

■ □ □ ■ **B. Cooling Equipment**

Type and Energy Source: Central Split, Electricity

Comments:

Items noted during the visual inspection that require comment, are in need of repair, adjustment, restoration, continuation of the due diligence process and/or servicing or items noted for information include but are not limited to:

GARAGE SYSTEM: The refrigerant pipe was not fully insulated. This can cause damage from condensate being created on the exterior of the pipe. It also reduces the efficiency of the unit as some of the cooling capacity is dissipated into the atmosphere.

The primary condensate drain pipe terminated on the side of the structure. Current codes provide that the primary condensate drain terminate in an active use trap, such as under a bathroom lavatory. Terminating the primary condensate drain pipe on the side of the structure can cause differential foundation movements, can attract wood destroying and other insects and pests and can cause water damage to the veneer. The termination of the primary drain pipe should be relocated either well away from the side of the structure or at an actively used trap.

COMMENTS FROM THE OTHER INSPECTOR

I NI NP R
☒ □ □ ☒

B. Cooling Equipment – (Type and Energy Source - None) Comments: This inspection covers the performance of the cooling systems.

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Comments: 1] Main house has 5ton Trane for downstairs and 3ton Trane for upstairs. Game room over garage has 1.5 ton . Need a return air filter in the garage unit . The primary condensate drain for the garage unit goes to ground in back. The secondary drain for this unit goes into the front soffitt but does not exit where it can be seen.

■ □ □ ■ **C. Ducts and Vents**

Comments:

Items noted during the visual inspection that require comment, are in need of repair, adjustment, restoration, continuation of the due diligence process and/or servicing or items noted for information include but are not limited to:

CONDITIONED AIR DISTRIBUTION SYSTEM: Pinched and misshapen flexible ducts were noted throughout the attics of the house and garage. It is well known that reducing or changing the shape of a pipe or channel causes turbulence which increases the pressure in the pipe or channel but reduces flow through the pipe, a phenomenon that you may have used in pinching a garden hose to reduce or eliminate water flow from the hose. For some reason, HVAC contractors contend that this well known and documented fact does not occur in flexible air ducts. It does. The ducts should be properly aligned and supported. The turns in the ducts should be gradual so that the duct is bent and distorted as little as possible. This will help increase the volume of air flowing into the house and may relieve the pressures on the air conditioning equipment. The temperature and humidity levels should be consistent throughout each story of the house.

Flexible Air Duct installation vs. Flexible Connector installation: There are distinct differences in the use and limitations between "air duct" and "connector," as defined by "Flexible Duct Performance & Installation Standards," Third Edition, published by the Air Diffusion Council. In accordance with NFPA 90A and 90B Standards, national building codes, and local building codes, there are specific limitations on the use and installation of these items.

Particular attention must be paid to the limitation for Connector (Anco System 3100). In all cases, the most stringent of codes must be met. The U.L. label for air duct is rectangular in shape; whereas, the

U.L. label for Connector is round. This allows easy differentiation between them. For example, connector CANNOT be used in lengths exceeding 14 lineal feet as per NFPA standards.

Avoid installations where exposure to direct sunlight can occur. Prolonged exposure to sunlight could cause degradation to the vapor barrier.

Install duct fully extended, do NOT install in the compressed state or use excess lengths. This will noticeably increase friction losses.

If suspended, product shall be supported at no less than 4' intervals by hanger, saddle, or ceiling joist or other commonly used support of no less than 1-1/2" width at contact points with maximum permissible sag of 1/2" per lineal foot of spacing between supports.

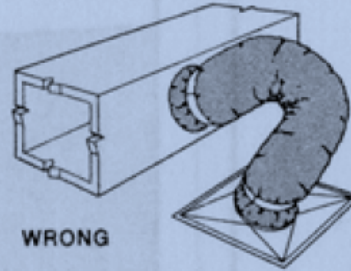
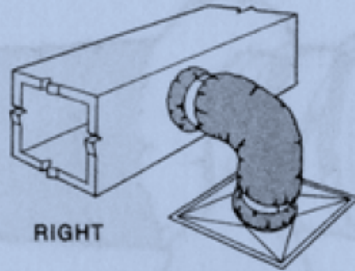
Avoid bending ducts across sharp corners or incidental contact with metal fixtures, pipes or conduits. Radius at center line of bend shall NOT be less than one duct diameter.

