



PROPERTY INSPECTION REPORT

Prepared For: Daniel and Helen Frounfelkner

(Name of Client)

Concerning: 10834 Olympia Dr. Houston, TX 77042

(Address or Other Identification of Inspected Property)

By: Gabe Fitzpatrick #21417

(Name and License Number of Inspector)

1/28/2020

(Date)

PURPOSE, LIMITATIONS AND INSPECTOR / CLIENT RESPONSIBILITIES

This property inspection report may include an inspection agreement (contract), addenda, and other information related to property conditions. If any item or comment is unclear, you should ask the inspector to clarify the findings. It is important that you carefully read ALL of this information.

This inspection is subject to the rules ("Rules") of the Texas Real Estate Commission ("TREC"), which can be found at www.trec.texas.gov.

The TREC Standards of Practice (Sections 535.227-535.233 of the Rules) are the minimum standards for inspections by TREC-licensed inspectors. An inspection addresses only those components and conditions that are present, visible, and accessible at the time of the inspection. While there may be other parts, components or systems present, only those items specifically noted as being inspected were inspected. 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. The inspector is NOT required to climb over obstacles, move furnishings or stored items. The inspection report may address issues that are code-based or may refer to a particular code; however, this is NOT a code compliance inspection and does NOT verify compliance with manufacturer's installation instructions. The inspection does NOT imply insurability or warrantability of the structure or its components. Although some safety issues may be addressed in this report, this inspection is NOT a safety/code inspection, and the inspector is NOT required to identify all potential hazards.

In this report, the inspector shall indicate, by checking the appropriate boxes on the form, whether each item was inspected, not inspected, not present or deficient and explain the findings in the corresponding section in the body of the report form. The inspector must check the Deficient (D) box if a condition exists that adversely and materially affects the performance of a system or component or constitutes a hazard to life, limb or property as specified by the TREC Standards of Practice. General deficiencies include inoperability, material distress, water penetration, damage, deterioration, missing components, and unsuitable installation. Comments may be provided by the inspector whether or not an item is deemed deficient. The inspector is not required to prioritize or emphasize the importance of one deficiency over another.

Some items reported may be considered life-safety upgrades to the property. For more information, refer to Texas Real Estate Consumer Notice Concerning Recognized Hazards or Deficiencies below.

THIS PROPERTY INSPECTION IS NOT A TECHNICALLY EXHAUSTIVE INSPECTION OF THE STRUCTURE, SYSTEMS OR COMPONENTS. The inspection may not reveal all deficiencies. A real estate inspection helps to reduce some of the risk involved in purchasing a home, but it cannot eliminate these risks, nor can the inspection anticipate future events or changes in performance due to changes in use or occupancy. It is recommended that you obtain as much information as is available about this property, including any seller's disclosures, previous inspection reports, engineering reports, building/remodeling permits, and reports performed for or by relocation companies, municipal inspection departments, lenders, insurers, and appraisers. You should also attempt to determine whether repairs, renovation, remodeling, additions, or other such activities have taken place at this property. It is not the inspector's responsibility to confirm that information obtained from these sources is complete or accurate or that this inspection is consistent with the opinions expressed in previous or future reports.

ITEMS IDENTIFIED IN THE REPORT DO NOT OBLIGATE ANY PARTY TO MAKE REPAIRS OR TAKE OTHER ACTIONS, NOR IS THE PURCHASER REQUIRED TO REQUEST THAT THE SELLER TAKE ANY ACTION. When a deficiency is reported, it is the client's responsibility to obtain further evaluations and/or cost estimates from qualified service professionals. Any such follow-up should take place prior to the expiration of any time limitations such as option periods.

Promulgated by the Texas Real Estate Commission (TREC) P.O. Box 12188, Austin, TX 78711-2188 (512) 936-3000 (<http://www.trec.texas.gov>).

Evaluations by qualified tradesmen may lead to the discovery of additional deficiencies which may involve additional repair costs. Failure to address deficiencies or comments noted in this report may lead to further damage of the structure or systems and add to the original repair costs. The inspector is not required to provide follow-up services to verify that proper repairs have been made.

Property conditions change with time and use. For example, mechanical devices can fail at any time, plumbing gaskets and seals may crack if the appliance or plumbing fixture is not used often, roof leaks can occur at any time regardless of the apparent condition of the roof, and the performance of the structure and the systems may change due to changes in use or occupancy, effects of weather, etc. These changes or repairs made to the structure after the inspection may render information contained herein obsolete or invalid. This report is provided for the specific benefit of the client named above and is based on observations at the time of the inspection. If you did not hire the inspector yourself, reliance on this report may provide incomplete or outdated information. Repairs, professional opinions or additional inspection reports may affect the meaning of the information in this report. It is recommended that you hire a licensed inspector to perform an inspection to meet your specific needs and to provide you with current information concerning this property.

TEXAS REAL ESTATE CONSUMER NOTICE CONCERNING HAZARDS OR DEFICIENCIES

Each year, Texans sustain property damage and are injured by accidents in the home. While some accidents may not be avoidable, many other accidents, injuries, and deaths may be avoided through the identification and repair of certain hazardous conditions. Examples of such hazards include:

- malfunctioning, improperly installed, or missing ground fault circuit protection (GFCI) devices for electrical receptacles in garages, bathrooms, kitchens, and exterior areas;
- malfunctioning arc fault protection (AFCI) devices;
- ordinary glass in locations where modern construction techniques call for safety glass;
- malfunctioning or lack of fire safety features such as smoke alarms, fire-rated doors in certain locations, and functional emergency escape and rescue openings in bedrooms;
- malfunctioning carbon monoxide alarms;
- excessive spacing between balusters on stairways and porches;
- improperly installed appliances;
- improperly installed or defective safety devices;
- lack of electrical bonding and grounding; and
- lack of bonding on gas piping, including corrugated stainless steel tubing (CSST).

