Commercial - Residential - Construction
Infrared Thermography
EIFS

Start 9:00am Finish 2:00pm
Property faces: North
Outside Temp: 41°F~57°F
Multilevel: Two
Weather: Clear
Last Precip: 4 days ago **0.04in.**

Property ID: 2013-666
REA: NA
FEE $1,349.00
54- Occupied, possessions may block the Inspector's view or access.

1733 GOLIAD DR. GARLAND, TX 75042-4238 **Office 972.487.5634**
www.adairinspection.com

2013 ADAIR INSPECTION PROPERTY INSPECTION REPORT COMPARISON

Contact:
Confidential Report Prepared For: ***Comparison to cheap inspection firm***
(Name of Client)
Concerning: ***The House***
(Address or Other Identification of Inspected Property)
BARRY ADAIR *TREC #4563* ***Today***
(Name and License Number of Inspector) (Date)

PROPERTY INSPECTION REPORT

Please read the entire report and call Barry at 972-487-5634 for all clarification.
Well-intentioned interpretations by others may not be factual statements of this report.

Additional pages or Hyperlinks may be attached or included into this report. This report is not complete without these. When an item is present in or at the subject property but is not inspected, the "NI" column will be checked and an explanation is necessary. The inspector may provide comments whether or not an item is deemed in need of repair. Repair items may often affect the health, safety, or welfare of the occupants and system's integrity. Plumbing leaks, Gas leaks, and all Electrical system deficiencies require immediate attention or discontinuance of use until all repairs are completed to assure proper operation. Because the inspector does not dismantle equipment, perform invasive inspections or destructive testing the repair contractor's subsequent examination may reveal additional required repairs. Insurability or any other documentation provision or research of the subject property and any of the components within is beyond the scope of this inspection. Always retain the expertise of a qualified repairperson, one who has the skills and knowledge related to the installation, construction, or operation of the system's components and has received safety training to recognize and avoid the hazards involved, whenever repairs are noted in this report.
Contractors and other service personnel may be verified through: https://personalreports.lexisnexis.com/index.jsp

Inspection Scope: TREC
Parties present at inspection: Owner/Client, Manny
Utilities On: Yes Water Electricty Gas
Documents provided to inspector: Previous Inspection Report
Square Footage from Tax Appraisal or other source: 3,778
Year Built from Tax Appraisal or other source: 2012
Property inspected was: The property is furnished, and in accordance with industry standards we only inspect those surfaces that are exposed and readily accessible. We do not move furniture, lift carpets or rugs, nor do we remove or rearrange items within closets or cabinets. On your final walk through, or at some point after furniture and personal belongings have been removed, it is important that you inspect the interior portions of the residence that were concealed or otherwise inaccessible and contact us immediately if any adverse conditions are observed that were not reported on in your inspection report.

Consult a verified/qualified/licensed contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

AFI=Appears to Function as Intended **NC**=No Comments
I=Inspected **NI**=Not Inspected **NP**=Not Present **D**=Deficient

I	NI	NP	D	Inspection Item
I	NI	NP	D	**I. STRUCTURAL SYSTEMS**

Important Note: Any photos that may be provided as a courtesy for component(s) or system(s) identification are typical examples only and ***SHOULD NOT*** be interpreted as the only occurrence or each and every specific occurrence present at the subject property during the inspection. **Numbers before comments correspond to the photos and separate file attachments. Blue text represents a deficiency unless it pertains to a hyperlink.** It is the responsibility of the appropriate qualified contractor to provide an itemized list of repair/replacement items in their bid estimate. For location purposes the report items may be identified as right, left, front, back, or up/downstairs as facing the front entry door. Inspections are generally performed in a clockwise manner at all elevations and may start with a general view picture with all deficiencies for that area following until the next general view picture.

X ☐ ☐ X **A. Foundation Comments:**

Type of Foundation(s): Post Tension Slab on Grade wherever visible

- The foundation appears to support the walls and roof systems

11A, 112A - Around the home the Post Tension mounting bracket nails are exposed, rusting, and some are leaving rust trails along the foundation wall as seen here. Rusting nails can expand potentially causing cracks/damage to the concrete around them. These are examples on the front and side of the front left corner of the home.

112A - Some minor spalling has been noted to the concrete foundation surface with this example at the front left corner of the home. Spalling concrete has the potential to deteriorate further and spalling around Post Tension cable mounting points, such as this one here, should be corrected to help preclude the chance of any further damage.

Foundations on clay soil require adequate evenly applied moisture and a moisture management program and system should be maintained throughout property ownership.

I recommend that you visit the following website: www.houston-slab-foundations.info This website will provide you with general information about slab-on-ground foundations. This site was published specifically to help buyers and others understand the foundation inspection with reference to real estate transactions. Recommended foundation care: http://www.profengineering.com/fndcare.htm

---

X ☐ ☐ X **B. Grading and Drainage Comments:**

No precipitation was occurring during the inspection.

1, 4, 8, - Typical: Trees, shrubbery, and other foliage can cause transpiration that in turn may be damaging to the foundation depending on species and proximity and should be maintained as far away from the structure as is aesthetically practical. It is advised that a 36" walkway between the foliage and the structure be maintained and that no limbs overhang the roofline.

4, 8, 11, 20- Typical: Gutter systems require 5' extensions at all grade level downspouts. In areas where expansive or collapsible soils are known to exist, all dwellings shall have a controlled method of water disposal from roofs that will collect and discharge all roof drainage to the ground surface at least 5 feet from foundation walls or to an approved drainage system.

73- Advise extending upper downspouts directly into lower gutter troughs to avoid shingle wear from excess focused water flow

Pooling and erosion shall be avoided alongside any part of the foundation.

Consult a verified/qualified/licensed contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

AFI=Appears to Function as Intended **NC**=No Comments
I=Inspected **NI**=Not Inspected **NP**=Not Present **D**=Deficient

I	NI	NP	D	Inspection Item
X	☐	☐	X	**C. Roof Covering Materials Comments:**

74, 76, 77, 78, 80, - Numerous shingles or tabs were scuffed, cracked, torn, perforated or had evidence of eroded granulation and need to be replaced.

76A, 77A, 78A, 79A - During window inspections the roof was noted as having multiple locations of abraded and damaged shingles. Pictures 76A, 77A are a view from the upstairs, right, rear bedroom window. Pictures 78A, 79A are views from the upstairs, center bedroom window. More pictures and descriptions are provided from the roof walk/inspection.

109A - The metal drip-edge flashings at roof eave points are not being properly run the complete length of the eaves and intersecting walls, overlapping each other, etc.

115A - Where metal counter-flashing meets roof trim the two do not overlap and are not being properly sealed as displayed on this front roof view. This is leaving gaps for water penetration. This is an example on the front of the home.

Type(s) of Roof Covering: Composition wherever visible

Viewed From: Walked surfaces

Precipitation was not occurring during the inspection.

I	NI	NP	D	Inspection Item
X	☐	☐	X	**D. Roof Structure and Attic Comments:**

64- Energy Efficiency data label

Approximate Average Depth of Insulation: 11A - Measured approximately 6" - 18" of loose fill with 4" - 6" batts under attic platforms (as visible near platform edges) and near eave area diagonal ceilings.

Approximate Average Thickness of Vertical Insulation: None visible in the accessible attic area.

The home is equipped with 4 attic access points:
One in the second floor hallway to access the main second floor attic area. Access in this area was limited due to high insulation levels and ductwork/ductwork strap obstructions. To preclude the chance of damaging installed insulation this area was viewed from the access platform only.

7A, 8A - Two are located in each of the closets of the second floor rear bedrooms to access the area over the master bedroom and the kitchen/dining nook areas. The two bedroom closet access points have been sealed around their frames and the access points are not readily accessible.
One is located in the garage ceiling. The garage attic access was blocked by stored personal possessions below it and not accessed for viewing.

9A, 10A - Although there is no typical need to access this attic area, and there are no safe provisions to use it for storage, you should be aware and use caution when utilizing this attic stair set. The stair set is a folding set and due to the ceiling height can be hazardous to open for an average size person while standing with both feet on the floor. Using even a small step stool for additional height is another hazard that should be avoided.

11A- The home has been equipped with loose fill insulation at an approximate 18.5" depth as noted on the insulators insulation marking sheet and measured in the highest accessible depths near the access platform. The remainder of the attic insulation depths could not be readily verified (see access restrictions above) due to a lack of any visible insulation depth markers as required for every 300 Sq. Ft. of attic space.

12A, 13A - Insulation around the attic access platforms and the attic entry opening is missing and/or displaced/removed as noted in 12A around the platform and 13A around the access door frame.

Consult a verified/qualified/licensed contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

AFI=Appears to Function as Intended **NC**=No Comments
I=Inspected **NI**=Not Inspected **NP**=Not Present **D**=Deficient

I	NI	NP	D	Inspection Item

14A, 15A, 16A - On the right side (West) of the home the insulation has been displaced in a path toward the eave area and at the eave area where exposed electrical cables were noted at the eave. There was a potential after insulation installation of an 8 AWG size cable that might have been the reason for this. The insulation was also disturbed in a centerline down the attic toward the HVAC supply air plenum boxes where the 8 AWG cable was run near. More pictures of the 8 AWG cable can be seen in the electrical section of the report.

14A - On the right side of the home, near the front, is what appears to be either a sheet of debris over the insulation. Debris in insulation, especially large pieces such as these, should be removed to prevent trapping moisture and affecting the insulation's properties.

35A, 36A - The entry stairs to the second floor attic area have been set to peak nearer the low point of the roof near eaves. The access is to step up and to the right. The attic light is located just above this entry point and can easily be struck with the head. This is a safety hazard.

108A, 109A - The roof trim sealant where it meets the brick wall is insufficient and/or prematurely deteriorating as noted in this example on the left side of the home near the rear.

109A - The fasteners for the roof trim have not been properly sealed and painted over.

115A - Roof trim is being allowed to contact roof shingle surfaces instead of being 2" above the shingled surface. Properly raising trim and siding 2" above shingles helps prevent constant water exposure to the trim edges which can damage the trim.

116A - On the high peaks, on the front of the home, the roof trim board joints of fascia and frieze boards do not appear to be properly caulked/sealed. This can allow water penetration at the joint and damage to this trim material.

113A, 114A - At various locations around the home the roof surface has slight dips and waves across the roof planes. During the attic inspection these could not be approached for a direct viewing but no issues were noted or suspected from what was viewable. At this time these appear very minor and aesthetic in nature. This is one example of the dips/divots at the front roof plane.

Type: Wood frame Gable & Hip wherever visible

Rafter & OSB Decking wherever visible

Attic Viewed From: The service platforms and wherever 3-points of contact could be maintained. The entire attic space is not traversed due to low head clearance, unsure footing, appliance or utility component(s) installation and occupant's possessions or too avoid insulation disturbance.

Attic ventilation: Soffit vents & Exhaust ports wherever visible. Although some differing types of attic vents were observed at the soffits, gable-ends or roof surface wherever applicable. Studies have shown less than 10% of attics are properly ventilated. Due to differing weather conditions and vent type installations the inspector only uses a standardized attic vs. exterior ambient temperature measurement to assess attic ventilation. Any attic temperature 10°F above the exterior ambient will increase utility usage regardless of insulation presence and may indicate improper ventilation and should be professionally evaluated for any repair recommendations.

Energy Efficiency Upgrade: When attic stairs are installed, a large hole (approximately 10 square feet) is created in your ceiling. The ceiling and insulation that were there have to be removed, leaving only a thin, unsealed, sheet of plywood. Your attic space is ventilated directly to the outdoors. In the winter, the attic space can be very cold, and in the summer it can be very hot. Gaps add up to a large opening where your heated/cooled air leaks out 24 hours a day. This is like leaving a window partially open all year round. An easy, low-cost solution to this problem is to add an insulated attic stair cover. An insulated attic stair cover provides an air seal, reducing the air leaks. Add the desired amount of insulation over the cover to restore the

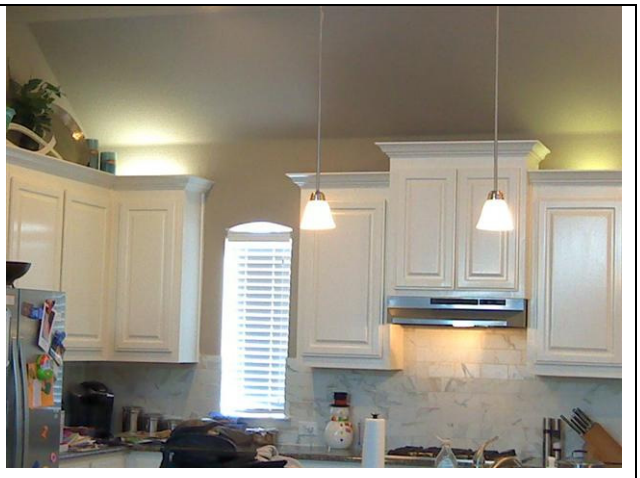
Consult a verified/qualified/licensed contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

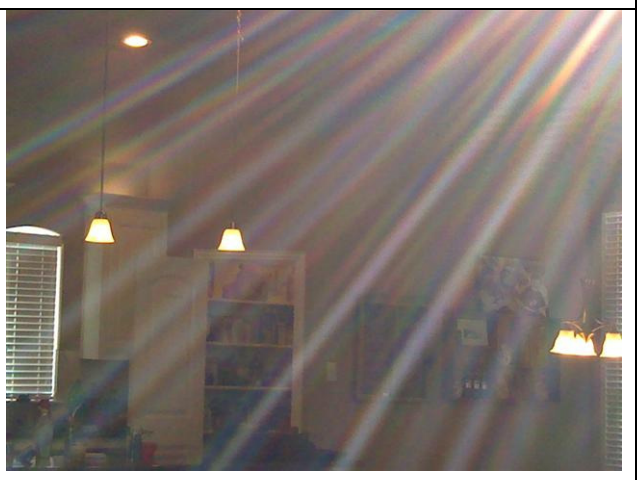
AFI=Appears to Function as Intended **NC**=No Comments
I=Inspected **NI**=Not Inspected **NP**=Not Present **D**=Deficient

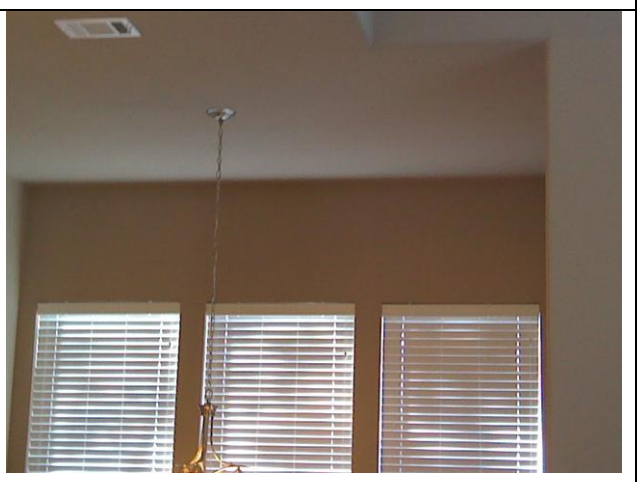
I	NI	NP	D	Inspection Item

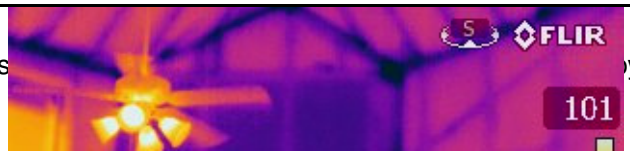
insulation removed from the ceiling void where stairs have been installed.

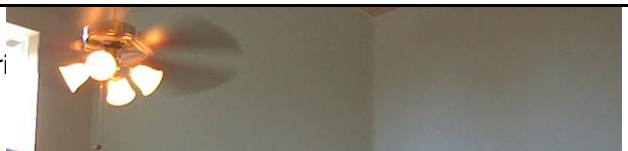
Typical: Below you will see numerous areas that may possibly have displaced or absent insulation. If any of these areas are not readily accessible from the attic spaces invasive examination will have to occur too make a definitive assessment and any further insulation re/placement recommendations. Many of the finite darker or lighter vertical, horizontal and diagonal lines are thermal bridging of the framing members and are not repairable items. Overall cost; return vs. reward should be considered.







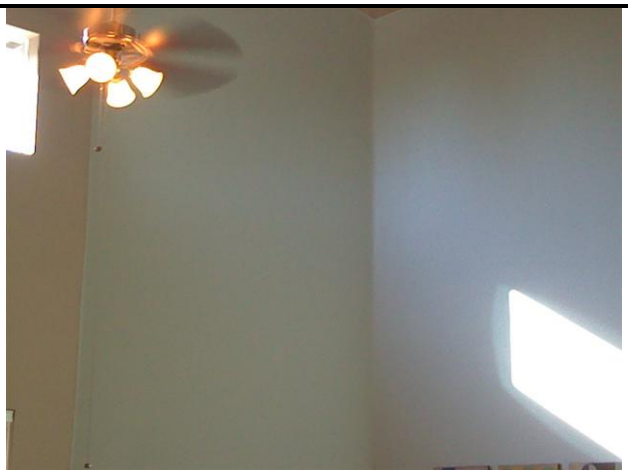


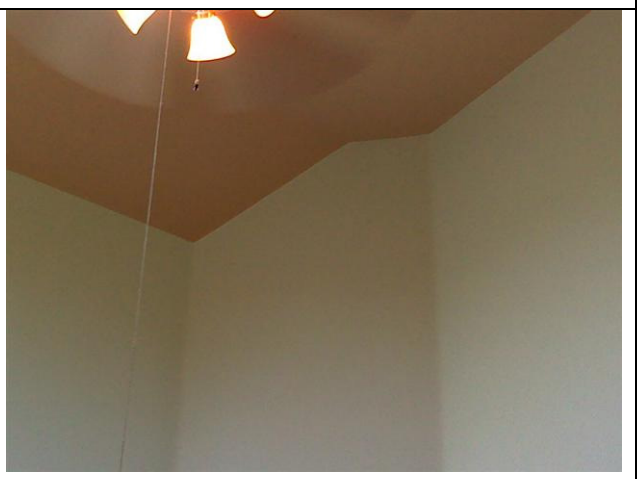


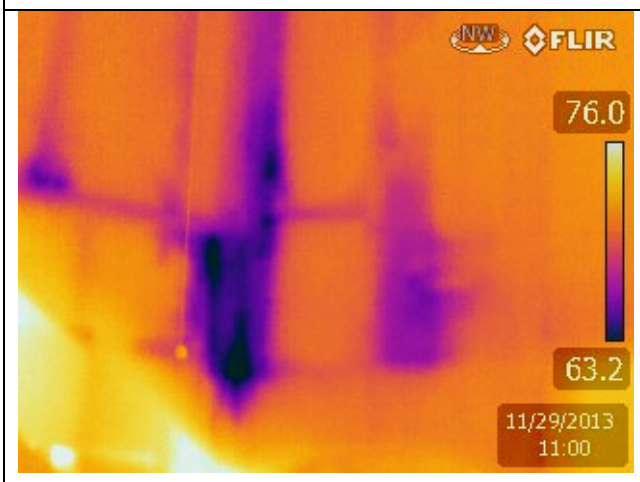
Consult a verified/qualified/licensed contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

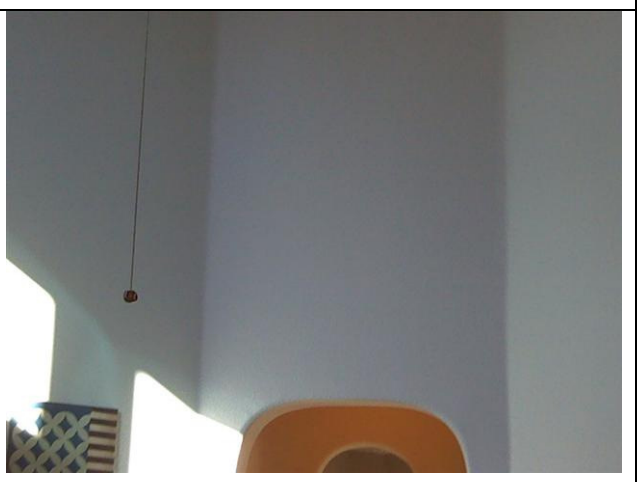
AFI=Appears to Function as Intended **NC**=No Comments
I=Inspected **NI**=Not Inspected **NP**=Not Present **D**=Deficient

I	NI	NP	D	Inspection Item





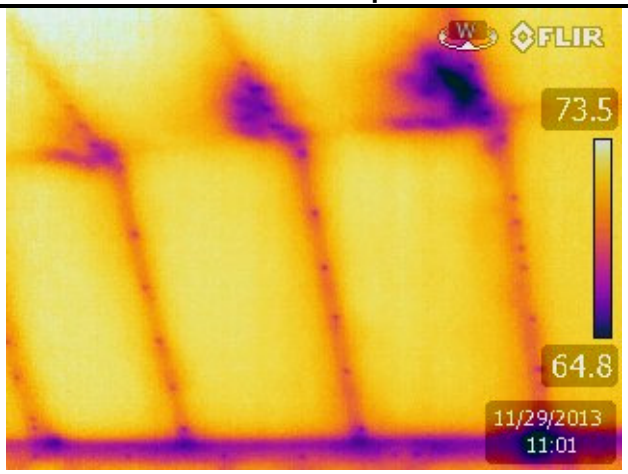


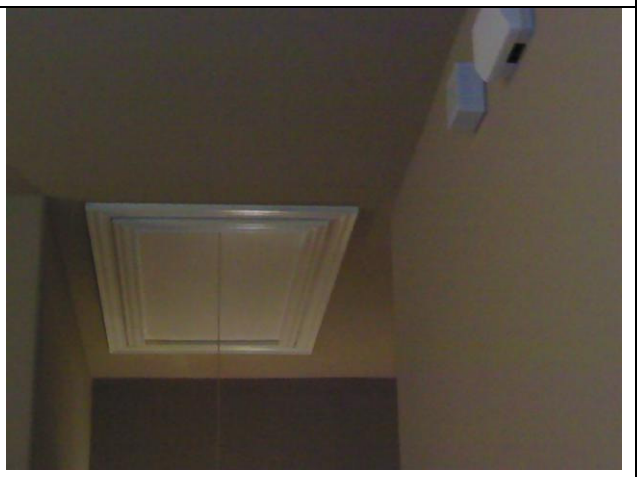


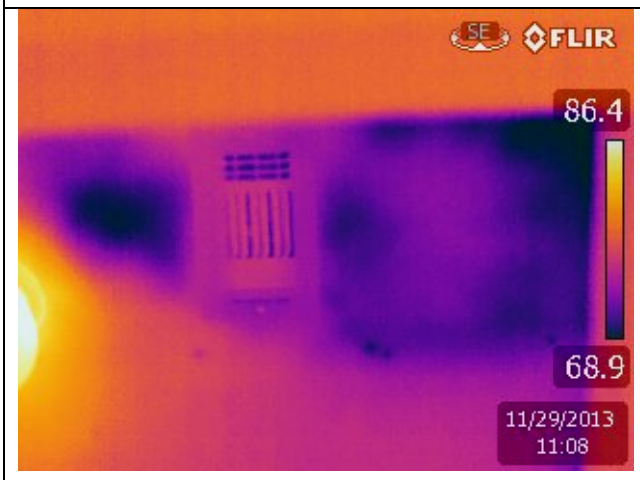
Consult a verified/qualified/licensed contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

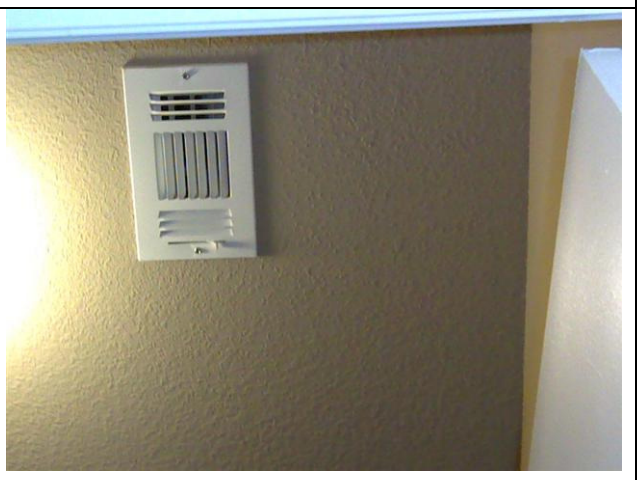
AFI=Appears to Function as Intended **NC**=No Comments
I=Inspected **NI**=Not Inspected **NP**=Not Present **D**=Deficient

I	NI	NP	D	Inspection Item





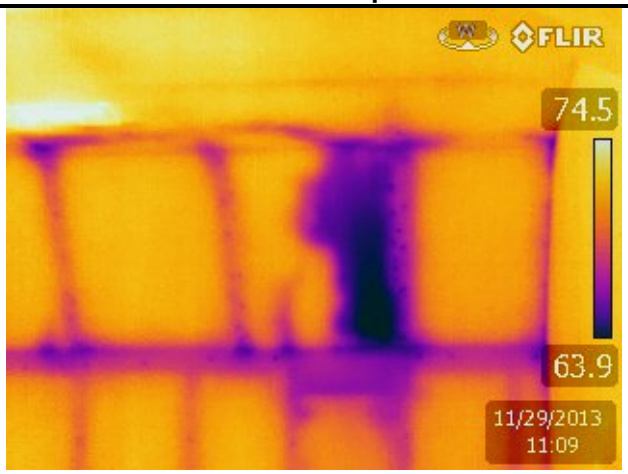


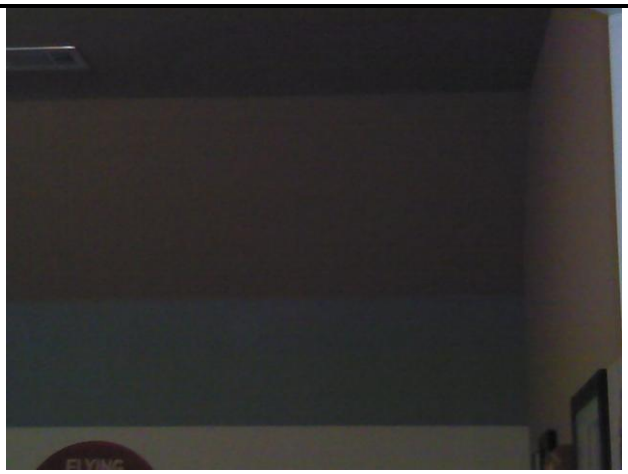


Consult a verified/qualified/licensed contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

AFI=Appears to Function as Intended **NC**=No Comments
I=Inspected **NI**=Not Inspected **NP**=Not Present **D**=Deficient

I	NI	NP	D	Inspection Item

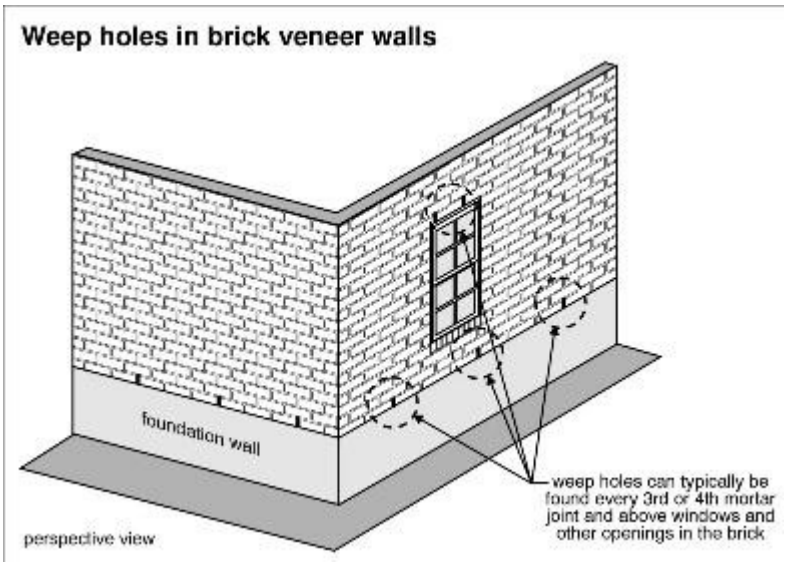




X ☐ ☐ X **E. Walls (Interior and Exterior) Comments:**

2, 3, 19- There are hairline cracks at numerous horizontal and vertical masonry veneer locations monitor for further movement and repair as needed

2, 3, 7- The required lintel and or window and door flashing is not visible and weep holes are not properly installed or cleaned of mortar debris.



2, 3, 19- The presence of corrosion at any metal lintel surfaces is not only an aesthetic detractor but will eventually compromise its proper function and structural integrity. Therefore, periodic cleaning and clearing of all surface corrosion and repainting is required and advised too avoid failure before it occurs. Unsupported masonry failure from elevations is a known safety hazard. For severe climates and exposures consideration should be given to the use of galvanized or stainless steel lintels or shelf angles. At a minimum any steel angles should be shop primed with a corrosion inhibitor coating and repainted if the steel will be welded or whenever corrosion is evident. Even where these materials are used continuous flashing should be installed to cover and lip over the angle too ensure corrosion protection.
http://www.masonrysystems.org/pdf/Literature-Review-Corrosion-Protection.pdf

5, 9, 14, 16, 17, 21, 22- Typical: All dissimilar materials at doors, windows, siding, fascia, soffit, trims and surface mounted fixtures require an expansive weather resistive caulk sealant as sealant joint(s) are damaged, incomplete or are not currently present. All exterior walls cladding that abuts or intersects

I	NI	NP	D	Inspection Item

dissimilar materials or projections shall have proper flashing and sealant installed to divert moisture out, away from and protect the building envelope.

6, 12, 13, 84, 85, 86- Typical: All pressboard type OSB siding and trim materials require proper priming and paint sealing at all six sides. These type materials are very porous and any open grain or pinholes in the finish allow moisture entry, swelling, delamination and premature failure.

22- Typical at all down slope counter flashing terminations: Exterior walls shall provide the structure with a weather resistant envelope. Flashings shall be installed in such a manner so as to prevent moisture entering the wall and roof through joints in copings, through moisture permeable materials, and at intersections with parapet, walls, chimneys and other penetrations through the roof plane. Flashings shall be installed at wall and roof intersections; wherever there is a change in roof slope or direction; and around roof openings. Advise installation of kickout diverters http://www.dryflekt.com or similar. Also gutters shall no contact the walls; there shall be at least a 1" clearance between the gutter trough and the wall system. In the event step flashing is used to assemble diverters it is advised that all overlapping and intersecting materials have tooled sealant applied.

61, 75, 79, 84, 85- Numerous interior and exterior joinery intersections were improperly fitted or have shrunk or delaminated, Caulk, repair or replace wherever required. Exterior gaps at joinery fascia, cornice, frieze trims and siding can lead to costly premature UV and moisture degradation of materials.

79, 80, 81, 82, 84, 85- Typical: The current standards and the majority of siding manufactures advise holding materials at least 1" above the roof surface for flashing inspection, weather/water proofing treatment of the bottom side and too allow for the free passage of water and debris.

87- Numerous siding or trim fasteners are not corrosion resistant as required as evidenced by seal popping and fastener exposure.

62A - In the second floor, private bathroom on the left side, the grout has either shrunk or shifted creating a crack in the grout line at the left, rear corner of the shower tile wall junction. This crack in the grout extends from the top of the wall junction, downward to the shelf, and across the top of the shelf. This should be repaired to prevent water penetration behind the tile.

62A - In the second floor, private bathroom on the left side, above the tile wall junction, is a split in the drywall tape. This should be repaired to help prevent moisture penetration in at that point.

63A - In the second floor, private bathroom the tub spigot is not properly seated against the tile wall leaving a large gap on the right, far side, where water can penetrate behind it. The spigot is not sealed around its base either.

62A, 66A - Around the upstairs bathroom tiled shower wall edges, where it meets the drywall, the grout was not smoothed and fully sealed. This is leaving gaps where moisture can potentially penetrate behind the tile wall. In the second floor, private bathroom on the bottom, right side the grout is deteriorating and leaving open gaps near the baseboard where moisture can penetrate.

64A - In the bathrooms are mirrors above the sink that have minimal mechanical clips present at their top and no clips present on the sides and bottom. It is expected that the mirrors might be glued to the wall but these glues can fail with age and repeated moisture exposure. I would highly recommend that you add additional and appropriate heavier weight fasteners or a frame to properly secure it to the wall to prevent injury from an unexpected release.

65A - In the bathrooms are mirrors above the sink that are improperly resting directly on the vanity backsplashes and have been caulked along their bottom and corner edges. This positioning and sealing will potentially prevent any moisture that might occur behind these mirrors from escaping which can further cause issues with deterioration of any glue or mastics holding them to the walls.

Consult a verified/qualified/licensed contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

AFI=Appears to Function as Intended **NC**=No Comments
I=Inspected **NI**=Not Inspected **NP**=Not Present **D**=Deficient

I	NI	NP	D	Inspection Item

71A, 72A - The decorative wood shutters on the home have not been properly sealed and/or primed and painted on the back side of them. This can allow water penetration into the wood materials and damage from the back side outward. The nails for the shutter pieces are also exposed and do not appear to be proper weather resistant materials. This can allow accelerated rusting and detaching of the wood pieces.

110A - Around the home gaps in mortar were noted as present which can allow water and pest entry. These were few but still present. This is an example at the left, front corner of the home.

56- Numerous interior and exterior wall receptacles and switches have air leakage present advise installation of foam insulation gaskets at all locations. This is prominent darker in the thermal images.

Wood frame wherever visible

Gypsum board wherever visible

Ceramic or stone tile wherever visible

Brick or stone masonry veneer wherever visible

Wood or wood products cornice, fascia, frieze, paneling, siding, soffit or trim wherever visible

X	☐	☐	X	**F. Ceilings and Floors Comments:**

57- Numerous carpet transitions are already frayed and damaged causing a potential tripping hazard repair or replace immediately.

69A - At multiple points around the home the carpet at doorways is damaged, shredding, and loose. This is a trip hazard.

117A, 118A - The ceiling of the heater/air handler closet does not appear to be properly and completely sealed where the supply plenum penetrates the ceiling as noted by the missing plywood and unknown black material at the opening. It is not known and can not be closely viewed/inspected/verified what this black material is and if it meets proper fire ratings to act as an acceptable fire block material.

Wood, wood laminate or carpet flooring wherever visible

Ceramic or stone tile flooring wherever visible

Gypsum board ceiling wherever visible

Consult a verified/qualified/licensed contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

AFI=Appears to Function as Intended **NC**=No Comments
I=Inspected **NI**=Not Inspected **NP**=Not Present **D**=Deficient

I	NI	NP	D	Inspection Item
X	☐	☐	X	**G. Doors (Interior and Exterior) Comments:**

15- One or more doors have damaged weather stripping

In the upstairs, front left bedroom, the closet door does not properly latch and stay closed. The bolt is not engaging in the receiver plate.

Neither garage door has proper handles on the interior or exterior surfaces in the event the door openers must be released and the doors have to be operated manually.

Numerous bathroom cabinet door panels appear to be loose on their hinges and wobble/move when opened/closed.

Safety enhancement upgrade advised: Upon transfer of possession all locking door units should be re-keyed or have the locks and deadbolts replaced for the new occupants assurance of privacy and safety.

Safety enhancement upgrade advised: Although the subject property may meet the building standards for when it was constructed the entry door from the garage to the living space requires a self closing mechanism too minimize hazardous vehicle exhaust and other fumes from entering the living space thus contaminating or fouling the indoor air quality.

X	☐	☐	☐	**H. Windows Comments:**

83- Typical: The subject property windows have been tested for the presence of a Low-E coating with a Low-E detector. All windows tested positive for this coating and its proper #2 surface location for our climate. The only exceptions are the glass in doors that typically are not equipped with Low-E coatings.

Type: Vinyl Insulated Glass Units (IGU) wherever visible. I was unable at this time to determine thermal efficiency of all window units because all of the units present are either not clean enough and differing lighting, thermal or humidity conditions may be necessary to expose any such failures.

X	☐	☐	☐	**I. Stairways (Interior & Exterior) Comments:**

AFI

X	☐	☐	X	**J. Fireplace/Chimney Comments:**

88- A possible leak was detected at the gas shut off valve and at the ignition area for the fireplace have a qualified plumber check all gas components associated with this unit.
Remote or auto control(s) are not inspected. Seasonal gas valve operation is not verified and open flame inspection is not conducted on open front or manual operational units.

89- Type: Metal

Energy source: Logs or other approved manufactured products

Manual ignition: The inspector does not apply any open flames therefore any units present were not tested for function have the owner or other qualified person demonstrate proper ignition before the end of your inspection contingency option period.

Yearly inspections and maintenance are advised prior to seasonal usage. Component malfunction can result in the potential for property loss or life endangerment.

90- The inner reaches of a flue are relatively inaccessible, and it should not be expected that the distant oblique view from the top or bottom is adequate to fully document damage even with a strong light.

Consult a verified/qualified/licensed contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

AFI=Appears to Function as Intended **NC**=No Comments
I=Inspected **NI**=Not Inspected **NP**=Not Present **D**=Deficient

I	NI	NP	D	Inspection Item

Therefore, because the inspection of chimneys is limited to those areas that can be viewed without dismantling any portion of them, and does not include the use of specialized equipment, we will not guarantee their integrity and recommend that they be video-scanned before the close of escrow. The National Fire Protection Association http://www.nfpa.org advises that each chimney receive a Level II inspection each time a residence is sold. Inspection Levels Explained: http://www.csia.org/HomeownerResources/ChimneySafetyInfo/ChimneyInspections/tabid/116/Default.aspx it is also advised that this inspection be conducted by a tradesperson certified by the Chimney Safety Institute of America http://www.csia.org Fireplace Investigation Research and Education http://www.f-i-r-e-service.com or International Association of Fireplace and Chimney Inspectors http://www.membersiafci.org

Safety enhancement upgrade advised: Properly install a flue damper clamp at all units present as required.

Fireplaces are energy losers. Your heated or conditioned air leaks out any exit it can find, and when air is drawn out of your property , outside air is drawn in to make up for it. The fireplace is like a giant straw sucking the air from your house. An easy, low-cost solution to this problem is to add a removable fireplace draft stopper too be installed only when the fireplace is not being used.

X	☐	☐	☐	**K. Porches, Balconies, Decks and Carports (Attached) Comments:**

Not present no comment required

X	☐	☐	☐	**L. Other Item Comments:**

Fence type: Wood on wood post AFI

II. ELECTRICAL SYSTEMS Failure to repair all known hazards reported or found by the inspector or an electrician can result in the potential for property loss, occupant(s) injury, or in the worst cases life endangerment. **NEVER ATTEMPT** to do electrical work yourself unless you are trained and qualified.
Electrical Safety Information: http://www.adairinspection.com/ElectricalSafety
Ways to reduce your bills: http://www.energystar.gov/index.cfm?c=home.index
Consult a verified/qualified/licensed electrical contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

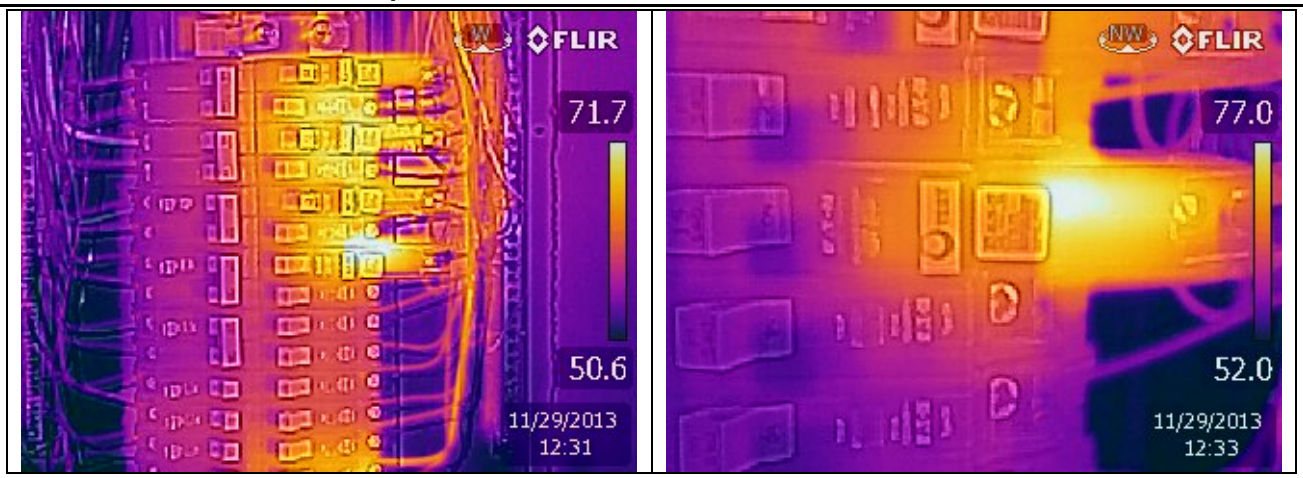
X	☐	☐	X	**A. Service Entrance & Panels Comments:**

66- The bottom AFCI did not trip by the internal test button. Advise ***Immediate replacement*** with a properly working device. Also excess heat was noted with thermal imaging see overview and detail images below.

Consult a verified/qualified/licensed contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

AFI=Appears to Function as Intended **NC**=No Comments
I=Inspected **NI**=Not Inspected **NP**=Not Present **D**=Deficient

I	NI	NP	D	Inspection Item



69- Bundling & Derating: http://www.southwire.com/support/DeratingAmpacities.htm

During the testing of the existing Arc Fault Circuit Interrupter (AFCI) breakers one failed to de-energize when its test button was pushed. The following areas of the home did not de-energize while all others required did. The entire second floor, front, left bedroom, bathroom, and closet.The first floor, front bedroom's bathroom and closet.

Safety enhancement upgrade advised: TREC requires the inspector to report as deficient. An Arc Fault Circuit Interrupter (AFCI) device does not protect one or more of the branch circuits at this subject property. AFCI are electrical devices designed to protect against fires caused by arcing faults in the electrical wiring. All homes where the AFCI is absent or incomplete can benefit from the added protection of AFCI.
General AFCI info http://www.cpsc.gov/cpscpub/pubs/afcifac8.pdf
NEC 2008 AFCI info and locations http://www.afcisafety.org/codes.html#NEC2008
AFCI Trip Causes http://ecatalog.squared.com/pubs/Web...0760DB0204.pdf

Electrical Service Size: 200amp

63, 65- Eaton Panel Service Rating: 225amp

67- Main Breaker Rating: 200amp

62- Main Distribution Panel Location: Garage interior

Meter location: Mounted on the right garage exterior wall.

Underground SLC wire type: Copper wherever visible

Branch Circuit wire type: Copper wherever visible

Over Current Devices: Circuit Breakers & partial AFCI wherever visible

Service Ground: Copper wherever visible Due to buried or covered components proper ground is not verified as specialized equipment is required for test purpose. Information/Maintenance: For an effective earth ground if a qualified and licensed electrician cannot demonstrate a resistance to ground of 25 Ohm or less then a additional grounding electrode (rod type or other) is recommended to be installed not less than 6 feet apart. [ref: 1978 NEC 250-84 to current 2011 NEC 250.53(A)] Foundations placed upon plastic sheeting or vapor barriers are not considered to be in contact with the earth. [ref: 2011 NEC 250.52(A)(3) Note]

35, 70- Ground and bonding connections: Clamped at ground rod and at UFER access

I	NI	NP	D	Inspection Item

http://www.psihq.com/iread/ufergrnd.htm. Corrosion is present and may inhibit proper function and component connections. Advise immediate replacement with non-corrosive rod as required.

Safety enhancement upgrade: Bonding is connecting any metallic pipe that may become energized and must be bonded (to ground). Bonding is usually achieved by clamp connecting a bare copper jumper wire across the water pipes. Water heaters are often installed with dielectric unions, plastic pipe or poly hose, which breaks any grounding path through the water heater therefore the jumper shall also be connected to the hot water supply piping. Bonding all piping including electrical conduits, metallic gas lines, metal air ducts, flues or vents within the premises will provide additional safety. Each aboveground portion of a gas piping system that is likely to become energized shall be electrically continuous and bonded to an effective ground-fault current path. Gas piping shall not be used as a grounding conductor or electrode.

X ☐ ☐ X **B. Branch Circuits-Connected Devices and Fixtures Comments:**

18- Properly secure the unidentified metal flex conduit and outlet box at the patio as required.

30- Properly secure the receptacle outlet box in the water heater cabinet.

17A, 18A, 19A - A large gauge (8 AWG) electrical cable of Type NM has been improperly routed through the attic space without the benefit of appropriate hangers. This cable has been allowed to drape on ductwork, ductwork straps, and through framing members improperly for support.

19A - Other electrical and low voltage cabling has been improperly been run over and allowed to rest on flexible ductwork instead of properly supported away from it. This is only one example found.

58A - The electrical supply lines for the heater/air handlers are being improperly run across the equipment cabinets, in front of the evaporative cooler coil case covers (potential safety blockage), and are loose which can potentially shift and come in contact with the hot heater flue pipes. These cables are not being properly run, supported, and secured.

68A - The floor outlet in the second floor open area is loose in the floor and moves freely when its protective cap is opened and if any item is plugged into it. The right side case screw is also bent and damaged.

Please Note - The outlet in the ceiling of the media room was not tested as it is not readily accessible without a ladder.

54, 55- FYI: One or more furnishing obstructed receptacles or covered junction boxes were not accessed for electrical testing

Branch Circuit wire type: Copper wherever visible

- When a washing machine or dryer are present the equipment is not moved and their associated electrical receptacles are not unplugged tested/inspected.

Only a random representative number of accessible outlets are tested when the property is occupied. Devices controlled by remote, computer, photocell switches, timers, landscape, grounds lighting, audio, visual, telecommunications, lightning suppression, and surge protection wiring, devices, components and equipment are beyond the scope of this inspection and excluded in their entirety. Consult specialists in these fields when further information or inspections are required.

Safety enhancement upgrade advised: The lack of GFCI protection at all required locations is a known electrocution hazard that has been documented in numerous incidents of electrocution, upgrade install GFCI protection immediately too prevent accidents at all bathrooms, garages, exterior, crawl space (at or below grade), unfinished basement, kitchen, laundry and boathouses, with other locations being added as the codes change. All receptacles that are GFCI protected require GFCI labels. See this site for further

Consult a verified/qualified/licensed contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

AFI=Appears to Function as Intended **NC**=No Comments
I=Inspected **NI**=Not Inspected **NP**=Not Present **D**=Deficient

I	NI	NP	D	Inspection Item

information on required locations and report completion:
http://ecmweb.com/mag/electric_branch_circuits_part_2/
GFCI receptacle example image only and is not the only available color, type, style or configuration of these devices. GFCI breakers are also available for entire circuit protection.

Safety enhancement upgrade advised: All 15A and 20A, 125V receptacles shall be listed as tamper resistant. This applies to all receptacles as well as those installed behind appliances, above countertops, and other locations that may be considered out of the reach of children. Tamper resistant receptacle example image only and is not the only available color, type, style or configuration of these devices.

X ☐ ☐ ☐ **C. Smoke Alarms-Fire Protection Equipment and Carbon Monoxide Detection Comments:**

Residence: Current Texas Law: Requires the state prepare information relating to the availability of carbon monoxide detectors, their use in preventing carbon monoxide poisoning; and the need to properly use and maintain fossil fuel-burning appliances. One detector per floor.

The installation of interconnected (sound or visibly alert at all locations) combination type ionization/photoelectric smoke detectors/alarms is now required in new construction and upgrading of older property is advised. These smoke detectors/alarms are required on each floor level including the basement, crawl space, and attic, where applicable, inside of any rooms where sleeping may occur and outside within the near proximity of the doors to these rooms. Test all alarms and detectors by both the test button and smoke per the manufactures instructions. Click link for further information and report completion
http://www.nfpa.org/categoryList.asp?categoryID=278&URL=Research%20&%20Reports/Fact%20sheets/Smoke%20alarms

The installation of Carbon Monoxide (CO) detector(s) is advised and required in homes with fuel-fired appliances at every floor elevation including the basement, crawl space, and attic, where applicable, and in the proximity of fuel-fired equipment. Must read Carbon Monoxide information:
http://www.cpsc.gov/CPSCPUB/PUBS/464.pdf

Low level CO Detector Information:
http://www.nationalcomfortinstitute.com/members/products2.cfm?product_id=21&Cat=Consumer%20Products

The installation of Type ABC fire extinguisher(s) at the kitchen, laundry, and garage, if applicable, is also advised. Test all of these devices monthly. Install new batteries yearly or more often as necessary.

Initiate and practice plans of escape and protection for all occupants in case any emergencies arise.

For further information about fire safety and CO poisoning consult your local Fire Department, your

Consult a verified/qualified/licensed contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

AFI=Appears to Function as Intended **NC**=No Comments
I=Inspected **NI**=Not Inspected **NP**=Not Present **D**=Deficient

I	NI	NP	D	Inspection Item

equipment manufacture(s) and print and read these links for your report to be complete
http://www.usfa.dhs.gov/downloads/pdf/publications/fa-250f.pdf
http://www.cpsc.gov/cpscpub/pubs/556.html
http://www.usfa.dhs.gov/downloads/pyfff/inhome.html
http://www.epa.gov/iaq/co.html
2009 CO Detector types and placement:
http://www.ulenvironment.com/global/eng/documents/offerings/perspectives/regulators/technical/ul_CarbonMonoxideAlarms.pdf

Smoke and CO detectors/alarms are often connected to the fire and security alarm systems, test operation of these detectors may result in nuisance visits by fire departments or police. The built-in test button, when present, only verifies proper battery and test-light function; it does not test sensing capabilities therefore detectors will not be tested. The smoke and CO detectors/alarms are only evaluated for proper location consult your equipment manuals or security monitor for further details and too assure proper function. All units shall be fully evaluated and tested per the manufacture's instructions and replaced at least every 10 years. Unless you are certain of the unit(s) age I always strongly recommend replacement upon the changing of ownership.

Recommendation: Obtain pertinent information from seller before the end of your inspection option period and have the entire system checked by a qualified technician from the security alarm company or your local fire department.

III. HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS (Note: Humidifier(s), dehumidifier(s), electric air filter(s), discharge pump(s), programmable thermostat(s), remote or auto control(s), and airflow balance is not inspected.) Luxury features, ancillary equipment, and thermostat(s) calibration are not inspected.
Do not destroy the installation and service manuals. Please read them carefully and keep in a safe place for future reference for yourself and service persons. In the event manuals are not present for your specific heating or air conditioning systems or units; most are available online by contacting or searching the manufacture, brand, model number and or serial number.

- Any recalls are beyond the scope of this inspection, further information regarding your appliances is available through the U.S. Consumer Product Safety Commission: http://www.cpsc.gov
- Indoor air quality information: http://www.epa.gov/iaq/pubs/insidest.html#IAQHome1
- The components of the air conditioning and heating systems may have a design life ranging from ten years or more but can prematurely fail anytime before this especially if seasonal maintenance is not performed. We test and evaluate these systems in accordance with the standards of practice, which means we do not dismantle and inspect the concealed portions of the heat exchanger, evaporator or condensing coils or run any tests requiring specialized equipment. We perform a conscientious evaluation of these systems, but we are not specialists in this field. Therefore, in accordance with the terms of our contract it is essential that any recommendations for service or a second opinion by a heating and cooling specialist be done before the close of escrow, because a specialist could reveal additional deficiencies or defects after dismantling the equipment for service, which could affect your final evaluation of the property. The manufacturer generally only guarantees heating and cooling equipment for one year after installation.

Consult a verified/qualified/licensed HVAC contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

X ☐ ☐ X **A. Heating Equipment Comments:**

Type of System: Central Heat

Energy Source: Gas

I	NI	NP	D	Inspection Item

32A, 45A, 46A - This gas heater set is obtaining its combustion air from the attic utilizing two solid ducts which terminate in the attic as displayed in Picture 32A. This is an acceptable method however it is not fully implemented properly. One duct should terminate within 12" of the closet floor and one within 12" of the ceiling. Both duct termination points should have no obstructions to allow a free and circulating air flow in the equipment cabinet. Both of the ducts are terminating within 12" of the cabinet floor, and the left side duct is potentially impeded by the flexible return air duct and limited space around it.

44A, 46A, 51A - The equipment closet and the interior of the heater/air handler cabinets require cleaning of construction debris from scrap pieces of material to sawdust and wood chips.

57A - The low voltage control cables are being brought into the heater/air handler cabinet through sharp edged openings and without the benefit of proper protective bushings and clamps.

58A - The electrical supply lines for the heater/air handlers are being improperly run across the equipment cabinets, in front of the evaporative cooler coil case covers (potential safety blockage), and are loose which can potentially shift and come in contact with the hot heater flue pipes.

Interior Heater/Air Handler Units

48A - Left side unit - Handling the downstairs area.
Manufacturer: Carrier
Model #: 58PHA110-20
Serial #: 3612A18402
Date Manufactured: September 2012

55A - Right side unit - Handling the upstairs area.
Manufacturer: Carrier
Model #: 58PHA110-20
Serial #: 1412A15263
Date Manufactured: April 2012

Testing and evaluating the Heating systems is in accordance with the standards of practice, which means the systems are not dismantled and the concealed portions of the heat coils or heat exchanger are not observed nor are any tests run requiring specialized equipment or gauges.
It is beyond the scope of this inspection to determine the uniformity, temperature, flow, balance, distribution, size, capacity, BTU, or supply adequacy of the heating system(s).

According to industry standards, functioning as designed is defined as the system is capable of maintaining a temperature of 70°F, as measured in the center of each room at a height of 5 feet above the floor under local design conditions as specified in the ASHRAE Handbook: Fundamentals.

Note: Full evaluation of the integrity of a heat exchanger requires dismantling of the furnace and is beyond the scope of a visual inspection. Tests are performed to try and determine if there are cracks or holes in the heat exchanger; however they are not conclusive unless visually observed.

X	☐	☐	X	**B. Cooling Equipment Comments:**

25- Most condensing unit manufactures require at least 18” clearance at all sides of the unit and 24” between units for proper operation and routine maintenance tasks. Consult owner manuals or installation instructions for further specific information.

Last service date is over one year ago. Initial install service label. No other data was made available to the inspector this is deficient for the recommended routine biannual or seasonal maintenance advised by most manufacturers. For optimal performance complete seasonal service of all equipment is recommended

I	NI	NP	D	Inspection Item

Type of System: Central Air

Due to the cold temperatures today these systems were only momentarily operated to ensure they would activate and did not display any noticeable issues. This is not a reliable test of the capability of these units and due to the mastics sealing the interior evaporative cooler coil cases these were not opened for a visual inspection.

73A - The primary condensate discharges for both interior evaporative cooler coils appear to be combined and brought to the vanity sink in the bathroom behind the second floor equipment cabinet. The use of a black, flexible hose in this manner has been generally approved by local Building Inspection Departments. However you should be aware that these discharge lines can carry large amounts of condensation from the air conditioning system and use caution when storing items under this sink to preclude the chance of damaging or disconnecting them.

Interior Evaporative Cooler Coil Units.

49A - Left side unit - Handling the downstairs area.
Manufacturer: Carrier
Model #: CNPVP4324ALAAAAA
Serial #: 2312X20214
Date Manufactured: June 2012
Refrigerant: R-410A

54A - Right side unit - Handling the upstairs area.
Manufacturer: Carrier
Model #: CNPVT4221ALAAAAA
Serial #: 3212X39611
Date Manufactured: August 2012
Refrigerant: R-410A

23, 24- Condensing unit data labeling. Most manufactures instruct that the AC condensing unit(s) not be operated when the outside temperature has been at or below 60°F. Therefore the unit(s) were only visually inspected and only operated to assure fan operation. The unit(s) present should be operated to establish proper function of all components and any repairs or replacements deemed necessary shall be completed by a qualified technician prior to the end of your warranty inspection option period.

Instruction manual(s) present: No consult owner or contact manufacturer

X	☐	☐	X	**C. Ducts Systems, Chases and Vents Comments:**

19A, 24A - Electrical and low voltage cabling has been improperly been run over and allowed to rest on flexible ductwork instead of properly supported away from it. This is only one example found.

30A, 31A - Ductwork is not being fully sealed with mastics and/or tapes where they attach to the distribution plenum's and registers. No seals/gaskets were noted at the registers, between them and the ceiling, inside of the home. Proper sealing of ductwork is needed to help ensure system air leakage is kept to a minimum or eliminated.

37A, 38A, 39A, 40A, 41A, 42A, 43A, 52A, 53A, 59A, 60A, 61A - The return air configuration for these units is an atypical arrangement. Both units are located in one cabinet with an open return air input located next to each other. The plenum area under the units is sealed off between the two units but these are still both open inputs next to each other. The left side unit appears to control the downstairs heating and cooling requirements with only one return air grill located in the ceiling just outside of the laundry room and no others located anywhere on the first floor area, and no jump ducts from the two bedroom areas downstairs, as well as the front study, into hallways to help assist with air circulation. Each model/design of a home should have

Consult a verified/qualified/licensed contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

AFI=Appears to Function as Intended **NC**=No Comments
I=Inspected **NI**=Not Inspected **NP**=Not Present **D**=Deficient

I	NI	NP	D	Inspection Item

its entire heating and cooling system engineered for its conditions. I would recommend that you have the builder display the engineered plans for this home's heating/cooling system and compare them to all equipment placements to include where the design called for return air duct openings to ensure this system is installed as engineered.

59A, 60A, 61A - In the return air plenum for the right side air handler unit (under the equipment cabinet) foam insulation board has been mounted around the input to the filter cabinet. This foam can potentially cause air flow restrictions in the system. I recommend that you speak with the builder to determine why this has been installed this way.

During the texturing and painting of drywall the heating/cooling system ductwork points were not properly covered over. Paint and/or texture have been oversprayed into the ductwork.

Please Note - With the exception of the master bedroom closet none of the closets (bedrooms or other closets) in the home are equipped with heating/cooling supply vents and no ventilation provisions such as jump ducts from them to the conditioned areas. This has the potential to cause significant temperature variations between these closed off closets and the rest of the conditioned areas. This is especially important for closets whose walls are located against the exterior walls or unconditioned attic spaces. These temperature variations, and no ventilation in the closet can potentially cause moisture issues inside the closet along with the negative effects of unventilated moisture.

Please Note FYI: During the heating system checks the air distribution for supply air is also checked. All downstairs supply vents are serviced by one unit with all upstairs supply vents serviced by the other unit.

Metallic louvered vents wherever visible

Flex ducts wherever visible

Note: The Inspector is not required to determine the uniformity of the supply of conditioned air to the various parts of the structure or to determine the efficiency, adequacy or capacity of the duct system. The condition of ducts under slabs, covered, covered by attic insulation or in other inaccessible areas cannot be determined.

IV. PLUMBING SYSTEM

Note: All exposed supply pipes in the attic, crawlspace, and outdoors should be properly insulated to protect from freezing. Keep any and all exposed pipes or plumbing fixtures warm. Be sure to heat your whole house to a minimum of 62°F even when plumbing winterizing has occurred. Keep all interior room and cabinet doors open to allow warm air to circulate. During intense or prolonged freezing temperatures allow both the hot and cold water to trickle from every valve/faucet inside your house. Many of the components are unobservable therefore; all pipes, reservoirs, and all related equipment concealed in enclosures or under ground are not inspected for material type(s), leaks, defects, or nonworking parts. The system is only inspected for the presence of fixtures and visual function. All luxury ancillary equipment is not inspected nor included as part of this report. Odors, turbidity, or discoloration may occur from the water supply piping during prolonged vacancy or other specific conditions such as but not limited to supply contaminants, sacrificial anode failure or bacterial growth. In the event flushing, allowing both the hot and cold water to run for a prolonged period of time at all fixtures and the water heater(s) does not resolve this condition consult a verified/qualified/licensed plumber for further information and any required appropriate action or repairs.

- CDC Plumbing Systems Information: http://www.cdc.gov/nceh/publications/books/housing/cha09.htm
- Advise the installation of a flood stop system at all potential locations present that will terminate the water supply upon activation before water/flood damage occurs http://www.getfloodstop.com/?Click=47
- Any recalls are beyond the scope of this inspection, further information regarding your appliances is available through the U.S. Consumer Product Safety Commission: http://www.cpsc.gov

Consult a verified/qualified/licensed plumbing contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade

I	NI	NP	D	Inspection Item

recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

Note: The condition of underground water supply, gas supply and any waste pipes cannot be determined within the scope of this inspection. Static, hydrostatic or drainline scope tests are not part of this inspection. Leaks may be present that cannot be detected within the scope of this inspection. Shower pans on slab foundations are not accessible and inspection results are not conclusive.

X ☐ ☐ X **A. Water Supply System and Fixtures Comments:** (See Plumbing System Notes above)

Typical: Water flow drops significantly when multiple fixtures are operated at the same time. The current configuration wastes water, utilities and are not energy efficient. Advise consulting a qualified plumber about increasing fixture flow and hot water delivery or other remedies.

Location of water meter: On the front curb at the front, left of the property

Location of main water supply valve: There appears to be two potential main water valves. One is located in a valve box to the right of the front entry, in the garden beds. The other appears to be located in the garage, behind a plastic panel, next to the walk through entry door to the house.

67A - During testing of the tubs and sinks significant water pressure drops were noted when more than one tub/shower cold and/or hot water valves were turned to the fully on positions. This is an example displaying the upstairs private tub with a significant pressure drop when a downstairs tub was running.

In the second floor, right rear bathroom, the vanity sink stopper of the vanity for the bedroom side does not fully seal to hold water in the bowl.

74A, 75A - In the second floor, right, rear bathroom the toilet is missing the protective cap over its mounting bolt on the right side.

- When a washing machine is present the equipment is not moved and the associated water supply are not disconnected/tested/inspected.

Supply Pipe Type: Copper & PEX pipe or fittings wherever visible

Location of water meter: Front curb easement. No Movement was observed at the meter's leak-test indicator after all systems use was discontinued for inspection purposes

71, 72- Location of main water supply valve: Water supply cutoff valve(s) were located at the water meter and at the garage access panel.

Static water pressure reading: The water pressure was 42~55 psi throughout the inspection identified with an uncalibrated gauge when measured at the exterior hose bib/sillcock this is within the recommended 40~80 psi standards. Static water pressure may vary at different times of the day depending on what pressure is being delivered by the supply source. In some communities municipal water pressure varies little while in others the variation can be significant, please be advised that the reading reported may not be accurate over a 24 hour period.

- No leaks observed at the washing machine hookups Advise installation of stainless steel reinforced burst proof washing machine water supply hoses at all required locations. Best practices advise that all interior installed washing machines that could leak and cause property damaged should be installed in an approved drainpan with additional flood stop mechanisms installed. When a washing machine is present the equipment is not moved and the associated water supply are not disconnected/tested/inspected.

Concerns about your water quality in the delivery system components and fixtures are beyond the scope of a

I	NI	NP	D	Inspection Item

general property inspection. I advise you read these links, contact your water supplier and consult a qualified specialist for further information too address your needs: http://www.tceq.state.tx.us/ http://www.cdc.gov/nceh/lead/tips/water.htm

X ☐ ☐ X **B. Drains, Wastes, Vents Comment:** (See Plumbing System Notes above)

Drain Pipe Type: PVC pipe or fittings wherever visible

Cleanouts were located at the walls and front flower bed

80A - The full routing of the main sewer line from the home to the street is not known. However directly behind this front yard tree seen here, under the front bedroom window, are the two main sewer drain clean-outs (black painted PVC). It is expected that these main drain line is potentially headed straight out to the street. You should be aware that as this tree matures it can have a potential affect on the underground portions of this drain line if precautions to protect it have not been taken. I would recommend that you speak to the builder to determine what steps if any have been taken to help preclude the chance of tree root damage to this and possibly the main water line to the home.

Drain test protocol: All toilets and bidets will be flushed at least 3 times, all sinks, lavs, tubs and showers will flow test at least 10 minutes and are filled to overflow, unless damage to fixture or property will occur or is observed prior to or during any portion of the test procedure. Floor or other non-appliance or fixture connected drains are not inspected due to property damage potential. All encapsulated wall, ceiling, floor or buried portions of the drainline systems cannot be observed and therefore are not commented upon. This is not an exhaustive all inclusive drain function or leak detection test and further hydrostatic tests or a video-scan of the drainline systems would confirm their actual current condition or function potential and your Inspector highly advises that you have these tests performed. Drainpipes are only visibly evaluated at the attached active fixture(s) by the flushing of their drains while observing its draw and watching for blockages or slow drainage.

X ☐ ☐ X **C. Water Heating Equipment Comment:**

30- Assure all piping is properly insulated and all penetrations are sealed.

No thermal expansion device-tank was observed and no drain pan was observed. See install manual page 5 sent in a separate attachment to this report. If a water heater is installed in a closed water supply system, such as one having a backflow preventer in the cold water supply line, means shall be provided to control thermal expansion. Contact the water supplier or local plumbing inspector on how to control thermal expansion.

Some delay in hot water presence at a particular fixture may occur unless on demand or recirculating systems appliance equipment are installed.

28- Rinnai RL94 water heater(s) label

Do not destroy the water heater(s) installation and service manuals. Please read them carefully and keep in a safe place for future reference for yourself and service persons. In the event manuals are not present for your specific system or units; most are available online by contacting or searching the manufacture, brand, model number and or serial number.

Energy source: Gas Fueled appliance

Capacity Size in Gallons: Tankless exterior vented

29- Number of Units: One mounted in the right garage exterior wall.

Consult a verified/qualified/licensed contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

AFI=Appears to Function as Intended **NC**=No Comments
I=Inspected **NI**=Not Inspected **NP**=Not Present **D**=Deficient

I	NI	NP	D	Inspection Item

40, 60- Water Temp**:** 114℉ when thermostat control reads 120℉ and read the CPSC Scald link for further information about proper water heater temperatures: http://www.cpsc.gov/CPSCPUB/PUBS/5098.html

33- The Temperature and Pressure Relief Valve (TPRV) was operated
MANUFACTURER WARNING: REINSPECTION OF T&P RELIEF VALVE: Temperature and Pressure Relief Valves should be reinspected AT LEAST ONCE EVERY THREE YEARS by a licensed plumbing contractor or authorized inspection agency, to insure that the product has not been affected by corrosive water conditions and to insure that the valve and discharge line have not been altered or tampered with illegally. Certain naturally occurring conditions may corrode the valve or its components over time, rendering the valve inoperative. Such conditions are not detectable unless the valve and its components are physically removed and inspected. Do not attempt to conduct this inspection on your own. Contact your plumbing contractor for a reinspection to assure continuing safety. FAILURE TO REINSPECT THIS VALVE AS DIRECTED COULD RESULT IN UNSAFE TEMPERATURE OR PRESSURE BUILD-UP WHICH CAN RESULT IN SERIOUS INJURY OR DEATH AND/OR SEVERE PROPERTY DAMAGE. IMPORTANT: A relief valve functions in an emergency by discharging water. Therefore, it is essential that a discharge line be piped from the valve in order to carry the overflow to a safe place of disposal. The discharge line must be the same size as the valve outlet and must pitch downward from the valve and terminate at least 6"(152mm) above the floor drain or wherever any discharge will be clearly visible.