B. GENERAL

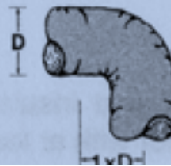
1. The routing and length of flexible duct, the number of degrees of each bend and the amount of sag allowed between support joints will have serious effects on system performance due to the increased resistance each introduces. Use the minimum length of flexible duct to make connections. It is not recommended that excess lengths of ducts be installed to allow for possible future relocations of air terminal devices.
2. This product is for indoor use only. Do not install product where exposure to direct sunlight can occur. Prolonged exposure to sunlight may cause degradation of vapor barrier.
3. The inner core may degrade if the duct is positioned near a bio-treatment lamp (UV emitter) installed within the HVAC system
4. Terminal devices shall be supported independently of the flexible duct.
5. Repair torn or damaged vapor barrier/jacket with duct tape listed and labeled to Standard UL 181B. If internal core is penetrated, replace flexible duct or treat as a connection.

C. INSTALLATION

1. Install duct fully extended, do not install in the compressed state or use excess lengths. This will noticeably increase friction losses.



2. Avoid bending ducts across sharp corners or incidental contact with metal fixtures, pipes or conduits. Radius at center line shall not be less than one duct diameter.



Typical Flexible Duct Manufacturer's Installation Instructions.



The flexible ducts rested on each other in some areas. Flexible ducts are not designed to support the weight



EXTERIOR FAUCETS: Back flow prevention devices were not installed on all of the exterior faucets. These devices were not on the market at the time the house was built. Back flow prevention devices are now required to reduce the possibility of contamination of the potable water supply system. It is recommended that they be installed.

EXTERIOR PIPES AND DRAINS: Some of the PVC sewer cleanout pipes, supply pipes, drain pipes and/or electrical conduits on the exterior of the house were exposed to the sunlight. The PVC pipes must be painted with a UV resistant paint to protect the PVC from degradation by the ultra violet rays of the sun. Any deteriorated or brittle pipes should be replaced.

NATURAL GAS PIPES: There were no sediment traps or “dirty legs” installed on the natural gas distribution pipes prior to the connections to the appliances. Sediment traps are required by Section G2419.4 of the IRC. Proper sediment traps should be installed where required.

G2419.4 (408.4) Sediment trap.

Where a sediment trap is not incorporated as part of the gas utilization equipment, a sediment trap shall be installed downstream of the equipment shut-off valve as close to the inlet of the equipment as practical. The sediment trap shall be either a tee fitting with a capped nipple in the bottom opening of the run of the tee or other device approved as an effective sediment trap. Illuminating appliances, ranges, clothes dryers and outdoor grills need not be so equipped.

NATURAL GAS PIPE: The natural gas pipe penetration through the brick veneer is required to be sleeved so that no friction between the brick veneer and the gas pipe can develop and so that corrosives from the brick veneer cannot attack the gas pipe. The penetration of the gas pipe through the brick veneer should be sleeved for safety.

G2415.7 (404.7) Above-ground piping outdoors.

All piping installed outdoors shall be elevated not less than 3 1/2 inches (152 mm) above ground and where installed across roof surfaces, shall be elevated not less than 3 1/2 inches (152 mm) above the roof surface. Piping installed above ground, outdoors, and installed across the surface of roofs shall be securely supported and located where it will be protected from physical damage. Where passing through an outside wall, the piping shall also be protected against corrosion by coating or wrapping with an inert material. Where piping is encased in a protective pipe sleeve, the annular space between the piping and the sleeve shall be sealed.



COMMENTS FROM THE OTHER INSPECTOR

I NI NP R

A. Water Supply and Fixtures – Comments: This inspection covers the type and condition of all accessible and visible water supply components.

Type of supply lines Copper Galvanized Iron
 PVC / CPVC Polybutylene
 Anti-Siphon / Back Flow / Air Gap (s) Present Not Present

Comments: 1) Missing air gap on hose bibb behind garage. 2) Master shower door does not close and seal evenly.

B. Drains, Wastes, Vents

Comments:

NOTE: When a house is newly built or remodeled, or when a house has been vacated from even for a short period of time, it is not unusual for the plumbing system to back up when the new owner occupies the structure. This is due to the fact that the contractors building or remodeling the house use the plumbing system as a method of cleaning everything from paint to putty to anything else you can think of. Solids in the pipes tend to congeal as water drains from the pipes through lack of use and the solids can form barriers in the pipes. Before occupying the structure, you should repeatedly fill all plumbing fixture in an attempt to insure that the drains will operate once you and your family have moved into the property. Information.

Items noted during the visual inspection that require comment, are in need of repair, adjustment, restoration, continuation of the due diligence process and/or servicing or items noted for information include but are not limited to:

MASTER BATHROOM: The tub drain trap and supply system were not accessible and were not inspected. An opening is required to be made behind the tub to allow access to the drain pipes and supply system for inspection and service. Without the opening, there is no possibility of determining the condition or the integrity of the tub plumbing. The tub supply and drain systems and the parts, components and systems in the tub enclosure could not be inspected and are specifically excluded from the inspection and from this report.