To ensure that consumers are informed of hazards such as these, the Texas Real Estate Commission (TREC) has adopted Standards of Practice requiring licensed inspectors to report these conditions as "Deficient" when performing an inspection for a buyer or seller, if they can be reasonably determined.

These conditions may not have violated building codes or common practices at the time of the construction of the home, or they may have been "grandfathered" because they were present prior to the adoption of codes prohibiting such conditions. While the TREC Standards of Practice do not require inspectors to perform a code compliance inspection, TREC considers the potential for injury or property loss from the hazards addressed in the Standards of Practice to be significant enough to warrant this notice.

Contract forms developed by TREC for use by its real estate licensees also inform the buyer of the right to have the home inspected and can provide an option clause permitting the buyer to terminate the contract within a specified time. Neither the Standards of Practice nor the TREC contract forms require a seller to remedy conditions revealed by an inspection. The decision to correct a hazard or any deficiency identified in an inspection report is left to the parties to the contract for the sale or purchase of the home.

INFORMATION INCLUDED UNDER "ADDITIONAL INFORMATION PROVIDED BY INSPECTOR", OR PROVIDED AS AN ATTACHMENT WITH THE STANDARD FORM, IS NOT REQUIRED BY THE COMMISSION AND MAY CONTAIN CONTRACTUAL TERMS BETWEEN THE INSPECTOR AND YOU, AS THE CLIENT. THE COMMISSION DOES NOT REGULATE CONTRACTUAL TERMS BETWEEN PARTIES. IF YOU DO NOT UNDERSTAND THE EFFECT OF ANY CONTRACTUAL TERM CONTAINED IN THIS SECTION OR ANY ATTACHMENTS, CONSULT AN ATTORNEY.

ADDITIONAL INFORMATION PROVIDED BY INSPECTOR

It is the purpose of this report to give the prospective buyer my educated and experienced opinion of the condition and function of the stated property as visually inspected by Gabe Fitzpatrick. The inspection performed on this house is of a general nature and includes the following systems: electrical, HVAC, mechanical, and plumbing. This does not include any specialized inspections and/or inspections of any hazardous materials (such as done in environmental inspections) or any of the following; structure, mold, hazardous materials and gases, rated walls, lead paint, destructive insects or pests, security, smoke detectors, water treatment systems, etc. The inspection is limited to those components which were visible and accessible at the time of the inspection. It is noted that this report contains the opinion of this Inspector of the stated property as it appeared on the day of the inspection and is in no way a warranty of any component in the days and future following the inspection. All mechanical components are judged on the basis of age, condition, and the function of those items as they appeared on the day of the inspection and are not guaranteed to continue functioning in that manner in the future. It is recommended that the buyer purchase a home warranty policy to protect oneself from both unexpected and anticipated problems that may occur in the future. It is noted that Gabe Fitzpatrick is not responsible for any problems found in the house during or after components are opened up, disassembled, uncovered, made visible, or made accessible after the inspection is completed.

If a service company is contacted to examine an area of question and comes to the conclusion that there is no repair needed; have them present to you in writing that the item is in compliance with a prevailing code and is functioning properly, not in need of repair. It is the intent of this inspector to work in compliance with the Standards of Practice For Real Estate Inspectors. It is not required of this company to exceed these standards. You may obtain a copy of the document referred to above by contacting the Texas Real Estate Commission. It is also noted that this is not a "code inspection" but rather an inspection of the condition and function of the stated property.

If there are any questions or problems please call Hedderman Engineering Inc. 281-355-9911.

Although this report may include observations of some building code violations, total compliance with mechanical, plumbing, electrical codes, specifications, and/or legal requirements is specifically excluded. We do not perform "code" inspections, and since building codes change every few years, our inspections are not done with the intention of bringing every item in the property into compliance with current code requirements. Rather, the standard of our inspections is a performance standard to determine if the items inspected are functioning at the time of the inspection, or are in need of repair. This is particularly applicable to Home Warranty policies, where the standards of the Home Warranty service company are often different than our stated performance standard for judging whether a piece of equipment is functional or in need of repair. If you intend to rely on a Home Warranty policy, then it is recommended that you contact the appropriate service companies for a more in-depth analysis of what may be required to meet their standards should a claim be made against the policy.

Thank you,
Gabe Fitzpatrick



I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I NI NP D

FOR THE PURPOSES OF THIS INSPECTION, NORTH WILL BE ASSUMED TO BE FROM THE FRONT OF THE HOUSE TOWARDS THE REAR.

I. STRUCTURAL SYSTEMS

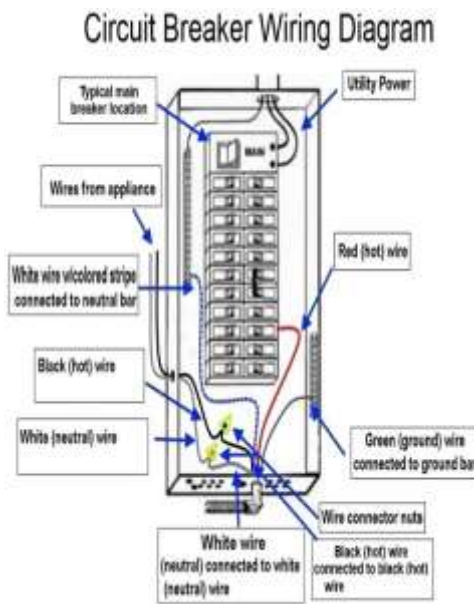
The structural systems were checked by a separate inspector from Hedderman Engineering and their report will arrive separately.

