

General Summary



JacobHomeInspection.com

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TREC 21196**

Note to Realtors: I have a supra key to access properties.

Confidential Property Inspection Report

Jacob Home Inspection

**9422 Borden Bluff Ln
Houston, TX. 77095
281-748-0566**

**Customer
William B. Hackett**

**Address
25 Rockfern Court
The Woodlands Texas 77380**

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)

Overview

In The Houston, residential foundations are typically constructed with concrete foundation systems. Your foundation should resist lateral loads from the grade below and provide a means of anchorage against uplift in the superstructure above. The primary purpose of your foundation is to provide a stable base to support the loads associated with your home, and then to transfer that load to the ground. During settlement the building should distribute the live and dead loads in a uniform manner to avoid significant damage to the structure.

Observed / Appeared Conditions

Note: *Weather conditions, drainage, underground leaks, erosion, trees/vegetation, and other adverse factors can affect the structure allowing differential movement to occur. This inspector's opinion is based on visual observations of accessible and unobstructed areas of the structure at the time of the inspection. Future performance of the structure cannot be predicted or warranted. This was not a structural engineering survey nor was any specialized testing done of any sub-slab plumbing systems during this limited visual inspection. In the event that structural movement is observed, the client is advised to consult with a Structural Engineer or foundation specialist who can isolate and identify causes, and determine what corrective steps, if any, should be considered to either correct and/or reduce structural movement.*

Note: The home was located in an area which may have expansive soil. Expansive soils are soils which increase to many times their original volume in response to increases in soil moisture content, creating forces which can easily damage home structural components such as foundations, floor slabs, flatwork and interior and exterior wall coverings. We recommend a program of conscientious watering and monitoring of the foundation.

(2) Performance Opinion

Note: During the inspector's assessment of the home's foundation, as well as observations made while within the home, the inspector has concluded that **foundation movement** was, or is currently affecting the home. Signs observed include:

- Masonry that is cracking, rotating, buckling, or deflecting
- Doors, windows or frames that are binding / stick
- Interior or exterior doors don't shut properly
- Framing or frieze board separations
- Sloping floors
- Atypical wall, floor, or ceiling cracks
- Soil erosion, subsidence or shrinkage adjacent to the foundation and movement of abutting flatwork such as walkways, driveways, and patios

In the Houston Jacob Home Inspection's opinion the distress patterns observed at the time of inspection were not severe enough

See Texas Real Estate findings

to recommend repair. However, we do recommend that the client consider seeking a second, expert opinion from a structural engineer. Acceptance of present condition and future performance rests solely with the client. No warranty against future movement can be made.

(3) Observed areas of slab that had "honey comb" voids. Honeycomb is mostly a cosmetic issue,

however, these areas are susceptible to water damage and cracking.

(4)

Post tension cable live ends are exposed. Post tension cables should be cut flush with the foundation edge and sealed against moisture intrusion. Moisture may enter the stranded cable and wick its way further

down the cable inside the sheath that surrounds it. Should be covered with non-shrink grout. Recommend repair before more extensive repairs become needed. **FIXED**

(5)

Roots from a tree located near the foundation may cause foundation damage as the tree grows and the root system expands. Monitor this area of the foundation during the growing season (usually May through September) for signs of damage. If signs of damage appear (such as cracks) the tree may need to be removed.

SEE TEXAS REAL ESTATE FINDINGS

The potential for damage from tree roots varies with tree species. Consider evaluation by a qualified arborist.

B. Grading and Drainage

Inspected, Deficient

(1)

Overview

Grading and drainage is a critical component for proper foundation performance and stability. Poor soil conditions are the leading cause of foundation repair. Controlling surface run off in conjunction with implementing a proper swale will help extend the life of your home's foundation over time. The Greater Houston area receives between 30 and 40 days of rain a year. Though June is on average our wettest month, Texans know that our rain patterns are quite unpredictable. The unpredictable regularity of precipitation makes it all the more important to implement proper surface grading and water control measures. We visually inspect the exterior of your property for proper soil heights, ground coverage, and adverse conditions that indicate detrimental performance to the foundation.

Observed Conditions

(2)

See Texas Real Estate Findings

Recommend addition of rain gutters and downspouts to help control and dispose of the precipitation that drains off of the roof. Gutters should effectively collect and discharge all roof drainage to the ground surface and discharge it at least 5 feet from your foundation in order to prevent uneven moisture levels in the soils supporting your home's foundation. In areas with expansive type soils, the proper implementation of gutters and drainage plans is crucial to avoiding differential foundation movement.