EXTERIOR DRAIN PIPE TERMINATIONS: There were no elbows on all of the terminations of the drain pipes. Elbow terminations should be installed on all drain pipe terminations so that the terminations point at the ground.

SEWER VENT TERMINATIONS: Most of the sewer vent jacks had inadequate clearance above to surface of the roof. The sewer vents must terminate in laminar air to provide proper ventilation. Lack of air flow creates a partial or full vacuum on the drainage system. The fixtures may not drain at all or may drain slowly and noisily.

COMMENTS FROM THE OTHER INSPECTOR

I NI NP R

B. Drain, Wastes and Vents – Comments: This inspection covers the condition of all accessible and visible waste-water and vent pipes.

Types of waste lines PVC Iron Tile Other

Comments: None

C. Water Heating Equipment (Report as in need of repair those conditions specifically listed as recognized hazards by TREC rules.)

Energy Source: Natural Gas

Comments:

Items noted during the visual inspection that require comment, are in need of repair, adjustment, restoration, continuation of the due diligence process and/or servicing or items noted for information include but are not limited to:

FIRST STORY UNIT: There work platform installed at the unit was inadequate. A work platform a minimum of 30 inches wide and 30 inches deep should be installed on each side of the unit for safe access to the unit as required by the manufacturer’s installation instructions and by the model building codes.



UPSTAIRS UNIT: The unit was not properly accessible. Gas fired appliances in the attic are required to be accessible by a 22" wide, continuous, unobstructed walkway. The unit is required to be located within 20 feet of the attic access opening. The units also require a work platform and a light to be installed near the unit. These items are for the safety of the technicians who must service the units and for safe access to the unit during an emergency. As the unit was not accessible, the unit was not inspected. The unit is specifically excluded from the inspection and from this report. Proper and safe access should be provided for safety.

COMMENTS FROM THE OTHER INSPECTOR

I NI NP R

C. Water Heating Equipment – (Report as in need of repair those conditions specifically listed as recognized hazards by TREC rules.) Energy Source: **None**
 Comments: This inspection covers the water heating equipment and it's temperature and pressure relief system.

T & P Valve	<input checked="" type="checkbox"/> Operated	<input type="checkbox"/> Not Operated Because ?	
Safety Pan and Drain Installed		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Water Heater(s)		<input type="checkbox"/> Electric	<input checked="" type="checkbox"/> Gas
Gas Shut Off Valve	<input checked="" type="checkbox"/> Present	<input checked="" type="checkbox"/> Accessible	<input type="checkbox"/> Not Present and/or Observable
Branch Line	<input checked="" type="checkbox"/> Iron / Flex	<input type="checkbox"/> Copper	<input type="checkbox"/> Other
Type of Observable Vent Pipe		<input type="checkbox"/> Double Wall	<input type="checkbox"/> Single Wall
		<input type="checkbox"/> Cement / Asbestos	<input type="checkbox"/> Other
Garage Unit(s):	Physically Protected	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	18 inch Floor Clearance	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Comments: 1] The control and firebox on the 30 gallon water heater faces the wall and cannot be inspected. Code requires 30" of clearance in front of the firebox. This unit needs to be rotated 180degrees. 2] Rust accumulation on top of the burner on the 50 gallon water heater needs to be cleaned off.



D. Hydro-Therapy Equipment

Comments:

I=Inspected NI=Not Inspected NP=Not Present R=Not Functioning or In Need of Repair
 I NI NP R Inspection Item

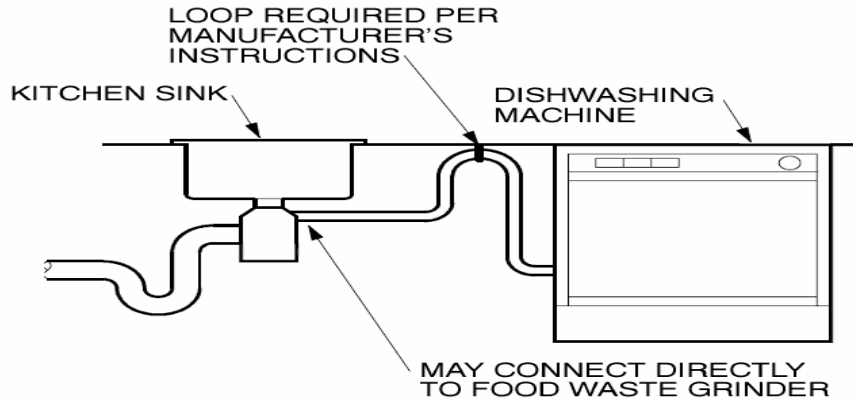
V. APPLIANCES

A. Dishwasher

Comments:

Items noted during the visual inspection that require comment, are in need of repair, adjustment, restoration, continuation of the due diligence process and/or servicing or items noted for information include but are not limited to:

There was no anti siphon loop or mechanical air gap in the drain pipe. An air gap or anti siphon loop is used to prevent backflow of contaminated water and bacteria from the disposer or plumbing drain back into the dishwasher. Many models come with backflow valves, but the anti siphon loop or mechanical air gap is still required. An anti siphon loop is created by forming an upside down “U” in the drain hose. The “top” of the “U” must be in contact with the bottom of the counter. The hose is the tied in place, usually to the underside of the sink or to the faucets.