II. ELECTRICAL SYSTEMS

A. Service Entrance and Panels

Comments:

The electrical service is provided by a 120/240 volt, single-phase, 200-ampere underground service to a meter located at the north side of the house, and then to a breaker panel located inside the garage. The breaker panel was manufactured by GE and was rated at 200-amperes with a 200-ampere main breaker. The size of the service entrance conductors into the breaker panel were observed to be #2/0 copper, and the branch circuit wiring from the panel was copper. The wiring in the house was a 3-wire grounded system. (Information)



The grounding conductor to the ground rod was not equipped with a low voltage grounding block for the low voltage service.

Obtain Cost Estimate

I=Inspected NI=Not Inspected NP=Not Present D=Deficient

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HEI File Photo

The ground rod was sticking out of the ground a few inches, and, since ground rods are typically 8 feet long and all 8 feet of the rod are required to be in the ground, it is recommended that the ground rod be pounded down flush with the top of the ground. The clamp on the rod should be an acorn clamp is approved for direct burial in the ground.

Obtain Cost Estimate



Breaker Panel Boxes

We observed one or more white wires that were used as a “hot” wire, and were connected to a circuit breaker. Typically, the white wires are the grounded conductors, and if they are used as a “hot” conductor, they must be permanently marked or wrapped with black or red tape to identify them as a “hot” ungrounded conductor.

Obtain Cost Estimate

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The circuit breaker for the condensing unit was rated higher (50-amperes) than the maximum size allowed by the manufacturer of the condensing unit (45-amperes). The breaker should be replaced by the size listed on the manufacturer's nameplate located on the condensing unit.

Obtain Cost Estimate

The dead front cover plate was missing one knock-out clip.

Obtain Cost Estimate



It is a general recommendation that all circuit breakers be tripped off and on at least once a year to ensure that they are still physically able to trip off. Occasionally, the points on a breaker will fuse to the main bus in the panel, preventing the breaker from tripping off, even if there is an overload on the circuit. If this condition occurs, it can be a fire hazard.

The legend in the breaker panel was labeled to identify the circuits in the panel. We did not verify the accuracy of the labeling.

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The breaker panel(s) did not contain any Arc Fault Circuit Interrupters (AFCI's). This is an "as-built" condition, that does not meet current building code standards. AFCI's devices are intended to protect against fires caused by electrical arcing in the wiring, by shutting off the power to the circuit when an electrical arc is detected in the circuit. Homes built prior to 2002 were not required by the National Electrical Code (NEC) to be protected by AFCI's. Since this house was built prior to 2002, the breaker panel is "grandfathered", and is not required by the NEC to be equipped with AFCI's. However, you may want to consult with an electrician and consider having the combination type AFCI's installed for safety purposes.

B. Branch Circuits, Connected Devices, and Fixtures

Type of Wiring: Copper - Non-metallic sheathed

Comments:

Receptacle Outlets

It was observed that the house was not equipped with Ground Fault Circuit Interrupt devices as specified by the National Electrical Code (with the exception of the GFCI outlet at the northwest bathroom). Have an electrician install the devices at all locations specified in the National Electric Code.

Obtain Cost Estimate

Three prong outlets that were not grounded properly were located throughout the house. It is recommended that an electrician be contacted, and the necessary repairs made.

Obtain Cost Estimate

The cover plate(s) for the exterior outlet was damaged, and needs to be replaced with a weathertight cover plate. Locations included: Front entry

Obtain Cost Estimate



We observed outlets located in countertop backsplashes that were not protected by extender boxes. This is considered to be a fire hazard, and it is recommended that the extender boxes be installed.

Obtain Cost Estimate

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The lavatory basin did not have a receptacle installed within 36 inches of the outside edge of the basin.
Locations included: Master bathroom

Obtain Cost Estimate

NOTE: Some of the receptacle outlets in the home were inaccessible and could not be reached for inspection due to furniture, heavy storage items, personal effects, or conditions outside the control of the inspector.

The 240-volt outlet for the electric dryer connections was observed to be the older 3-prong outlet. A gas connection was installed. The gas valve was not operationally inspected. (Information)

Light Switches and Fixtures

One or more of the closet light fixtures are missing covers. It is recommended that the fixture be replaced with a globed type fixture or only LED bulbs be used in the existing fixture.

Obtain Cost Estimate

A light fixture(s) was observed that was non-functional when the switch was turned on. The problem may be a burned out bulb, a defective light fixture, or defective switch.

Locations included: Northwest bathroom (2 fixtures), Attic, living room track light, Master bathroom, Hall track light, North exterior flood light

Obtain Cost Estimate

The insulation in the attic was in contact with the recessed lights, which may be a fire hazard. We saw no evidence on the outside of the recessed cans to indicate that the cans were rated as "IC", which is the manufacturer designation for "Insulation Contact". Further investigation is recommended, including dismantling the trim kit in the ceiling below. If the recessed cans are NOT "IC" rated, then the insulation needs to be pulled back, and a three inch air space provided around the lights to prevent overheating and a possible fire hazard.

Further Investigation Recommended

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A light fixture(s) had a missing/broken globe.
Locations included: Utility closet

Obtain Cost Estimate

Doorbell

No items requiring repair were visible at the time of the inspection. The internet capabilities of the doorbell are not inspected. (Information)

Visible Wiring

The locations where the water supply piping and gas supply piping were bonded together and/or back to the electrical ground system were not visible at the time of the inspection. It is recommended that an electrician be contacted to determine if the plumbing in the house is properly bonded and to make any needed repairs.

Obtain cost estimate

Wires were spliced and were not in a junction box, and repair is needed.
Locations included: Multiple locations in the attic

Obtain Cost Estimate



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An open junction box(es) was observed.
Locations included: Multiple locations in the attic

Obtain Cost Estimate



Wires that were not properly encased in a conduit or were only partially encased in a conduit were observed.
Locations included: South exterior

Obtain Cost Estimate



The cover on the large junction box at the north side of the attic does not secure closed. It is recommended the cover be secured for safety.

Obtain Cost Estimate

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Wiring was observed inside the return air chase, and the wiring needs to be moved or encased in a metal conduit.

Obtain Cost Estimate



Smoke and Carbon Monoxide Alarms

Smoke detectors were properly installed in the house. We could not determine if the smoke alarms are connected to the security alarm system as is common practice, therefore, to avoid triggering the security alarm we did not operationally check each device. Further investigation is recommended with a service company who specializes in this field to determine if the devices are interconnected as currently required and functioning properly. For safety purposes, it is recommended that smoke detectors and carbon monoxide detectors be replaced every ten years. Further investigation is recommended.

Carbon monoxide detectors were not installed at all of the currently required locations and it is recommended that approved carbon monoxide detectors be installed. Currently carbon monoxide detectors are required outside each sleeping area. It is noted that we could not determine if the carbon monoxide alarms that may be installed are connected to the security alarm system as is common practice, therefore, to avoid triggering the security alarm we did not operationally check devices that may be present.

Obtain Cost Estimate

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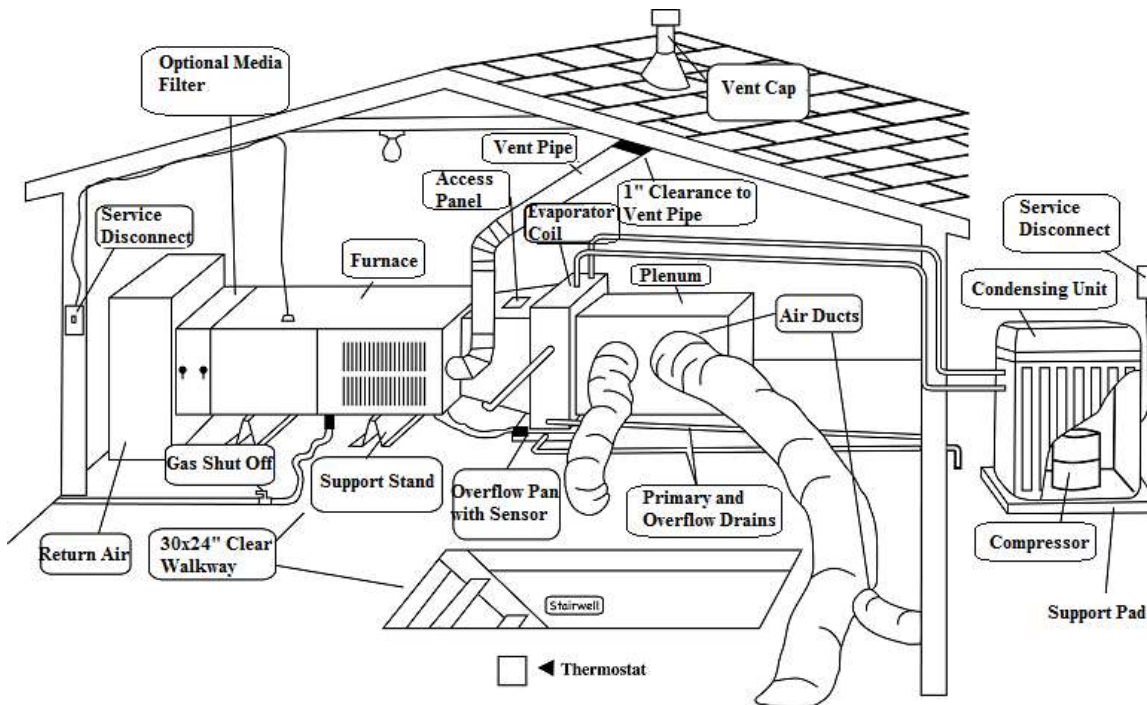
Electrical Conclusion

Due to the multiple conditions listed above, it is recommended that an electrician be contacted to assess the condition of the electrical system and provide cost estimates to make all of the needed repairs. It is pointed out that our inspection is a limited visual inspection and other conditions that should be repaired may be identified by a professional service company. It is reasonable to believe that an electrician who specializes in this field may identify other items that should be repaired.

Further investigation is recommended.

III. HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS

It is pointed out that our inspection of the air conditioning and heating system(s) is a limited, visual inspection where we check the equipment as it has been installed to determine whether or not the system(s) is cooling and/or heating at the time of the inspection. Our inspection is necessarily a cursory inspection, as we do not determine the sizing, adequacy, or design of any component in the system, or the compatibility of the individual components, nor the installation of the system(s) to be in conformity to the latest building code requirements. If you desire an in-depth analysis of the HVAC system(s), then it is recommended that a service company be contacted to analyze the system(s). This is particularly important if the system(s) is an older system and has only a limited amount of remaining life due to its age and/or condition.



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A. Heating Equipment

Type of Systems: Forced Air
Energy Sources: Natural Gas
Comments:

The heating for the house was provided by a natural gas-fired horizontal furnace located in the attic. The furnace was a 125,000-BTU unit manufactured by Goodman in 1998. (Information)

Observations

The furnace was operationally checked at the time of the inspection, and no repairs were indicated to the operation of the furnace. The furnace responded to the thermostat, and the burners came on, and were heating.

Due to the age and/or condition of the equipment, it is the opinion of the inspector that the unit has only a limited amount of remaining life. Therefore, it is recommended that a service company be contacted to dismantle the furnace, and view the heat exchanger for cracks.

Obtain Cost Estimate

Vent Pipe

Double wall vent pipes require a minimum of one inch clearance to any material that is combustible. The vent pipe was located too close to a combustible material, which is a fire hazard.

Obtain Cost Estimate



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Burner Compartment

The furnace is constructed such that the unit must be dismantled in order to view the entire heat exchanger. The unit was not dismantled, and the heat exchanger was not able to be viewed for evidences of a crack. If further investigations are desired, then it is recommended that a service company be contacted to dismantle the unit. It is generally recommended that the heat exchanger be checked every year.

B. Cooling Equipment

Type of Systems: Split System
Comments:

The air conditioning for the house was provided by a forced air split system with a 4-ton condensing unit manufactured by Lennox in 2017 and is located at the east side of the house. The evaporator coil located in the attic was a 4-ton unit manufactured in 2009, and was connected to the furnace, the blower, and the common duct system. (Information)

Cooling Performance

The system had a less than normal temperature differential across the evaporator coils (only 10.5 degrees). Have a service company find the source of the problem, and provide a cost estimate to make any necessary repairs.

Obtain Cost Estimate

We measure the temperature drop (ΔT) across the coil(s) at each unit at the time of the inspection and our observations have been recorded above in the description of each zone. It is pointed out that our measurements of the cooling performance of the equipment is only at a “point in time”, and cannot reflect whether the equipment has been recently serviced, or what the future performance of the equipment will be after the day of the inspection. Further investigation with the homeowner is recommended to determine when the equipment was last serviced.

Evaporator Coil

The overflow pan under the evaporator coil had rust in the pan, apparently from water overflowing the condensate drain line into the overflow pan. No water was in the pan at the time of the inspection, but, since we only ran the unit for a few minutes, it is recommended that the drain line be checked by an air conditioning service company.



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The overflow pan under the evaporator coil was equipped with a float switch which should shut off the air conditioning unit if the pan fills with water.

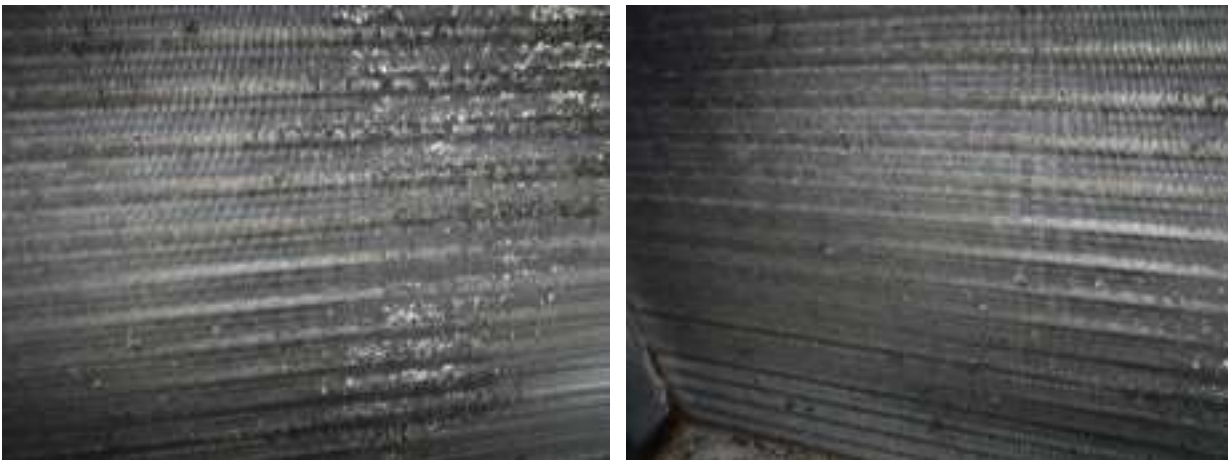
The primary drain line(s) are plumbed to the exterior of the house. The drain line(s) should be plumbed to a trapped interior drain line or a splash block should be placed under the drain line(s) to direct water run-off away from the foundation.

Obtain Cost Estimate



The bottom of the evaporator coils were visible and were clogged with debris. Have a service company clean the coils for proper operation.

Obtain Cost Estimate



C. Duct Systems, Chases, and Vents

Comments:

Return Air Chase

The filter was dirty and needs to be replaced. A dirty filter can allow the evaporator coil to become dirty also along with the ductwork, which can affect the performance of the system.

Obtain Cost Estimate

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Ducts/Registers

Some of the ductwork has been replaced with newer flex duct, but most of the ductwork appeared to be the original installation ductwork. It is recommended that further investigation be done with the homeowner and/or a service company to determine if the ductwork has been cleaned recently.

The ducts were laying on the insulation and ceiling joints and are not supported properly. The ducts should be supported in accordance with the manufacturer's installation instructions, which typically includes hanging the ducts from the rafters supported by 1 1/2 inch straps spaced approximately every four feet. Have a service company make the necessary repairs.

Obtain Cost Estimate



We observed that some of the ductwork in the attic was touching other ductwork, which can cause condensation on the outside of the ductwork. It is recommended that the ducts that are touching other ducts be separated, typically by inserted a piece of fiberglass batt insulation between the ducts.

Obtain Cost Estimate



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The insulation is damaged or missing on the ducting in the attic. A service company should be contacted to evaluate the ducting and provide a cost estimate for repair.

Obtain Cost Estimate



IV. PLUMBING SYSTEMS

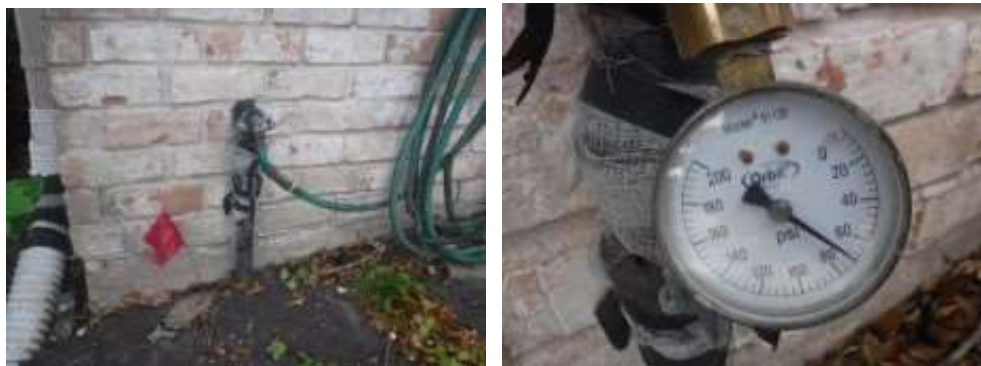
A. Plumbing Supply, Distribution Systems and Fixtures

Location of water meter: Southeast side of the lot near the street
Location of main water supply valve: East side of the house, exterior
Static water pressure reading: 72 PSI
Comments:

A plumbing system typically consists of three major components, including the potable water supply piping; the waste or drain piping; and the plumbing fixtures. The distribution piping brings the water from the public water main or a private well to the individual fixtures throughout the house. The water distribution system is under pressure, usually from 40 psi to 70 psi. The waste or drain piping carries the waste water and products underground to the sewer system or septic tank, and the waste piping is not under pressure, but operates by gravity flow. We typically run water down the drains from the sinks, tubs, showers, and toilets, but this cannot simulate the waste flow characteristics of full occupancy. There may be partial blockage of the underground waste lines from debris, broken pipes, or tree roots that cannot be detected by a visual inspection. If you desire a more in-depth inspection, it is recommended that you contact a qualified plumber.

Water Service / Supply Piping

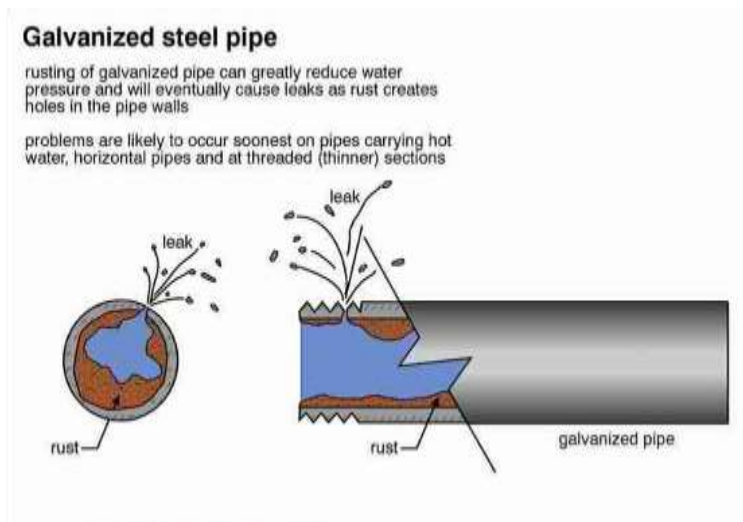
The shut-off valve for the main inlet water line was located at the exterior at the east side of the house. The water meter was located at the street. (Information)



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The water piping for the house was galvanized steel piping. It is pointed out that galvanized steel piping will deteriorate with time and will corrode on the inside of the piping, thereby reducing the inside diameter of the pipe and restrict the flow of the water through the pipe. In addition, the piping will corrode through to the outside of the pipe and will eventually deteriorate to where the pipe will start leaking. It can be anticipated that galvanized water piping throughout the house will need to be replaced when it deteriorates to where it is restricting the flow of the water or is corroded enough to start leaking.



Sinks & Lavatories

The drain stopper(s) was missing from the sink.

Locations included: Northwest bathroom

Obtain Cost Estimate

The water pressure was low, and the aerator (wire screen) appeared to be clogged on the faucet(s), and repair is needed.

Locations included: Master bathroom

Obtain Cost Estimate

The faucet assembly was loose on the sink(s), and needs to be repaired.

Locations included: Kitchen

Obtain Cost Estimate

The backsplash needs to be caulked around the sink(s).

Locations included: Kitchen

Obtain Cost Estimate

Water damage/stains were observed inside the cabinet below the sink indicating a leak has occurred at some point. No leaks were observed when we operated the sink at the time of the inspection. Further investigation is recommended with the owner and/or a contractor to determine the source of the damage/stains in the cabinet. It is recommended that you obtain a cost estimate to repair the cabinet.

Locations included: Hall bathroom

Further investigation is recommended.

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Toilets

No items requiring repair were visible at the time of the inspection to the operation of the toilets. The toilets were flushing properly, with no leaks visible in the plumbing, the wax seal, or the internal valves.

Tubs/Showers

The sealant at the shower surrounds is deteriorated, this can allow moisture penetration into the wall cavities. Apply a wet location caulk to all shower surround corners.

Locations included: Master bathroom

Obtain Cost Estimate

The escutcheons were loose which can allow water to run behind the tub/shower.

Locations included: All bathrooms

Obtain Cost Estimate

There is missing or deteriorated grout and loose tiles at the northwest shower surround. A service company should be contacted to evaluate the tile and provide a cost estimate for repair.

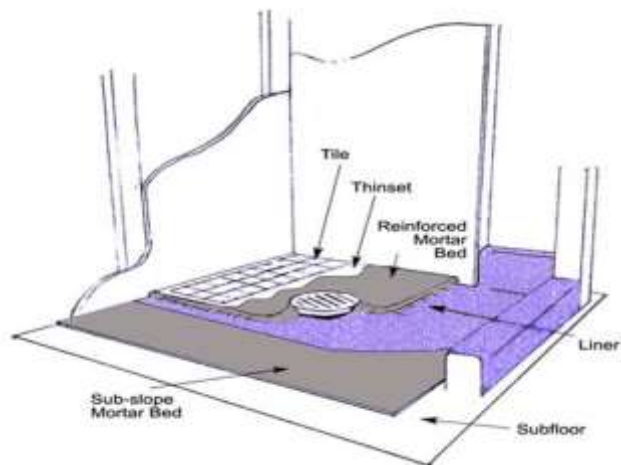
Obtain Cost Estimate



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No evidences of a current shower pan leak were visible at the time of the inspection for the showers in the house. It is pointed out that the duration of our shower pan leak check is only for a portion of the time spent during the inspection. If you desire a comprehensive shower pan leak check, then it is recommended that a plumber be contacted to perform a shower pan leak check.



Access was not provided to the trap areas at the back of the tubs, therefore the plumbing behind the tubs was not viewed. (Information)

Miscellaneous Exterior Plumbing



The atmospheric vacuum breaker devices were missing at one or more of the hose bibbs, and it is recommended that they be installed to prevent cross connections, which can allow contaminated water to enter the potable water supply.

Obtain Cost Estimate

The handle for the hose bibb was missing at the east side hose bibb.

Obtain Cost Estimate

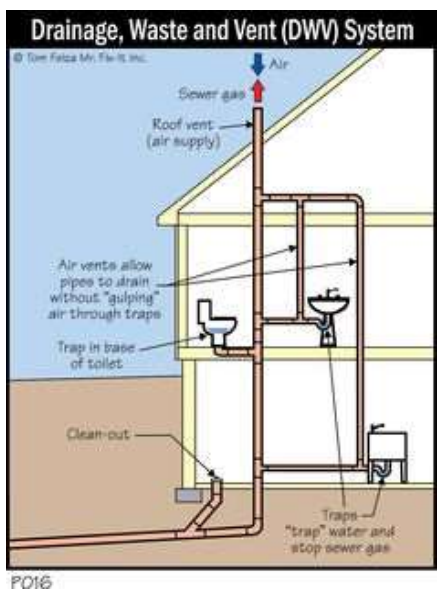
I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I	NI	NP	D
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B. Drains, Wastes, and Vents

Comments:



The water in the house was run for approximately 30 minutes at the sinks and tubs. In addition, the toilets were flushed three or four times each, and the sinks and tubs were filled, and allowed to drain. No evidence of slow drains were visible. If you desire a hydrostatic test to determine if the underground piping is leaking or clogged, then it is recommended that you contact a plumber. (Information)

The sewer piping appeared to be the original cast iron piping. It can be anticipated that the underground cast iron piping will rust out at some point, and will need to be replaced at that time. Due to the corrosive nature of the cast iron sewer piping, it is recommended that an underground sewer line inspection be performed by a service company to determine if any repairs are needed and to provide cost estimates. It is pointed out that underground sewer leaks can cause differential foundation settlement and lead to drainage problems.

Obtain Cost Estimate

I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I NI NP D

The cap for the clean out was missing at the kitchen clean out, and needs to be replaced.

Obtain Cost Estimate

☒ ☐ ☐ ☒ C. Water Heating Equipment

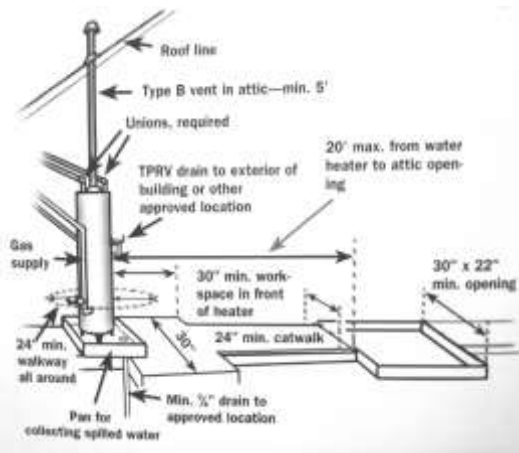
Energy Sources: Natural Gas

Capacity: 50 gallons

Hot water temperature at kitchen faucet: 131 degrees

Comments:

The hot water for the house was provided by a 50-gallon natural gas fired water heater manufactured by State Select in 2016 and is located in the garage. The water piping from the water heater was observed to be galvanized steel. (Information)



No items requiring repair were visible at the time of the inspection to the operation of the water heater. The water heater was functional at the time of the inspection, and providing hot water to the house.

The temperature of the hot water was measured to be 131 degrees at the kitchen sink at the time of the inspection. Normally, 120-125 degrees is the recommended maximum temperature of hot water to prevent accidental scalding. See the chart below for more information about hot water burns, as taken from the International Residential Code, 2012.

I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I NI NP D

TIME AND TEMPERATURE RELATIONSHIP TO SERIOUS BURNS			
WATER TEMPERATURE		Adults (skin thickness of 2.5 mm)	Children (skin thickness of .56 mm)
		Time required for a third-degree burn to occur	
155°F	68°C	1 second	0.5 second
148°F	64°C	2 seconds	1 second
140°F	60°C	5 seconds	1 second
133°F	56°C	15 seconds	4 second
127°F	52°C	1 minute	10 seconds
124°F	51°C	3 minutes	1.5 minute
120°F	48°C	5 minutes	2.5 minutes
100°F	37°C	Safe temperature for bathing	Safe temperature for bathing

For SI: °C = [(°F) - 32]/1.8 or $\left(\frac{°F + 40}{18}\right) - 40 = °C$

Figure P2708.3
TEMPERATURE BURN CHART

Temperature/Pressure Relief Valves

The temperature/pressure relief valve was not operationally checked at the time of the inspection. Valves typically do not reseat properly when they are operated, which causes the valves to leak. It is best to replace the temperature/pressure relief valve every 2-3 years to prevent them from getting clogged with mineral deposits.

The drain line for the temperature/pressure relief valve was partially missing, and the drain line needs to be run to an outside location, turned towards the ground with a 90 degree elbow, and terminated not more than 6 inches above the ground.

Obtain Cost Estimate



Vent Pipe

A heat shield is not installed on the vent pipe where the vent penetrates through the ceiling sheetrock. A service company should be contacted to install a heat shield.

Obtain Cost Estimate

I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I	NI	NP	D
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D. Hydro-Massage Therapy Equipment

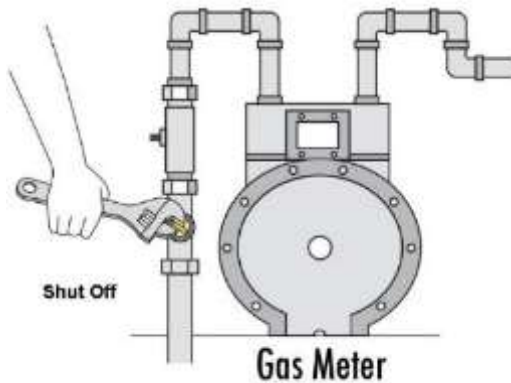
Comments:

Hydro-massage therapy equipment was not present.

E. Gas System

Comments:

The gas meter, with the main shut off valve for the gas to the house, was located at the side of the house.



It is noted that the inspection of the gas supply lines was a visual inspection of those gas pipes that were visible at the time of the inspection and was performed in a cursory manner. We did not use any specialized equipment to detect leaks. If further investigation is desired, it is recommended that a plumber be contacted. (Information)

The gas supply lines were not equipped with sediment traps on the gas line. Have a plumber make the needed repairs.

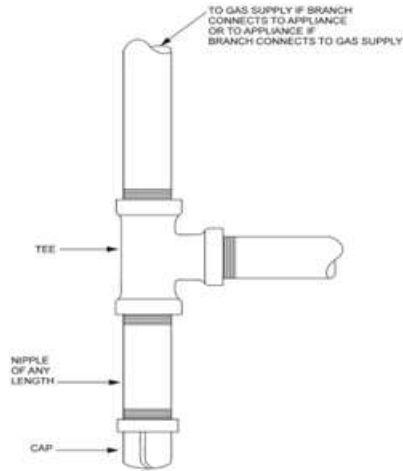
Obtain Cost Estimate

I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I	NI	NP	D
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HEI file photo showing sediment trap



Clip art of a sediment trap in gas line

V. APPLIANCES

A. Dishwashers

Comments:

No items requiring repair were visible at the time of the inspection for the operation of the dishwasher. The unit was run through a cycle at the time of the inspection, and appeared to be operating properly.

The drain line under the sink was not equipped with an anti-siphon device, nor was it looped up so that the top of the loop is at least six inches above the entrance of the drain line into the disposal. It is recommended at least that the drain line be looped to prevent the water from the garbage disposal from siphoning back into the dishwasher, or an anti-siphon device installed.

Obtain Cost Estimate



The dishwasher was loose in the cabinet and needs to be properly secured.

Obtain Cost Estimate

I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I NI NP D

B. Food Waste Disposers

Comments:

No items requiring repair were visible at the time of the inspection for the operation of the disposal.

C. Range Hood and Exhaust Systems

Comments:

No items requiring repair were visible at the time of the inspection for the operation of the range hood and exhaust systems.

D. Ranges, Cooktops, and Ovens

Comments:

Gas Cooktop

No items requiring repair were visible for the operation of the gas cooktop. All of the burners and controls were operating properly at the time of the inspection.

Electric Oven

No items requiring repair were visible at the time of the inspection. The oven thermostats were checked, and was properly calibrated. The thermostats were set at 350 degrees, and the ovens heated to within the allowable ±25 degrees. The oven was checked with an oven thermometer, and found to heat to 350 degrees at both ovens.

E. Microwave Ovens

Comments:

Appliance not present.

F. Mechanical Exhaust Vents and Bathroom Heaters

Comments:

No items requiring repair were observed to the operation of the bath vent fans at the time of the inspection. The bath vent fans responded to the switches, and were functional at all the bathrooms.

G. Garage Door Operators

Comments:

The exhaust fan was non-functional. A licensed electrician should be contacted to replace the unit.

Locations included: Utility room

Obtain Cost Estimate

H. Dryer Exhaust Systems

Comments:

No items requiring repair were visible for the dryer vent at the time of inspection.

The vent was connected to the dryer but was not tested. It is recommended that the vent be checked for an excess of lint and that it be cleaned if necessary. (Information)

I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I	NI	NP	D
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I. Other

Comments:

Non built-in refrigerators, clothes washers, and dryers are not included in the scope of this inspection. If further investigation is desired, it is recommended that a service company be contacted.

Additional Comments

Security systems are not included in the scope of this inspection. If further investigation is desired, it is recommended that a service company be contacted.

Fire protection equipment is not included in the scope of this inspection. If further investigation is desired, it is recommended that a service company who specializes in this field be contacted.

CLOSE

Opinions and comments stated in this report are based on the apparent performance of the items included within the scope of the inspection, at the time of the inspection. Performance standards are based on the knowledge gained through the experience and professional studies of the inspector. There is no warranty or guarantee, either expressed or implied, regarding the habitability, future performance, life, merchantability, and/or need for repair of any item inspected. It is recommended that a Home Warranty Policy be provided to protect the appliances and mechanical equipment against unforeseen breakdowns during the first year. Check with your agent for details.