Location:

1. Multiple locations

Reference

IRC Section R801.3 Roof drainage

The problem soils often referred to as "expansive soils" are susceptible to periodic shrinking and expanding based on the moisture content around the property, which is why home inspectors and structural engineers recommend improving lot drainage and adding guttering systems.

C. Roof Covering Materials

Inspected, Deficient

(1)

Overview

Your roof's primary purpose is to shield the interior of your home from precipitation, heat, cold, and high winds. It must also be engineered to properly distribute the live and dead loads to the foundation. Residential home's mostly use a sloped roofing system with an approved covering. Asphalt shingles, wood, tile, concrete, and metal are

among the most popular and economical choices in this region. Your inspector will always strive to physically climb and inspect your roof. This cannot, and at times should not be performed. If your inspector determines that physical access is not suitable, an alternative method of ground surveillance using a telephoto lens will be incorporated.

Observed Conditions

(2)

The tree limbs that are in contact with roof or hanging near roof that they could be holding moisture against the shingles. And/or cause the most impact damage by their branches being too close to the roof covering and tree limbs falling onto the roof structure.

TREE BRANCHES TRIMMED BY RAMIREZ MULTI-SERVICE (RMS)

They should be trimmed or removed at least 3' feet from the roof surface in all areas.

If tree limbs brush against the house or windows during high winds or thunderstorms, they should be trimmed to prevent possible siding, shingle, gutter and window damage.

(3)

Keep leaves from collecting on roof, especially in valleys (if any) and keep tree

limbs away from roof to prevent damage to shingles.

Leaves and pine needles on the roof will also promote fast decay of the covering because they retain moisture on the roof. Also, many species produce acids during the decay process, and these can eat into the asphalt.

-Debris accumulation will speed deterioration by holding moisture next to the shingles where it may cause freeze damage.

(4)

Insufficient gap where vertical wall meets roof. Roofing and siding

manufacturers require 2 inch gap to allow leaves/debris a path to wash down. Insufficient gap can also cause water to penetrate via capillary action.

2" GAP. CUT SIDING - RMS

(5)

Lower side of roof shingle or metal flashing is not sealed down properly causing water penetration from wind driven rains. Wind can get under the exposed tabs on the shingle and cause them to be ripped from the roof.

Location: FIXED BY AMERICAN ROOFING

- Front

(6)

Painting of exterior plastic PVC vents/metal flashing above roof line required to prevent UV damage/rusting.

D. Roof Structures and Attics

Inspected, Deficient

(1)

Overview

The roofing structure is observed from both the exterior and interior in order to determine the performance condition. Your Inspector will be evaluating the structural components of your roofing system as well as insulation, wood rot, moisture intrusion, fire damage, and the presence of insects and rodents. Plumbing, electrical, and mechanical components that are in accessible attic space are also evaluated for performance.

Observed Conditions

(2)

The stairway to the attic was not adequately sealed and insulated. Attic stairway lacked the following:

- Foam sealing between the jamb and rough opening
- Weather stripping
- Insulation on the door panel

This condition allows air leakage and heat transfer between the conditioned living space and unconditioned attic space. Does not conform to current energy standards.

Reference

IRC Section N1102.2.3 Access hatches and doors

IRC Section N1102.4.1 Building thermal envelope

(3)

Not cut to fit properly, which puts undue stress on ladder; there should be no gaps at section ends. *LADDER to Attic Adj. By RMS*

(4)

WATER STAINS IN ATTIC

Water stains were observed on the roof framing and/or decking at one or more locations. This may indicate previous moisture penetration in those areas.

E. Walls (Interior and Exterior)

Inspected, Deficient

(1)

Overview

The Interior and exterior walls are examined for signs and symptoms of adverse structural integrity and water penetration. Exterior walls are visually inspected for adverse performance issues, particularly at supporting members and common installation failures. Moisture intrusion is virtually impossible to detect if there are no active and visual signs. Therefore, your inspector will inspect for flashing deficiencies and common problem areas for signs of moisture damage. The interior is generally always obscured by wall coverings and paint. Insulation, plumbing, and electrical items behind these walls cannot be inspected. Your inspector will primarily focus on structural movement and installation deficiencies. Cosmetic items are not considered or annotated in the report unless they correlate to a more significant problem.

Observed Conditions

(2)

Cracks should be sealed/caulked/repair by qualified contractor and monitored for further development.

Recommend further evaluation of area by a structural engineer if cracks become larger over time. With all the wet weather it is possible that once the soil dries the foundation may settle back.

Location:

1. Front side of home

(3)

Cement board siding should be caulked at butt joints. -Dowe - RMS

This gap recommend sealed with permanently flexible exterior caulk, to prevent water/moisture intrusion through the siding.

(4)

Deteriorated/missing mortar joints on the veneer siding water can easily penetrate deteriorated/missing mortar joints, accelerating other problems. Need repointing mortar joints, there the existing mortar joint is cut out and the joint is repacked with new mortar. Done - RMS

(5)

Need sealing / caulking around all holes and exterior siding penetrations, etc on top and both sides, (leave bottom open) to prevent water entry, including but not limited to dryer, bath and range top vents, light fixtures, etc. DONE - RMS

G. Doors (Interior and Exterior)

Inspected, Deficient

(1)

Overview

Exterior doors should be installed to provide Weather tightness and reliable security. Weather tightness, locking mechanisms, glass panes, thresholds, and the overall condition of your doors are inspected. In addition, garage doors are inspected for fire safety compliance.

Interior doors provide privacy and noise reduction. They may also be an indicator of structural movement within the home. Interior doors should also allow for the adequate flow of conditioned air between passages. Interior doors are inspected for movement free of binding and proper latching. Mechanical hardware is also inspected.

Observed Conditions

(2)

Prudent buyers replace/rekey exterior locks upon taking possession of property.

(3)

At the door located in the garage entry, the inspector noted missing closing devices (self or automatic). Every fire door should have a closing device. This condition may prevent the fire door from performing as designed in a fire. SPRING Hinges INSTALLED -RMS

The inspector recommends correction by a qualified contractor.

Reference:

IRC R302.5.1, NFPA 80 Opening protection.

Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1 3/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 1 3/8 inches (35 mm) thick, or 20-minute fire-rated doors, equipped with a self-closing or automatic-closing device.

(4)

Door hinge(s) has missing screws / damaged.

Location:

1. Garage entry

(5)

Appeared the door is not latching properly. Needs adjustment.

Location:

1. Master bathroom

FIXED/ADJUSTED- RMS

(6)

The door latch locks one or more is sticky hardware need adjustment for proper operation.

Location:

1. Left side entry door (face front)

LUBRICATED/ADJ- RMS

(7)

Missing or non-functioning door stop behind one or more doors to prevent damage to sheetrock.

(8)

One or more doors in house are difficult to open / close due to contact with frame / jamb. Should not interfere with the door's operation.

ALL DOORS ADJ. F/NORMAL OPERATION AS NEEDED. RMS

Bulging floors, cracked walls, and doors that won't close are all signs of foundation distress. Sixty percent of all homes built on expansive soils suffer from foundation distress. The problems occur when only part of the foundation heaves or settles, causing cracks and other damage.

Recommend further evaluation and correction/repairs by qualified professionals.

Location:

1. Master bedroom

LATCH ADJUSTED- RMS

(9)

Doors that stand open and/or swing freely once released. The door to stay put wherever we leave it. Recommend evaluation and repair by a qualified contractor.

The hinge side of the door has to be plumb or the door will swing open or closed on its own. Start by shimming the hinge side of the rough opening. First make marks to indicate the centers of the hinges. Then use a long level or a long, straight board along with a short level to plumb the shims.

Location:

- 1. Master bathroom *FIXED RMS*
- 2. 3rd bedroom *FIXED - RMS*

H. Windows

Inspected, Deficient

(1)

Overview

Your home's windows provide many passive features ranging from aesthetic value to emergency egress. Composed of varying materials and methods of operation, your home's windows are an important component to the overall building system. Once fully installed it is not possible to determine proper flashing details and framing practices. Therefore, your inspector will rely on visual indicators to assist in determining the performance of your home's windows. Your inspector will be observing for deficiencies in the glazing, weather-stripping, safety glass locations, emergency egress compliance, and the condition of the hardware and operability.

Observed Conditions

(2)

Caulking deficient around one or more windows, will allow water penetration during heavy / wind driven rains.

WINDOWS + DOORS CAULKED / PAINTED - RMS

-Apply caulk/sealant to all joints in a window frame and the joint between the frame and the wall.

Recommend checking all windows/doors for proper sealant.

(3)

Appeared one or more window and/or latch sticky and/or difficult to operate. Need lubrication or repair as needed.

Location:

- 1. Several *ALL WINDOWS LUBRICATED + ARE OPERATIONAL - RMS*

(4)

Some or many screens are missing and/or damaged.

- SCREENS ARE IN THE GARAGE SHOULD NEW OWNER WANT TO INSTALL

The lack of window screens may not seem important in the Greater Houston Area, where these questions originated, but the Standards of Practice covers the entire state of Texas, parts of which have seasonal changes where opening windows is practical. 535.228 (f) (2) (B)

I. Stairways (Interior and Exterior)

Inspected, Deficient

(1)

Overview

Evolving building standards have been established in order to effectively limit the amount of injuries worldwide that are directly related to stairways and their components. Residential homes are the number one source for stairway injuries worldwide. Falls are the second-leading cause of unintentional deaths in the home and community; resulting in more than 25,000 fatalities in 2009. To help ensure that the home that you're going to occupy is safe, we inspect the interior and exterior stairways visually for deficiencies in the railings, balusters, spindles, guards, treads, risers, lighting, and clearance. Defects observed in the visible portions of these components are noted in the report.

Observed Conditions

(2)

Minimum tread depth is less than the required 10 inches.

(3) *STAIRWAY IS AS BUILT IN 1982. WOULD REQUIRE MAJOR STRUCTURE CHANGES*

Space between balusters, spindles, or rails for steps, stairway, guards, and railings does not comply with current industry standard, (code) UBC 421.1.1 & CABO D105.2.1. Requires spacing between intermediate rails do not allow passage of an object 4 inches in diameter. Recommend covering large openings in stair rails with temporary type nylon netting if small children are present in house to prevent injury.

(4)

Improper height (recommend change)

A handrail at this stairway did not meet generally-accepted current standards which require handrails to have a height of 34 to 38 inches above the sloped plane represented by the noses of the stair treads.

The Jacob Home Inspection recommends that the handrail be altered or replaced to make it safer.

J. Fireplaces and Chimneys

Inspected, Deficient

(1)

Overview

The chimney's primary purpose is to dispel the bi-products from burning fuels safely out of the home as well as containing its fire within the hearth. The primary items to be inspected on the chimney include the visible and accessible components of the firebox, hearth extension, fuel source, combustion air source, doors, circulating fan, lintel, damper, flue, fire blocking at attic penetration, chimney crown, cap and spark arrester. Defects observed in the visible portions of these components are noted in the report. No testing of the draft performance is performed.

Observed Conditions

(2)

The fireplace was off. I did not inspect (turn on) the fireplace for proper operation. recommend inquiring current resident regarding use/control; Living room.

FIREPLACE IS OPERATIONAL. GAS LIGHTER WORKS.

The TREC Standards of Practice (Sections 535.227-535.233. The inspector is NOT required to turn on decommissioned equipment, systems, utility services or apply an open flame or light a pilot to operate any appliance.

(3)

Damper missing required bracket that keeps damper from fully closing when fireplace is equipped with gas logs. If damper is fully closed then combustion fumes will enter house unseen.

Manufacturer's installation instructions for artificial gas log sets specifically say that dampers must be locked in a "fully-open position".

DAMPER CHAMP INSTALLED- RMS

Reference:

IRC G2453.1 (634.1) Free opening area of chimney dampers.

(4)

Observed penetrations that were not sealed within the refractory panel. Penetrations may provide access to areas outside of the refractory panel by flames seeking combustion air. This is a potential fire hazard.

PENETRATION AROUND GAS PIPE SEALED - RMS

(5)

There is no spark arrestor / screening on top of flue to keep birds / vermin out of chimney.

SCREEN INSTALLED - RMS

K. Porches, Balconies, Decks and Carports

Inspected, Deficient

The minor cracking in the garage, driveway and/or porch floor slab should be sealed against water entry. Common repair methods include applying a masonry patching compound to the surface using epoxies, or other sealants. Recommend using a premium grade non shrink elastic epoxy grout.

II. ELECTRICAL SYSTEMS

A. Service Entrance and Panels

Inspected, Deficient

(1)

Overview

The electrical system has many components that must work in harmony in order to provide your home with electricity. The vast majority of residential homes are supplied with power via two 120 volt wires and one neutral wire, giving your modern home the much needed 240 volts necessary to power appliances like the stove, range, dryer, and HVAC system. Generally, homeowners are responsible for everything that happens after the attachment to the meter. The outlets, switches, fixtures, and grounding system also play a key role in your home's electrical system.

Your inspector is limited by many factors on what can and cannot be properly inspected. However, safety of your home and family is of highest priority. We will report every defect that we can verify.

Observed Conditions

(2)

Some labels are present, but are illegible or confusing. I recommend correcting for safety reasons.

(3)

Grounds and neutrals terminate on same bus-bar.

Ground and neutral wires appeared terminated on the same bus bar. This conditions is improper and should be corrected by a qualified electrical contractor.

NEW BUS-BAR INSTALLED BY SPRING ELECTRIC

(4)

150 AMP ELECTRICAL SERVICE PANEL LOCATED IN BACKYARD:

Did not observed / appeared or not adequate AFCI (Arc Fault Circuit Interrupt) device protection on electrical circuits, most

probably protecting the bedroom circuits. *AFCI devices are intended to protect against fires caused by electrical arcing faults in the home's wiring. Arc faults are a common cause of residential electrical fires. Arc faults can be created by damaged, deteriorated, or worn electrical plugs, cords, and/or branch circuit conductors.*

Be advised As of September 1, 2008, the State of Texas has adopted the 2005 NEC, which includes this requirement, as the "minimum standard" for all non-exempt electrical work. Homes built between 2002 and late 2008, generally were only required to have arc fault protection for bedroom circuits. However, the current / recently adopted

TREC standards of practice requires licensed home inspectors to indicate that a deficient condition exists in any home (as if the home were built today, regardless of

date the home was constructed) does not have this protection at all locations required by the most current version of the National Electric Code "NEC" (currently bedrooms, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreations rooms, closets, hallways, or similar rooms or areas).

Reference:

IRC E3902.12 Arc-fault circuit-interrupter protection.

B. Grounding and Bonding

Inspected, Deficient

(1)

The main gas supply line does not appear to be bonded at the meter.

(2) *GAS + WATER Lines Bonded By Spring Electric
NEAR Hot Water Heater*

Gas and hot / cold water lines are not properly bonded near water heater. Does not comply with most recent electrical code. NEC 250-80b.

Local jurisdiction requires **bonding** between metal piping that may become energized. They require bonding of the water and gas lines to reduce the chance of potential between the metal piping.

If an isolated section of metallic water (or gas) piping accidentally becomes charged, a shock or fire hazard may occur. Grounding all isolated sections reduce this hazard and provides safety for the user.

Lack of bonding of gas piping, including corrugated stainless steel tubing (CSST)

Reference:

IRC G2411 (310) ELECTRICAL BONDING

TREC 535.229

C. Branch Circuits, Connected Devices, and Fixtures

Inspected, Deficient

(1)

One or more outlets are not secured well in wall, was loose and moved when a plug was inserted. This condition should be corrected by a qualified electrical contractor for safety reasons.

Take loose devices, even switches, very seriously. They won't get better on their own, and in fact they're guaranteed to get worse.

(2)

No indication as to where these outlets are.

Wire connections are not enclosed in proper electrical junction box(s), or electrical junction box(s) do not have covers in place, including but not limited to the following location.

A junction box is needed to provide an impact-resistant safe location to connect wires within a wall. It protects spliced wires from damage and contains any sparks that might start a fire. Junction boxes are required by electrical code.

Location:

- 1. Kitchen ✓ *Covers installed by Spring Electric*
- 2. Utility room ✓

(3)

GFCI outlet does not operate properly when tested with simulated short.

The GFCI will not reset after testing. Recommend repair by an Electrical contractor.

Location:

- 1. Kitchen
 - 2. Powder room
- ALL GFCI's were tested
• New GFCI's installed in kitchen & Bathrooms*

(4)

Did not observe GFCI protection of all outlets in required locations, including but not limited to;

all bathrooms, two or more kitchen counter top outlets, wet bar locations, all exterior outlets, one or more in garage, laundry room, etc.

This condition is a recognized safety hazard and is in need of repair.

Outlet the left of the range and to the left of the refrigerator area are not protected.

Reference:

IRC E3803.1

(5)

One or more ceiling fan(s) appeared not balanced on low or high speed setting.

(6)

An outlet is inoperative. This outlet and circuit is recommended to be investigated and/or repaired by a qualified electrical specialist.

Location:

1. Left side of home (face front)

New outlet Installed (GFCI) by Spring Electric

(7)

There is no or insufficient carbon monoxide detector found in home. It is recommended that one be installed according to the manufacturer's instructions.

Carbon monoxide (CO) detectors is required in homes with fuel-fired appliances at every floor elevation and any areas where fuel-fired equipment is located.

2 new CO Detectors Installed

Carbon-monoxide detectors are one way to help in the early detection of combustion gas problems.

Reference: IRC R315.1 Carbon monoxide alarms.

Any fuel-burning appliances which are malfunctioning or improperly installed can be a source of CO, such as:

- furnaces;
- stoves and ovens;
- water heaters; Cars should never be left running in a garage
- dryers;
- room and space heaters;
- fireplaces and wood stoves;
- charcoal grills;
- automobiles;
- clogged chimneys or flues;
- space heaters;
- power tools that run on fuel;
- gas and charcoal grills;
- certain types of swimming pool heaters; and
- boat engines.

*1 - UPSTAIRS - MBR
1 - DOWNSTAIRS
NEAR STAIRWAY*

(8)

Smoke alarm did not operate as intended via the test button at several locations. Smoke alarms required under this section must be interconnected such that the activation of any one smoke alarm causes the triggering of all other required smoke alarms in the home.

Devices are in need of replacement. Proper smoke alarm operation is an important safety requirement.

Reference:

- ALL Smoke ALARMS ARE OPERATIONAL (Independently)
- CAN'T INTERCONNECT IN 1982 BUILT HOUSE (PRE-CODE)

IRC SMOKE ALARMS R314

NFPA 72

III. HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS

A. Heating Equipment

Inspected, Deficient

(1)

Appeared or No service record was found at the furnace. To maximize service life we recommend the furnace be serviced and an annual service log started.

Old unit: The heating equipment appears to be functioning as intended at the time inspected.

(2)

CSST (Corrugated stainless steel tubing) Gas piping was observed at the heating equipment. There have been reported issues that the CSST metal piping may not properly bonded & no bonding jumper was observed at the CSST line. Recommend further evaluation, repair by a licensed electrician.

Reference:

NFPA 54 Sec. 7.13.

(3)

↳ AS INSTALLED IN 2006
 • FULLY OPERATIONAL PER SERVICE
 BY WOODHANDS A/C SERVICES
 (SEE ATTACHED RECEIPT)

Gas fired heat exchangers cannot be thoroughly inspected without disassembly (In order to inspect a heat exchanger the unit must be disassembled, which is beyond the scope of this inspection), So I recommend it be checked by a qualified HVAC repairman Prior to winter start up.

(4)

Exhaust vent pipe is in contact or does not have required minimum 1" clearance from combustible material. [insulation and/or wood roof decking].

(5)

The heater gas supply line is not equipped with a sediment trap just before the gas appliance connector. This condition does not meet current installation requirements and should be corrected.

(6)

Flexible gas line is not allowed by current industry standards 535.231 (b) (2) (N) (V) and most installation instructions to pass into metal cabinet of gas heating units due to vibration from unit can rub hole in gas line. rigid metal pipe should extend outside cabinet a minimum of 2 inches for flex line connection.

Reference

International Fuel Gas Code 411.1.3.3 Prohibited locations and penetrations

B. Cooling Equipment

Inspected, Deficient

(1)

Overview

Your cooling system is an integral part of your home's overall efficiency and level of comfort. Many factors contribute to the heat load in a home, including; outdoor temperatures, humidity levels, amount of insulation, air-sealing, window locations and types, and the direction the home is oriented.

The cooling system is inspected for its ability to adequately cool the home, demonstrated by its performance during the cooling cycle. Also, primary and secondary pipes and drain pans are inspected for previous leaks and current condition.

Observed Conditions

(2)

The air conditioner produces a differential temperature of 4.5 degrees F.

The condenser appeared has a 3.5 ton cooling capacity.

The low temperature differential indicates / possible that the system is not functioning well and should be serviced by an HVAC contractor.

*Serviced By Woodhands A/C Services
- Drain was clogged - Float shutting off
UNIT TO AVOID
FLOODING.*

An industry practice of taking the air temperature between the supply and return air systems with a differential of about 14F-20F is just one means of determining proper operation, which I perform.

Recommend hiring a professional to look at the heat exchanger when servicing the cooling unit.

(3)

Units have exceeded its normal serviceable life span; near or end of useful life and budgeted for in near future.

Remember to treat an attic air-conditioning drain exactly as you would any other household drain. Routine maintenance should include a periodic removal of dust and debris, followed by a flush of hot water and bleach.

(4)

The utility room / attic-installed cooling system evaporator coil had no secondary condensate drain pan installed. If the primary condensate drainage system should become non-functional, this condition could result in moisture damage to attic or home interior materials.

AS Installed 2006

The inspector recommends that a secondary drainage system such as a pan with an overflow routed to discharge properly be installed by a qualified HVAC contractor.

Reference:

IRC M1411.3.1 Auxillary and secondary drain systems

(5)

Recommend sealing exterior where AC lines enter house.

Rodent Resistance: All exterior openings around piping, ducts, plenums, equipment and vents should be sealed to resist the entrance of rodents.

Sealed By RMS (SPRAY FOAM)

Common Rat Entry Points Into House

Rats only need a hole the size of a quarter, or a gap that is about 5/8 inch to gain access to your house. You have to check many areas of the building - in fact, the whole building, to find all the possible entry spots. Check every vent - gable vents, roof vents, ground-level crawl space vents, even the laundry vent. Check all doors and windows.

Check every part of the roof, especially the fascia, and wherever an eave meets the roof. Check all roof lines. If you have a tile roof, you've got a TON of entry spots. Check plumbing stacks, air conditioner chases, power line entry points, basically, EVERY SQUARE INCH OF THE HOUSE.

(6)

The manufacturers listing plate on the outside condenser/coil list that the maximum over current device (breaker) to be used should not exceed 35 -amp. There is a 50 -amp breaker in place at this time.

This breaker in place does not meet the manufacturers listing plate requirements.

C. Duct Systems, Chases, and Vents

Inspected, Deficient

(1)

Overview

Ventilation is very important for all buildings. Good ventilation yields a healthier living environment as it reduces the accumulation of offensive and/or toxic fumes. Interior ventilation and circulation can be significantly improved by keeping interior doors open whenever possible. Most residential homes employ flexible duct systems for the distribution of air through the house. Improperly installed ductwork increases friction in the ducts and reduces air flow and efficiency. Inadequately sealed ducts and return registers can allow unconditioned air to enter the system and conditioned air to leak out of the system and may have a substantial detrimental impact on comfort and heating/cooling costs. The Department of Energy estimates that the typical duct system loses 25-40% of the energy used for heating and cooling. Installations where the ducts are routed through hot attics, as most residential homes employ, lose significantly more. Poorly installed and sealed ductwork can be one of the biggest causes of energy loss in your home

Observed Conditions

(2)

Observed one or more flex ducts that were improperly routed with sharp bends. Improper routing increases frictional loss in the duct and reduces heating and cooling efficiency. Radius at centerline of the bend should be no less than one duct diameter

AS INSTALLED IN 2006

Reference

Air Diffusion Council Flexible Duct Performance and Installation Standards

(3)

SUPPLY DUCTS CHASES AND VENTS:

Observed several / multiple areas in attic where flex duct touch and are missing required

1" clearance from other ducts to prevent condensation between ducts that touch.

In addition, when two cold lengths of duct are in contact within a hot attic space, condensation can form causing moisture damage to insulation and drywall.

Recommend general maintenance to flex ducts in attic, Re-support where needed,

seal/tape minor air leaks, repair torn/damaged vapor seal, etc..

The duct should not be in contact with the ground.

IV. PLUMBING SYSTEM

A. Plumbing Supply Distribution Systems and Fixtures**Inspected, Deficient**

(1)

Overview

Plumbing supply systems are composed of three relational components, the water supply (aseptic), the fixture components, and the gas supply system.

Supply Piping: Must sustain a flow of clean potable water and not have any cross-connections that would introduce contaminants. Piping systems must be protected against damage and supported. Modern plumbing systems often use plastic tubing and in some systems, the branch piping originates from a central manifold, rather than a traditional series system when a mainline and branches.

Fixtures: Composed of all the end-user devices such as commodes, sinks tubs and showers.

Gas Supply System: Much of the gas delivery system is typically concealed from inspection underground, inside walls, under attic insulation, etc. This inspection is restricted to only those components that are readily visible and accessible at the time of the inspection. This inspection specifically excludes: Concealed and underground piping; Pressure testing of the gas delivery system; Verification of gas delivery pressures; Disconnecting any gas piping or connectors; Manipulation or operation of gas supply valves; any activity that requires a plumbing license to perform in the state of Texas.

Observed / Appeared Conditions

(2)

Appeared a faucet that was dripping water at spout when not in operation. Recommend monitor and repair / replacement as needed.

Location:

1. Laundry room

- NO LEAK OBSERVED
TUB

(3)

The installation of the shower head and tub faucet and/or handles not performing as intended or loosed, appeared not properly fasten to the wall structure.

Must be firmly attached to a structural component to prevent the pipes from leaking caused by stress fractures of joint failures. Movement of the showerhead may move the riser piping, possibly causing failure of the piping. The risers must be firmly secured in an approved manner.

Location:

1. 2nd bathroom

FIXED - RMS

(4)

Bathtub shower diverter appear to be not working as intended, broken, Repair / replacement as needed.

Location:

1. 2nd bathroom

FIXED - RMS

(5)

Recommend caulking around all tub/shower faucets and spouts to prevent water entry behind wall.

CAULKED w/SILICONE - RMS

(6)

Exterior hose spigot(s) do not have code approved anti-back flow devices installed.

These devices minimize the risk of contaminated water entering the potable water supply.

Reference:

Installed Anti-Back Flow Devices on 2 ea outside spigots - RMS

IRC P2902.3

535.231 (a) (D) (III)

B. Drains, Waste, and Vents

Inspected, Deficient

(1)

Overview

The drain, waste, and vent piping's (septic) primary purpose is to collect and remove the solid, liquid, and gas waste from the home to an approved collection point. The primary components that are inspected include the drain piping, traps, and the venting system.

Observed Conditions

(2)

Observed / appeared one or more slow drain, or clogged and not functioning as intended.

Recommend that a plumbing contractor be retained for further evaluation and remedial action.

Drains can clog and cause water to back up into the house.

Location:

Clog cleared by Woodlands A/C

- 1. 2nd bathroom Sink

(3)

There were no plumbing access panels behind plumbing fixtures or blocked or not safe to open due to screws may / possibly damage the behind plumbing line. The lack of provided access limits the scope of the inspection. Interior components such as slip joints, traps, drains, and below tub leakage cannot be observed.

Location: Throughout residence

AS ~~Back~~ Installed in 2006

Reference

IRC 2704.1 Access To Connections

C. Water Heating Equipment

Inspected, Deficient

(1)

Overview

The water heater is the second largest energy expense in the home at roughly 18% of your total energy bill. **With proper care and maintenance, you can not only extend the service life of your water heater, but also the efficiency.** Simple steps like manually decreasing the water temperature, insulating the water lines can help to reduce your monthly cost. Maintenance of the water heater can help extend the life of the system and keep it functioning more efficiently as well. Consider **flushing the built up sediment within the tank annually**, as well as inspected the anode rod within the tank.

Observed / Appeared Conditions

- (2) The water heater equipment appears to be functioning as intended at the time inspected.
(3)

Did not observe gas line drip leg(s) on gas house heater and/or gas water heaters which is called for in the manufactures installation instructions.

Reference.

Installed Drip line - RMS

IRC G2419.4 (408.4)

V. APPLIANCES

A. Dishwashers

Inspected, Deficient

(1)

Drain line needs to be elevated above side inlet of disposal to underside of countertop to prevent debris and gray water from draining down line from disposal and back into dishwasher.

We recommend a high loop or an approved backflow preventer be installed. *FIXED - RMS*

(2)

Dish rack(s) rusted and/or deteriorated.

A rusted dishwasher prong can alter the look and feel of your dishes, and ultimately may affect your health.

B. Food Waste Disposers

Inspected, Deficient

The food disposer wiring is missing a romex connector (anti-strain device). I recommend repair as needed.

FIXED - RMS

C. Range Hood and Exhaust Systems

Inspected, Deficient

Not vented out of kitchen or not properly connected. In the inspector's opinion, an **exhaust duct should be installed and terminate to the outdoors.**

*Range Hood - Microwave Outside Exhaust
Installed - RMS*

Fans and filters are small items that play a big role in moisture and mold management. Some fans merely filter and re-circulate air, which does not reduce moisture produced from cooking.

Information: Range hoods shall discharge to the outdoors through a single-wall duct. The duct serving the hood shall have a smooth interior surface, shall be airtight and shall be equipped with a backdraft damper. Ducts serving range hoods shall not terminate in an attic or crawl space or areas inside the building.

Reference:**IRC M1503.3 Kitchen exhaust rates.****D. Ranges, Cooktops and Ovens**

Inspected, Deficient

(1)

The oven thermostat was out of adjustment. The thermostat should be calibrated or to set the oven temperature to within 25 degrees of the dial setting. The temperature was set at 350 degrees for ten minutes. The internal temperature of the oven was then measured to be 315 degrees. The thermostat should be properly calibrated or replacement.

(2)

Oven Temp checked by owner - ACCURATE
ONCE PRE-HEAT cycle complete

Lack of Anti-tip device at freestanding range/oven appeared / observed.

There are well-known life-safety risks associated with Ranges tipping over on persons. 535.231 (d) (4).

K. Bathroom Exhaust Fans

Inspected, Deficient

Appeared improperly vents to soffit/attic. Should vent to exterior.

Terminate in attics can cause problems from condensation. Warm, moist air will condense on cold attic framing, insulation and other materials. This condition has the potential to cause health problems and structural decay issues from mold growth, as well as damage to building materials, such as drywall. Moisture also reduces the effectiveness of thermal insulation.

Reference

Fixed: Bathroom Fans now exhausted to outside
BY RMS

International Residential Code M1501.1 Outdoor Discharge

IRC M1507.2 Recirculation of air

VI. OPTIONAL SYSTEMS

A. Landscape Irrigation (Sprinkler) Systems

Inspected, Deficient

(1) *The sprinkler system / equipment appears to be functioning as intended at the time inspected.*

(2)

Automatic sprinkler one or more appears to be spraying water onto or too close to the foundation walls / siding.

Location:

1. Left side of home (face front)

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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