COMMENTS FROM THE OTHER INSPECTOR

- I NI NP R
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A. Dishwasher – Comments: This inspection of the dishwasher covers the door gasket, including the dish tray, rollers, spray arms, and the soap dispenser.

Comments: **1) Discharge does not go through an air gap per code.**

■ B. Food Waste Disposer

Comments:

There were no visible defects noted in the operation of the disposer that appeared to require immediate repair at the time of the inspection, in my opinion. Information.

COMMENTS FROM THE OTHER INSPECTOR

- I NI NP R
-

B. Food Waste Disposer – Comments: The inspection covers the splashguard, grinding components and exterior.

Comments: **None**

■ ■ C. Range Hood

Comments:

Items noted during the visual inspection that require comment, are in need of repair, adjustment, restoration, continuation of the due diligence process and/or servicing or items noted for information include but are not limited to:

The range vent discharge pipe was improperly routed. The vent pipe contained a low spot that would trap grease and debris. This condition would increase the chances of the materials and debris trapped in the vent pipe catching fire. The vent pipe should be rerouted so that the low spot or trap is eliminated.



COMMENTS FROM THE OTHER INSPECTOR

I NI NP R

C. Range Hood – Comments: The inspection covers the filter, vent pipe, and switches as well as operate the blower.

Vent Recirculates Vents to Exterior

Comments: **None**

D. Ranges/Ovens/Cooktops

Comments:

RANGE/OVEN COMBINATION UNIT: There were no visible defects noted in the installation of the range/oven unit that appeared to require immediate repair at the time of the inspection, in my opinion. Information.

COMMENTS FROM THE OTHER INSPECTOR

I NI NP R

D. Ranges / Ovens / Cooktops – Comments: The inspection of the range / oven / cooktops covers the knobs, elements, drip pans handles, glass panels, lights or light covers, and other parts.

Type of Range Electric Gas
 Type of Oven Electric Gas
 Gas Shut Off Valve Present Accessible Not Present and/or Observable
 Branch Line Iron / Flex Copper
 Oven Temperature when set at 350° - **340°**

Comments: **None**

E. Microwave Cooking Equipment

Comments:

There were no visible defects noted in the installation of the microwave oven that appeared to require

immediate repair at the time of the inspection, in my opinion. Information.

COMMENTS FROM THE OTHER INSPECTOR

- I
- NI
- NP
- R

E. Microwave Cooking Equipment – Comments: This inspection of the microwave cooking equipment covers the knobs, handles, glass panels, door and seals.

Comments: **None**

F. Trash Compactor
Comments:

G. Bathroom Exhaust Fans and/or Heaters
Comments:

BATHROOM EXHAUST FANS ONLY: There were no visible defects noted in the bathroom exhaust fans that appeared to require immediate repair at the time of the inspection, in my opinion. Information.

COMMENTS FROM THE OTHER INSPECTOR

- I
- NI
- NP
- R

G. Bathroom Exhaust Fans and/or Heaters – Comments: The inspection will cover the operation of the unit, observing sound, speed and vibration level.

Comments: **None**

H. Whole House Vacuum Systems
Comments:

I. Garage Door Operators
Comments:

There were no visible defects noted in the garage door operator that appeared to require immediate repair at the time of the inspection, in my opinion. Information.

COMMENTS FROM THE OTHER INSPECTOR

- I
- NI
- NP
- R

I. Garage Door Operators – Comments: The inspection will cover the condition and operation of the garage door operation.

Comments: **1] Brackets in place but no IR detectors in place. Reverser worked.**

J. Door Bell and Chimes
Comments:

There were no visible defects noted in the doorbell that appeared to require immediate repair at the time of the inspection, in my opinion. Information.

COMMENTS FROM THE OTHER INSPECTOR

I NI NP R

J. Door Bell and Chimes – Comments: The inspection will cover the condition and operation of the unit.

Comments: **None**

K. Dryer Vents
Comments:

There were no visible defects noted in the visible dryer vent system that appeared to require immediate repair at the time of the inspection, in my opinion. Information.

COMMENTS FROM THE OTHER INSPECTOR

I NI NP R

K. Dryer Vents – Comments: The inspection will cover the condition and the routing of ducts (where visible and accessible).

Comments: **1] Clean lint out of vent before use.**

L. Other Built-in Appliances
Comments: