouts around the home at the time of inspection. This is considered deficient since these missing splash blocks allow water from these downspouts to wash away the grade (dirt) in these areas, creating low points for water to collect near the home.

3) A missing kick-out flashing was noted at the bottom of the roof valley at the back of the home at the time of inspection. This is considered deficient since this missing kick-out flashing allows water to wash away the grade (dirt) below this area, creating a low point for water to collect near the foundation of the home.

Recommend having these issues looked at further by a licensed grading and drainage/landscaping company and all required repairs be made.



B. Item 1 (Picture)
Back of home



B. Item 2 (Picture)
Back of home/missing splash block



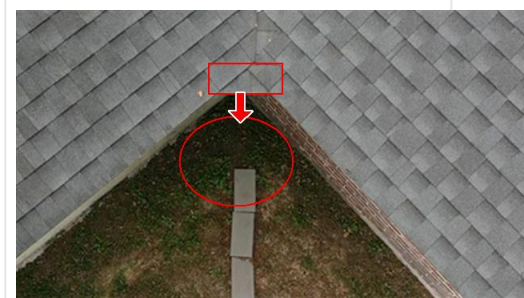
B. Item 3 (Picture)
Left (front facing) side of home



B. Item 4 (Picture)
Left (front facing) side of home



B. Item 5 (Picture)
Right (front facing) side of home



B. Item 6 (Picture)
Missing kick out flashing: Back of the home

C. ROOF COVERING MATERIALS

INSPECTED, DEFICIENT

1) Multiple exposed/degraded fastener heads (nails) were observed on the roof covering material at the time of inspection. This is considered deficient and does not meet the minimum standard of practice, since these are openings for moisture intrusion which can lead to a roof leak in these areas.

2) The combustion air vents on the roof for the furnace and water heater are too short. This is considered deficient as the minimum standard of practice requires all combustion air vents to be at least 2 feet higher than any part of the roof within 10 feet.

3) Raised flashing was observed for multiple roof vents at the time of inspection. This is considered deficient since wind and water can get beneath the flashing in this condition, tearing it from the roof further which can lead to a roof leak and/or moisture damage to the roof decking material in these areas.

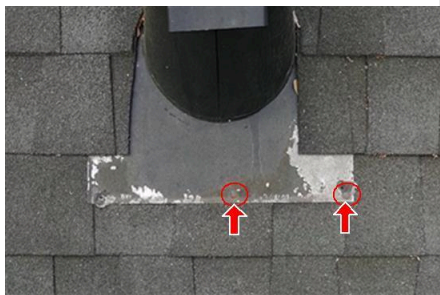
4) There are no plumbing vents on the roof at the time of inspection. This is considered deficient and does not meet the minimum standard of practice, as this is an indication that multiple vents on the roof are the incorrect type of vent for what they are being used for.

5) Several raised shingles were noted at the time of inspection. This is considered deficient and does not meet the minimum standard of practice. Wind and water can get beneath the raised shingles, causing them to tear

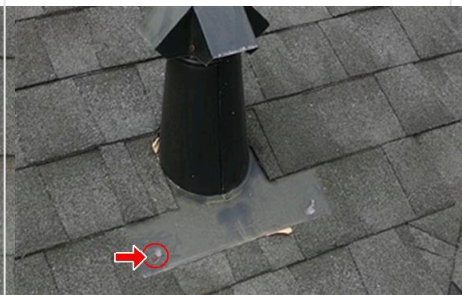
away from the roof decking which can result in a roof leak.

6) Missing counter flashing was observed at the bottom of the exterior wall above the shingles at the front of the home at the time of inspection. This is considered deficient since the missing counter flashing can lead to a roof leak and/or moisture damage to the roof decking in this area.

Recommend having these issues looked at further by a licensed roofing company and all required repairs be made.



C. Item 1 (Picture)
Exposed/degraded fastener (nail) heads



C. Item 2 (Picture)
Exposed/degraded fastener (nail) head



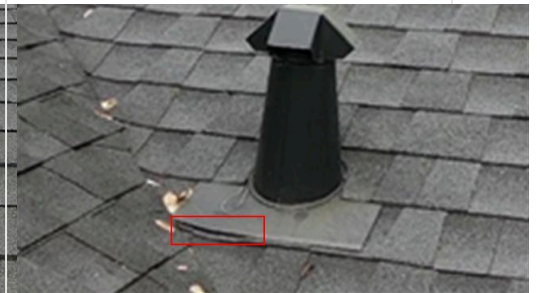
C. Item 3 (Picture)
Exposed fastener (nail) head



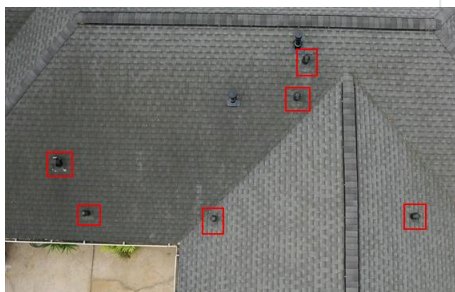
C. Item 4 (Picture)
Combustion air vents for water heater and furnace



C. Item 5 (Picture)
Raised flashing for roof vent



C. Item 6 (Picture)
Raised flashing for roof vent



C. Item 7 (Picture)
No plumbing vents on roof



C. Item 8 (Picture)
Raised shingle



C. Item 9 (Picture)
Raised shingle



C. Item 10 (Picture)
Raised shingles

C. Item 11 (Picture)
Missing counter flashing: Front
of home

D. ROOF STRUCTURES AND ATTICS

INSPECTED, DEFICIENT

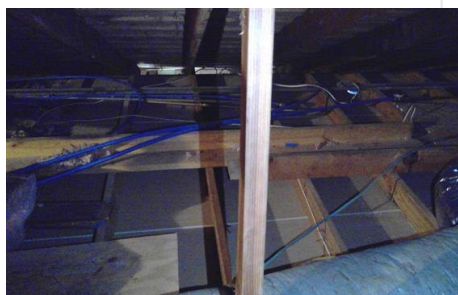
1) Insufficient insulation was noted in the attic space of the home, this is considered deficient and does not meet the minimum standard of practice. Standard requires that a minimum of 12 inches of R30 or greater R value insulation be placed in the attic space. The insulation is used to help trap warm or cool air in the home, so that the home can be conditioned to its desired temperature.

2) Undersized purlin bracing members were observed supporting rafters in the attic space of the home at the time of inspection. This is considered deficient as the minimum standard of practice requires purlin bracing members to be at least as large as the rafters which they support.

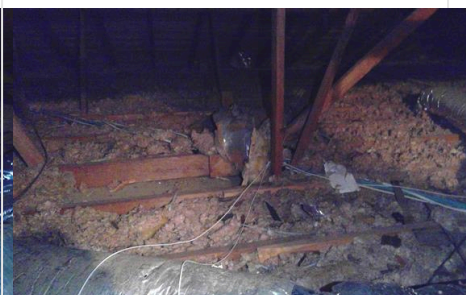
3) Multiple rafters were observed in the attic space of the home that are not fully/properly attached to the ridge beam, and multiple cracked rafters were also observed at the time of inspection. This is considered deficient and does not meet the minimum standard of practice, since this can diminish support for these rafters and other attic structural framing members.

4) A moisture damaged area of roof decking material was observed in the attic space above the garage. This is considered deficient and can lead to the roof decking not performing as intended over time, while resulting in other roof supporting members being damaged by moisture.

Recommend having these issues looked at further by a licensed roofing company and all required repairs be made.



D. Item 1 (Picture)
Insufficient insulation



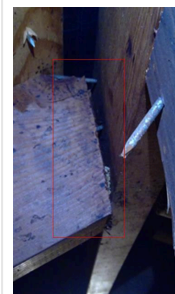
D. Item 2 (Picture)



D. Item 3 (Picture)
Undersized purlin bracing members



D. Item 4 (Picture)
Rafter not attached to ridge beam



D. Item 5 (Picture)
Rafter not attached to ridge beam



D. Item 6 (Picture)
Cracked rafter



D. Item 7 (Picture)
Cracked rafter



D. Item 8 (Picture)
Moisture damaged roof decking

E. WALLS (INTERIOR AND EXTERIOR)

INSPECTED, DEFICIENT

1) Cracks were observed running vertically through multiple bricks at back and both sides of the home at the time of inspection. This is considered deficient since cracks such as this are an indication that the foundation is not performing as intended.

2) Cracked/deteriorated areas of mortar were noted between bricks at multiple areas around the home, and degraded/missing caulking was observed between the exterior siding board material. A significantly cracked/

damaged area of exterior brick wall material was also observed at the front right (front facing) corner of the home. This is considered deficient as these are openings for moisture intrusion which will degrade the exterior wall material in these areas.

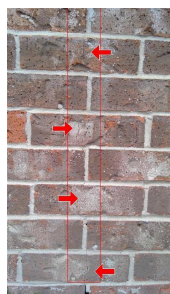
3) An opening was observed in the exterior soffit board material where the AC lines from the exterior air handler unit pass from the exterior and into the home. This is considered deficient and does not meet the minimum standard of practice, since this opening provides an opportunity for insect/rodent intrusion into the home.

4) Degraded/insufficient countertop back splash caulking/grout was noted in the kitchen and master bathroom at the time of inspection. This is considered deficient as these are openings for moisture intrusion which will degrade the countertop, back splash, and wall material in these areas.

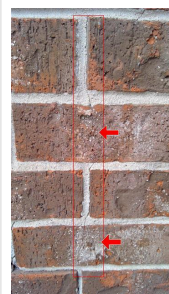
Recommend having these issues looked at further by a licensed general contractor and all required repairs be made.



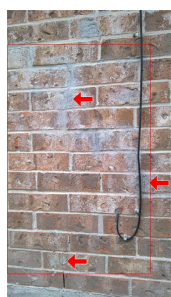
E. Item 1 (Picture)
Left (front facing) side of home



E. Item 2 (Picture)
Left (front facing) side of home



E. Item 3 (Picture)
Right (front facing) side of home



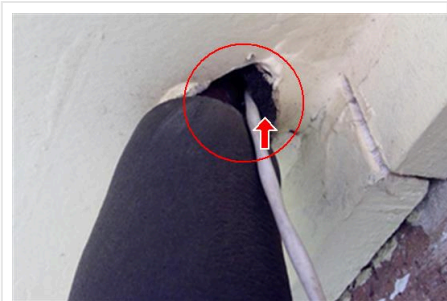
E. Item 4 (Picture)
Back of home



E. Item 5 (Picture)
Front right (front facing) corner
of home



E. Item 6 (Picture)
Exterior siding board material



E. Item 7 (Picture)
AC lines passing into home



E. Item 8 (Picture)
Kitchen



E. Item 9 (Picture)
Master bathroom

F. CEILINGS AND FLOORS

INSPECTED, DEFICIENT

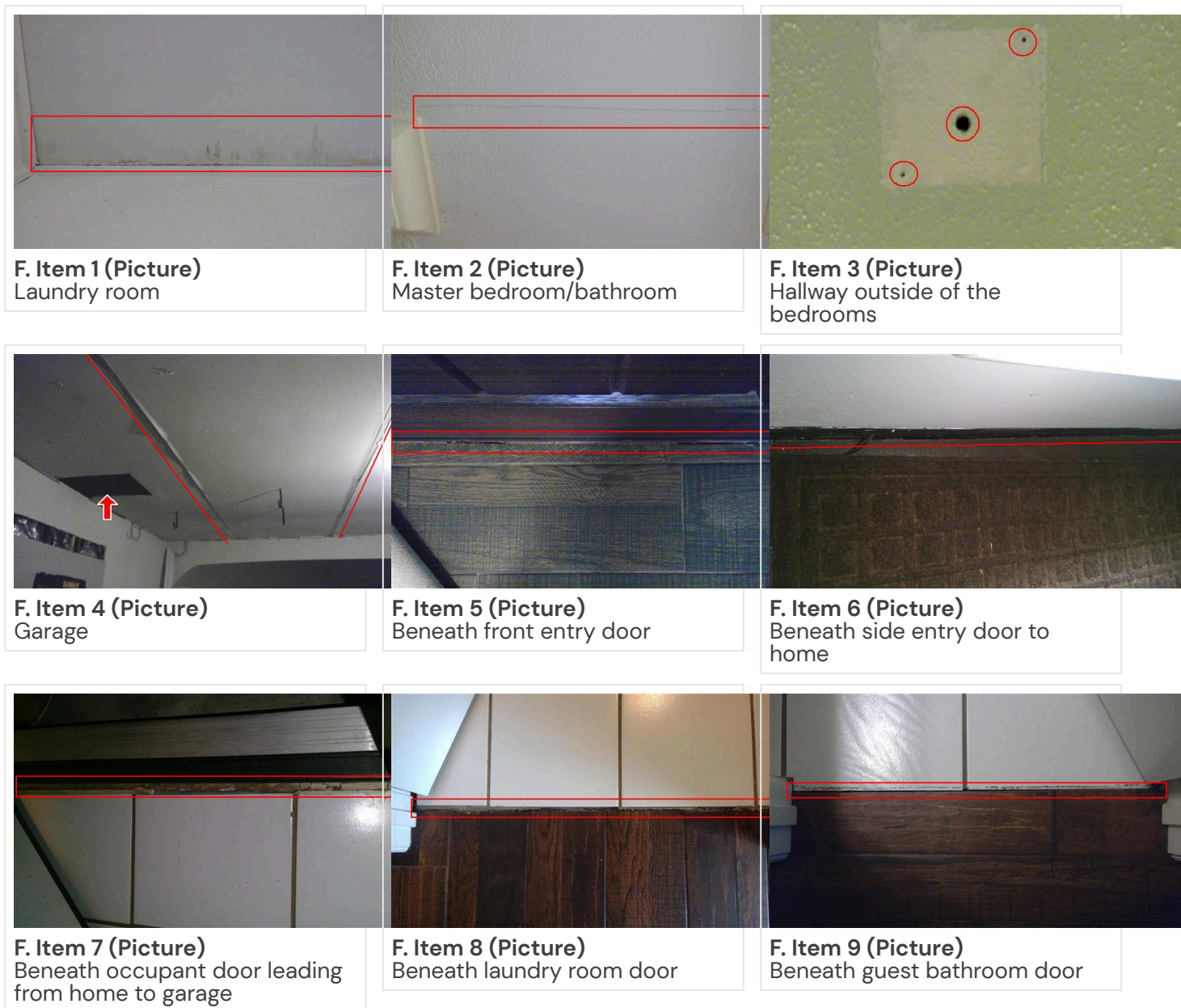
1) A moisture damaged area of ceiling material was noted in the laundry room at the time of inspection. The source and/or cause of the moisture damage could not be determined at the time of inspection. This is considered deficient and does not meet the minimum standard of practice.

2) A settlement crack in the ceiling was observed between the master bedroom and bathroom, and multiple holes in the interior ceiling were noted in the hallway outside of the bedrooms. This is considered deficient since these openings in the interior ceiling material diminish the required fire separation between the attic space and the habitable areas of the home.

3) An opening in the ceiling and multiple cracks/openings in the ceiling were noted in the garage at the time of inspection. This is considered deficient since these openings in the garage ceiling diminish the fire separation between the garage and the habitable areas of the home.

4) Openings in the interior flooring/insufficient grout was observed beneath front entry door, side entry door, occupant door leading from the home to the garage, laundry room door, and guest bathroom door. This is considered deficient as these are openings for moisture intrusion which will degrade the interior flooring material in these areas.

Recommend having these issues looked at further by a licensed general contractor and all required repairs be made.



G. DOORS (INTERIOR AND EXTERIOR)

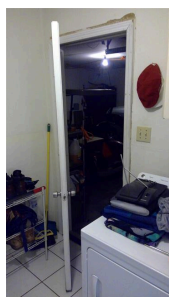
INSPECTED, DEFICIENT

1) The occupant door leading from the home into the garage is considered deficient and does not meet the minimum standard of practice since it does not self close. Standard requires that this door be a metal or solid wood door, and that the door must be self closing at all times. The occupant door acts as a fire barrier between the garage and the habitable areas of the home.

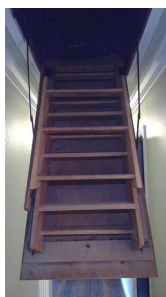
2) The attic access door in the home is missing insulation and weather stripping. This attic access door also does not stay completely shut closed. This is considered deficient and does not meet the minimum standard of practice, since this diminishes the energy efficiency of the home, as well as the required fire separation between the attic space and the habitable areas of the home.

- 3) Damaged/insufficient weather stripping was noted along the edge of the front entry door to the home at the time of inspection. This is considered deficient since this diminishes the energy efficiency of the home by allowing air to leak in and out of the home from along the edge of this door.
- 4) Degraded caulking was observed along the side entry doorframe at the time of inspection. This is considered deficient as these are openings for moisture intrusion which will degrade the doorframe and wall material in this area.
- 5) The master bedroom door, guest bathroom door, and front guest bedroom closet door were noted rubbing against their frames. The middle guest bedroom closet door did not latch shut when closed, and the back guest bedroom closet door was noted rubbing against the carpet beneath it. This is considered deficient as these are indications that these doors are not sitting square to frame, and/or the foundation is not performing as intended.
- 6) The interior doorknob for the front entry door to the home only works when it is pushed upwards at the time of inspection. This is considered deficient and does not meet the minimum standard of practice, since this doorknob is not performing as intended.

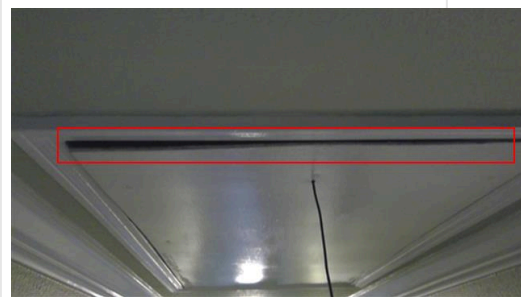
Recommend having these issues looked at further by a licensed general contractor and all required repairs be made.



G. Item 1 (Picture)
Occupant door leading from home to garage



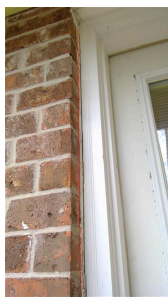
G. Item 2 (Picture)
Attic access door



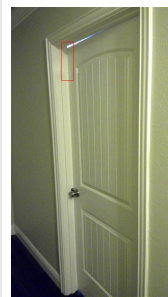
G. Item 3 (Picture)
Attic access door



G. Item 4 (Picture)
Front entry door weather stripping



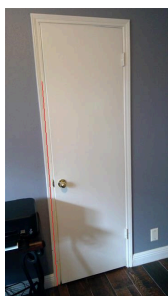
G. Item 5 (Picture)
Side entry door to home



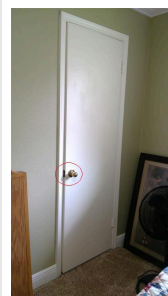
G. Item 6 (Picture)
Master bedroom door



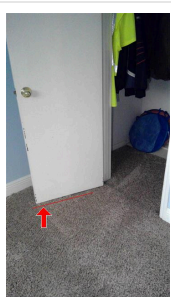
G. Item 7 (Picture)
Guest bathroom door



G. Item 8 (Picture)
Front guest bedroom closet door



G. Item 9 (Picture)
Middle guest bedroom closet door



G. Item 10 (Picture)
Back guest bedroom closet door



G. Item 11 (Picture)
Front entry doorknob

H. WINDOWS

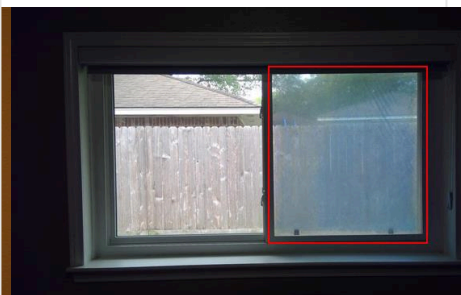
INSPECTED, DEFICIENT

The seal on the window in the dining area, middle guest bedroom, and the window in the main living area to the left of the front entry door appear to be damaged. This diminishes the energy efficiency of these windows, and prevents the windows from performing as intended. This is considered deficient and does not meet the minimum standard of practice.

Recommend having these issues looked at further by a licensed general contractor and all required repairs be made.



H. Item 1 (Picture)
Dining area



H. Item 2 (Picture)
Middle guest bedroom



H. Item 3 (Picture)
Main living area

J. FIREPLACES AND CHIMNEYS

☐ INSPECTED, DEFICIENT

1) The flashing at the base of the chimney is raised. This can lead to water getting under the raised flashing, causing water damage to the roof decking and other roof supporting members. This is considered deficient and does not meet the minimum standard of practice.

2) Multiple cracks were observed on the mortar cap on top of the chimney at the time of inspection. This can lead to the mortar cap leaking water through cracked areas and into the home, preventing the fireplace from being used, while causing moisture damage to the interior components of the home.

3) A damper was not visible and did not appear to be present for the fireplace at the time of inspection. This is considered deficient and does not meet the minimum standard of practice, since this missing damper prevents the chimney flue from being closed.

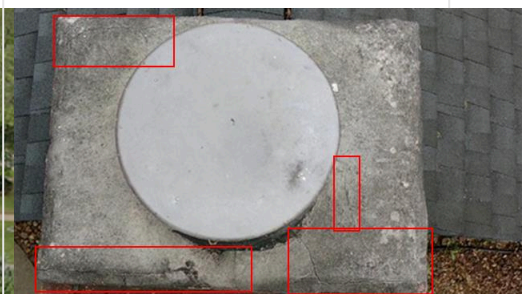
Recommend having these issues looked at further by a licensed roofing company/general contractor and all required repairs be made.



J. Item 1 (Picture)
Raised chimney flashing



J. Item 2 (Picture)
Raised chimney flashing



J. Item 3 (Picture)
Cracks on chimney mortar cap



J. Item 4 (Picture)
Missing fireplace damper

K. PORCHES, BALCONIES, DECKS AND CARPORTS

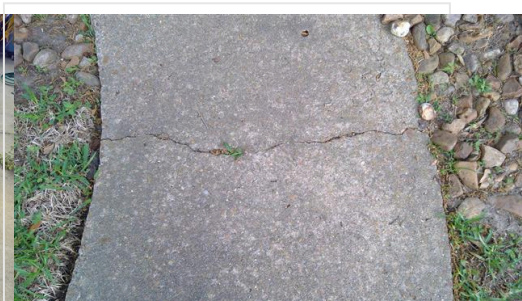
INSPECTED, DEFICIENT

Multiple cracks were noted in the driveway and walkway at the front of the home. This can lead to water getting under the damaged areas, resulting in the slabs not being even, and becoming a trip and fall hazard. This is considered deficient and does not meet the minimum standard of practice.

Recommend having this looked at further by a licensed general contractor and all required repairs be made.



K. Item 1 (Picture)
Driveway



K. Item 2 (Picture)
Front walkway

L. OTHER

INSPECTED, DEFICIENT

Discolored areas of wall material were noted at the back wall in the garage, and cracked/peeling areas of wall and ceiling material were also observed in the garage at the time of inspection. This is considered deficient as these can be indications of moisture damage to the wall and ceiling material in this area.

Recommend having this looked at further by a licensed general contractor and all required repairs be made.



II. ELECTRICAL SYSTEMS

A. SERVICE ENTRANCE AND PANELS

INSPECTED, DEFICIENT

1) The main service entrance panel for the home is overcrowded and disorganized with electrical conductors at the time of inspection. This is considered deficient and does not meet the minimum standard of practice, as this creates an electrical hazard.

2) Multiple breakers in the main service entrance panel have missing/insufficient labels at the time of inspection. This is considered deficient and does not meet the minimum standard of practice, since this makes it impossible to tell which breakers serve which circuits throughout the home.

3) A sharp piercing screw was being used on the cover face for the main service entrance panel at the time of inspection. This is considered deficient as the minimum standard of practice only allows for dull, non-piercing style screws to be used for electrical panels since they can potentially pierce a screw and cause the entire panel to become electrically charged, creating a life/safety hazard.

4) The aluminum main service entrance conductors were missing an anti-corrosive gel on them at the time of inspection. This is considered deficient and does not meet the minimum standard of practice.

5) Multiple white neutral conductors were observed being used as hot conductors in the main service entrance panel at the time of inspection. This is considered deficient as the minimum standard of practice requires all white neutral conductors being used as hot conductors to be properly labeled when being used as such.

6) Oversized electrical conductors were noted being used on multiple 20 amp breakers in the main service entrance panel at the time of inspection. This is considered deficient as the minimum standard of practice requires #12 AWG copper conductors to be used on 20 amp breakers.

7) Multiple spliced electrical connections were observed in the main service entrance panel at the time of inspection. This is considered deficient since the minimum standard of practice does not allow for spliced electrical connections such as these to be present in this panel.

Recommend having these issues as well looked at further by a licensed electrician and all required repairs be made, as well as any other problems that an electrical contractor may discover while performing repairs.



A. Item 1 (Picture)
Disorganized/overcrowded panel



A. Item 2 (Picture)
Missing/insufficient labels for breakers



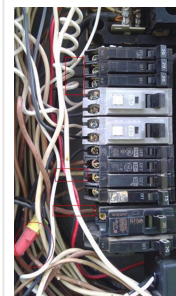
A. Item 3 (Picture)
Sharp piercing screw



A. Item 4 (Picture)
Aluminum main service entrance conductors



A. Item 5 (Picture)
White neutral conductors being used as hot conductors



A. Item 6 (Picture)
White neutral conductors being used as hot conductors, oversized conductors for 20 amp breakers, spliced conductors

B. BRANCH CIRCUITS, CONNECTED DEVICES AND FIXTURES

INSPECTED, DEFICIENT

1) The smoke detector should be tested at common hallway to bedrooms upon moving in to home.

2) Smoke detectors were not present in any of the bedrooms in the home at the time of inspection. This is considered deficient as the minimum standard of practice requires smoke detectors to be present in all bedrooms/sleeping rooms, offices, the vicinity outside of bedrooms, and at each additional floor in a home. The smoke detectors located in the vicinity outside of bedrooms area also required to perform as carbon monoxide detectors. Missing smoke/carbon monoxide detectors in these areas create a life, fire, and safety hazard in the home.

3) I am unable to determine if the CSST gas lines are bonded, this is considered deficient and does not meet the minimum standard of practice. Standard requires that all gas line connections be bonded, this is to help prevent a surge or arc in current from causing damage to the gas line.

4) The oven/cooktop is connected to the kitchen GFCI (Ground Fault Circuit Interrupter) circuit, which causes the oven/cooktop to shut off when one of the receptacles on this circuit is tripped. This is considered deficient as the minimum standard of practice requires appliances to be on their own dedicated circuit.

5) A missing ceiling light fixture was noted in the dining area of the home at the time of inspection. This is an incomplete installation which is considered deficient and does not meet the minimum standard of practice.

6) Multiple light fixtures in the master bedroom did not work at the time of inspection. This is considered deficient since these light fixtures did not perform their intended function, diminishing the lighting in this area.

Recommend having these issues looked at further by a licensed electrician and all required repairs be made.



B. Item 1 (Picture)



B. Item 2 (Picture)



B. Item 3 (Picture)
Kitchen GFCI/Oven



B. Item 4 (Picture)
Dining area



B. Item 5 (Picture)
Master bedroom

III. HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS

B. COOLING EQUIPMENT

INSPECTED, DEFICIENT

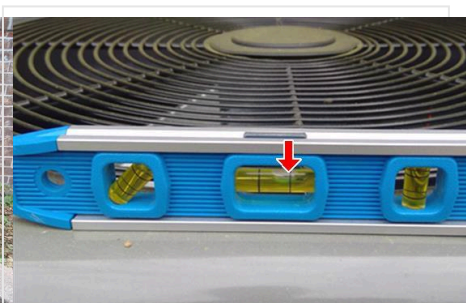
1) The exterior air handler unit is not sitting on a level or raised base, causing the unit to tilt. This is considered deficient as the minimum standard of practice requires all exterior air handler units to be sitting on a level base which is raised at least 3 inches off the ground. A tilted exterior air handler will degrade the fan and compressor within the unit, diminishing the overall performance of the AC system in the home.

2) The drain pan beneath the coil for the interior air handler unit is missing a float switch. This is considered deficient since a float switch is required to shut down the AC system in a home if this drain pan were to clog and be filled with water. This is to prevent moisture damage to the wood structural members in the attic in this area.

Recommend having these issues looked at further by a licensed HVAC tech and all required repairs be made.



B. Item 1 (Picture)
Tilted exterior air handler unit



B. Item 2 (Picture)
Tilted exterior air handler unit



B. Item 3 (Picture)
Missing float switch in drain pan

C. DUCT SYSTEMS, CHASES AND VENTS

INSPECTED, DEFICIENT

1) Although the AC duct material that is closer to the supply air plenum cabinet is newer, the rest of the AC duct material in the attic space of the home is old, degraded, and at the end of its normal life expectancy. This is considered deficient and does not meet the minimum standard of practice, since these ducts are likely no longer performing as intended, diminishing the overall performance of the AC system in the home.

2) AC ducts in the attic space of the home are sitting on insulation and ceiling joists. This is considered deficient since this is an incorrect installation. These ducts should be hung from rafters/attic framing members in order to prevent them from prematurely deteriorating.

Recommend having these issues looked at further by a licensed HVAC tech and all required repairs be made.



C. Item 1 (Picture)



C. Item 2 (Picture)



C. Item 3 (Picture)



C. Item 4 (Picture)

IV. PLUMBING SYSTEM

A. PLUMBING SUPPLY, DISTRIBUTION SYSTEM AND FIXTURES

INSPECTED, DEFICIENT

1) Galvanized plumbing lines were noted in the home, this is considered deficient since galvanized plumbing has passed its shelf life expectancy. The shelf life expectancy of galvanized plumbing pipes is 40 years, after this period, they are known to leak, causing water damage in the home.

2) The toilet in the master bathroom is not secured/sealed at its base, allowing it to move. This is considered deficient and does not meet the minimum standard of practice, since all toilets should be fully sealed at their base in order to prevent leakage/water damage and not move.

3) A drop in water pressure was noted for the sink/vanity fixtures in the bathrooms when the bathtub fixtures were being tested simultaneously. This is considered deficient as this can be an indication of an issue with these fixtures and/or the plumbing lines for these fixtures.

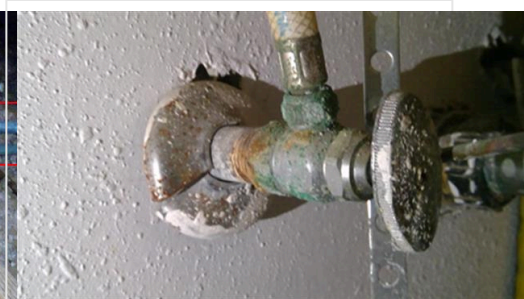
Recommend having these issues looked at further by a licensed plumber and all required repairs be made.



A. Item 1 (Picture)
Galvanized plumbing



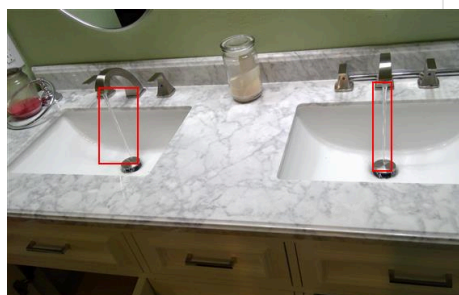
A. Item 2 (Picture)
Galvanized plumbing



A. Item 3 (Picture)
Galvanized plumbing



A. Item 4 (Picture)
Master bathroom



A. Item 5 (Picture)
Master bathroom



A. Item 6 (Picture)
Guest bathroom

B. DRAINS, WASTE AND VENTS

INSPECTED, DEFICIENT

1) It is recommended that the main drain line for the home be further evaluated by a licensed plumber due to the issues noted in the "Foundations" portion of this report, due to the age of the home, and due to the large trees within close proximity to the home.

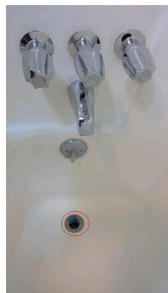
2) Rigid drain line material was observed being used at the drain line for the right master bathroom sink/vanity fixture at the time of inspection. This is considered deficient and does not meet the minimum standard of practice, since this is an incorrect drain line material which is prone to clogging.

3) Missing drain stops were noted for both bathtub drains, as well as for the guest bathroom sink/vanity fixture drain at the time of inspection. These missing drain stop components for these drain lines are considered deficient and do not meet the minimum standard of practice.

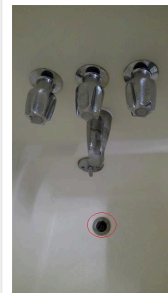
Recommend having these issues looked at further by a licensed plumber and all required repairs be made.



B. Item 1 (Picture)
Master bathroom: Drain line for
right sink/vanity fixture



B. Item 2 (Picture)
Master bathroom



B. Item 3 (Picture)
Guest bathroom



B. Item 4 (Picture)
Guest bathroom

C. WATER HEATING EQUIPMENT

INSPECTED, DEFICIENT

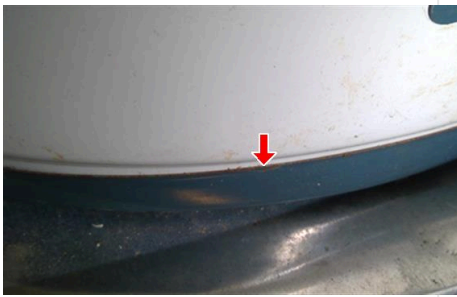
1) Rust was observed at the bottom edge of the water heater, and signs of previous moisture was also noted near the top of the water heater at the time of inspection. This is considered deficient as these can be indications that this water heater may not be performing as intended, and/or has not been serviced in some time.

2) The TP&R (Temperature and Pressure Relief Valve) for the water heater is missing a drain line. This is considered deficient because the minimum standard of practice requires the TP&R valve on all water heaters to be connected to a drain line which drains outside the home.

3) The cold water line for the water heater is installed on the side near the bottom of the water heater at the time of inspection. I have never seen this kind of an installation of a cold water line for a water heater before, and this should be looked at further by a licensed plumber in order to determine if this can cause an issue since water typically flows from the top of the water heater.

4) The water heater is not sitting 18 inches off the ground at the time of inspection. This is considered deficient since this is required by the minimum standard of practice.

Recommend having these issues looked at further by a licensed plumber and all required repairs be made.



C. Item 1 (Picture)
Rust at the bottom of water heater



C. Item 2 (Picture)
Sign of previous moisture



C. Item 3 (Picture)
Missing drain line for TP&R valve



C. Item 4 (Picture)
Cold water line installed at the bottom of the water heater, water heater sitting on floor

E. GAS DISTRIBUTION SYSTEMS AND GAS APPLIANCES

INSPECTED, DEFICIENT

1) Improperly supported/secured gas plumbing line material was observed in the attic space of the home near the interior air handler unit at the time of inspection. This is considered deficient as the minimum standard of practice requires all gas plumbing lines to be supported/secured every 6 feet along their length in order to prevent them from moving, coming loose, and/or leaking.

2) A sediment trap/drip leg was not present and/or visible near the gas valves for the furnace or water heater at the time of inspection. This is considered deficient and does not meet the minimum standard of practice since sediment trap/drip leg is required for the gas line.

Recommend having these issues looked at further by a licensed plumber and all required repairs be made.



E. Item 1 (Picture)
Improperly supported/secured gas line

E. Item 2 (Picture)
Gas connection for furnace

E. Item 3 (Picture)
Gas line/valve for water heater

F. OTHER

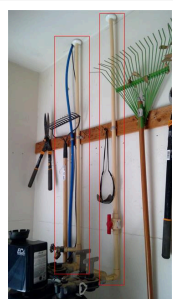
INSPECTED, DEFICIENT

1) Missing insulation was observed on exposed plumbing lines in the garage and in the attic space above the garage at the time of inspection. Degraded insulation was noted on what appeared to be a main water line on the left (front facing) side of the home. This is considered deficient as the minimum standard of practice requires all exposed plumbing lines to be fully and adequately insulated in un-insulated areas in order to prevent freezing/bursting in the event of freezing weather.

2) Missing anti-siphon devices were noted on the exterior water hose bibs at the time of inspection. This is considered deficient as the minimum standard of practice requires all exterior water hose bibs to be equipped with anti-siphon devices in order to prevent the potable water within the home from becoming contaminated.

3) Damage was observed on the surface of both of the bathtubs, as well as on the shower wall material in the master bathroom at the time of inspection. This is considered deficient since continued deterioration of the bathtub/shower wall material in these areas can prevent them from performing as intended.

Recommend having these issues looked at further by a licensed plumber and/or general contractor and all required repairs be made.



F. Item 1 (Picture)
Exposed plumbing lines in garage



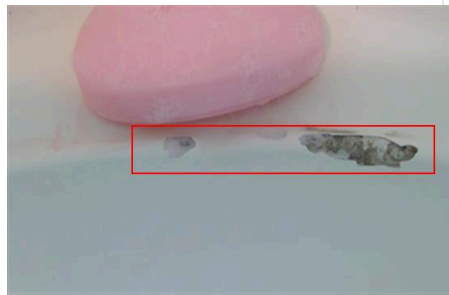
F. Item 2 (Picture)
Exposed plumbing lines in attic space above garage



F. Item 3 (Picture)
Main water line on left (front facing) side of home



F. Item 4 (Picture)
Missing anti-siphon device



F. Item 5 (Picture)
Master bathroom



F. Item 6 (Picture)
Master bathroom



F. Item 7 (Picture)
Guest bathroom

V. APPLIANCES

G. GARAGE DOOR OPERATOR(S)

INSPECTED, DEFICIENT

1) The garage door is missing auto-reverse sensors at the time of inspection. This is considered deficient as the minimum standard of practice requires garage door auto-reverse sensors to be at both bottom corners of the garage door and raised no more than 6 inches off the ground.

2) The garage door operator did not reverse when met with resistance. This is considered deficient as the minimum standard of practice requires garage door operators to automatically reverse when met with a reasonable amount of resistance, as well as have functional auto-reverse sensors.

Recommend having these issues looked at further by a licensed small appliance tech and all required repairs be made.



G. Item 1 (Picture)



G. Item 2 (Picture)

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

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