☐ ☐ X ☐ **D. Hydro-Massage Therapy Equipment Comments:**

Not present no comment required

V. APPLIANCES

- Advise getting copies of all instruction manuals prior to the end of your inspection option period. Do not destroy the installation and service manuals. Please read them carefully and keep in a safe place for future reference for yourself and service persons. In the event manuals are not present for your specific systems or units; most are available online by contacting or searching the manufacture, brand, model number and or serial number.
- Any recalls are beyond the scope of this inspection, further information regarding your appliances is available through the U.S. Consumer Product Safety Commission: http://www.cpsc.gov

Consult a qualified appliance contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

X ☐ ☐ ☐ **A. Dishwasher Comments:** Operation is inspected in Normal cycle only. Luxury features are not inspected.

39- Frigidaire
The unit present is properly secured and was operated AFI

X ☐ ☐ ☐ **B. Food Waste Disposal Comments:**

37, 38- Insinkerator Model 1-87
The unit present is properly secured and was operated AFI
http://www.insinkerator.com/en-us/Service-Support/Pages/Downloads.aspx

X ☐ ☐ ☐ **C. Range Exhaust Vent Hood Comments:**

41- Frigidaire
The unit present is properly secured and was operated AFI

X ☐ ☐ ☐ **D. Ranges, Cooktops and Ovens Comments:** Clock, timer, auto cook, self-clean, rotisserie, probe thermometer, and other luxury features are not inspected for accuracy or operation.

Consult a verified/qualified/licensed contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

AFI=Appears to Function as Intended **NC**=No Comments
I=Inspected **NI**=Not Inspected **NP**=Not Present **D**=Deficient

I	NI	NP	D	Inspection Item
				43, 46- Electrolux Home Products Cooktop Energy Source: Gas Fueled appliances should have Carbon monoxide (CO)detectors installed at all of the required locations. Advise immediate installation at all required locations when CO detectors are not present or not functioning as intended. Four elements or burners AFI Oven Energy Source: Electric 47, 48, 50, 52- Frigidaire Upper Oven Temp: Set at 350°F**=** 360°F thermostat accuracy is within 25°F at a setting of 350°F. The unit present is properly secured and was operated bake and broil elements AFI 47, 48, 51, 53- Frigidaire Lower Oven Temp: Set at 350°F**=** 373°F thermostat accuracy is within 25°F at a setting of 350°F. The unit present is properly secured and was operated bake and broil elements AFI
X	☐	☐	☐	**E. Microwave Oven Comments:** Units are not checked for radiation leakage. 49- Electrolux Home Products The unit present is properly secured and was operated AFI operation, as determined by heating a container of water or with other means of testing.
☐	☐	X	☐	**F. Trash Compactor Comments:** Not present no comment required
X	☐	☐	☐	**G. Mechanical Exhaust Vents and Bathroom Heaters Comments:** Heat Source: HVAC vents only Exhaust fans The unit(s) present is properly secured and was operated AFI Timer(s) are not inspected for accuracy or operation. Exhaust fans: All units present shall terminate at an exterior location with weather cover protection. The air removed by every mechanical exhaust system shall be discharged to the outdoors. Air shall not be exhausted into an attic, soffit, ridge vent or crawl space. Exception: Whole-house ventilation-type attic fans that discharge into the attic space of dwelling units having private attics shall be permitted.
X	☐	☐	X	**H. Garage Door Operators Comments:** Inspected in manual and installed wall console/button control operation only. Remote controls and auxiliary keypads are not inspected. Please read these articles and inspect doors monthly, entrapments and deaths have been documented with faulty equipment. Print and read these documents for your report to be complete. http://www.dasma.com/safetygdmaint.asp http://www.dasma.com/PDF/Publications/TechDataSheets/CommercialResidential/TDS167.pdf 82A - The sensor eyes on both of the door tracks are improperly mounted higher that 6". This is considered a safety hazard. Large garage door opener Manufacturer: Linear Model #: LD050 Serial #: None displayed Date Manufactured: Unknown

Consult a verified/qualified/licensed contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

AFI=Appears to Function as Intended **NC**=No Comments
I=Inspected **NI**=Not Inspected **NP**=Not Present **D**=Deficient

I	NI	NP	D	Inspection Item
				Small garage door opener Manufacturer: Linear Model #: LD050 Serial #: None displayed Date Manufactured: Unknown Instruction manual(s) present: No consult owner or contact manufacturer Balance AFI Emergency release rope/handle AFI Labeling is not present as required install at all locations noted in the owner manual Motion Sensor AFI requires adjustment for proper operation Reversing Downward Force requires adjustment for proper operation. The garage door opener safety function to reverse on striking an object in downward travel and stop when encountering resistance in upward travel is not functioning on either garage door opener. The sensor eyes on the door tracks do function correctly. Safety bolts for hinges, rails, rollers and torsion spring(s): AFI Upward force requires adjustment for proper operation Wall console/button control AFI Consult a qualified garage door specialist for evaluation of the entire systems components when repairs are noted.
X	☐	☐	☐	**I. Doorbells and Chimes Comments:** Intercom, radio, and other luxury features are not inspected. The unit present is properly secured and was operated AFI
X	☐	☐	☐	**J. Dryer Vents Comments:** Clear lint filter(s) of debris after each use; this will reduce a known fire hazard, dry time, and energy costs. Please print, read and follow these instructions for your report to be complete: http://www.dryerbox.com/dryer_venting_guide.htm http://www.appliance411.com/faq/dryer-vent-length.shtml The unit present is properly secured and was operated AFI
				VI. OPTIONAL SYSTEMS Advise getting copies of all instruction manuals prior to the end of your inspection option period. Do not destroy the installation and service manuals. Please read them carefully and keep in a safe place for future reference for yourself and service persons. In the event manuals are not present for your specific systems or units; most are available online by contacting or searching the manufacture, brand, model number and or serial number.

Consult a verified/qualified/licensed contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

AFI=Appears to Function as Intended **NC**=No Comments
I=Inspected **NI**=Not Inspected **NP**=Not Present **D**=Deficient

I	NI	NP	D	Inspection Item
X	☐	☐	X	**A. Lawn and Garden Sprinkler Systems Comments:**

Typical at all exterior walls and all sides of the subject property. The yard or landscape irrigation system adjacent to or that impacts the structure(s), walls, windows, doors, pavements, appliances or any other equipment shall be considered for conversion to a soaker, drip, bubbler or other means to keep water away from the exterior walls and windows. Foundation moisture shall be the primary consideration before any changes in the existing system are implemented. Consult a licensed Irrigation Professional for conversion details and cost estimates.

91A - In Zone 3 heads are not fully extending upward to clear the grass and provide a proper spray pattern.

Zone 6 - A spray head has been located in the left rear corner of the yard behind a tree which is partially blocking its coverage. However the remaining of the heads near this area are overlapping to provide needed coverage.

Zone 8 - A pop-up spray head just inside of the walk through fence gate, on the right side, is improperly tilted backward. When it activates it catches on the fence and does not retract when the zone shuts down.

95A, 99A, 102A - Most sprinkler zones require adjustment to spray patters to prevent spraying on the fence, the house walls and window ledges, and the various equipment around the house. This repeated spraying on these items can accelerate their aging, damage them, and potentially cause water penetration into the house where it strikes the exterior walls and windows.

Please Note - Underground Soaker hoses are not uncovered during this inspection to check for proper operation. At this time Zone 1 did have an exposed line to the right of the front entry that activated but no others were visible. Zone 2 did not have any visible or audible indications of where it might be but is expected to be the front curb areas. I would highly recommend that you obtain a full sprinkler plan from the builder to display all buried parts of the system and have the builder demonstrate the operation of buried zones to confirm they are properly functioning. At that time the builder can also provide you a full and proper routine test procedure for all zones including the buried zone equipment.

Controller
Manufacturer: Hunter
Model #: Pro-C #PCC-900i
Serial #: None displayed
Date Manufactured: November 2012

For your benefit the Zones and their coverage are noted here. Pictures 87A - 105A will display each Zone on the control panel as it is activated with a brief picture displaying the zones after it. Picture 106A displays the mounting point on the gutter for the system rain and freeze sensor.

Zone 1 - Buried soaker hoses in at least the garden area to the right of the front entry porch.
Zone 2 - Unknown as nothing activates and buried soaker hoses are not all visible.
Zone 3 - Pop-ups on the right side of the driveway from the front public sidewalk to the front corner of the garage.
Zone 4 - Pop-up oscillating heads covering the entire front yard, left side, from the front left corner of the house to the public
sidewalk and across to the driveway.
Zone 5 - Pop-up heads on the left side of the home from the front to rear corners of the house.
Zone 6 - Pop-up oscillating spray heads that cover the entire left side of the rear yard from the left fence to the middle of the rear
patio.
Zone 7 - Pop-up oscillating spray heads that cover the entire right side of the rear yard from the right fence to the middle of the
rear patio.

Consult a verified/qualified/licensed contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

AFI=Appears to Function as Intended **NC**=No Comments
I=Inspected **NI**=Not Inspected **NP**=Not Present **D**=Deficient

I	NI	NP	D	Inspection Item

Zone 8 - Pop-up spray heads that cover the entire right side of the home from the right rear to right front corner of the house.
Zone 9 - Bubbler heads in the front yard at each of the two trees.

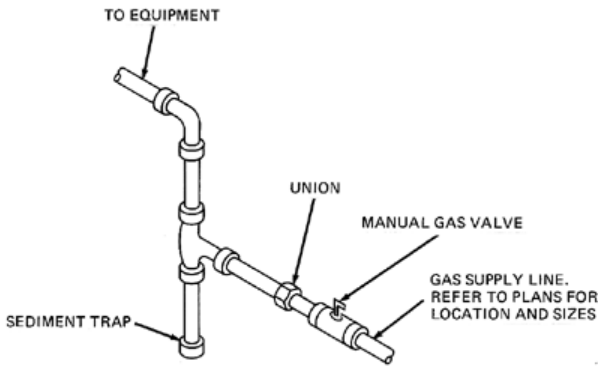
Landscape irrigation systems are operated in the manual mode only at the control box. The system is not inspected for the operation or function of the automatic timer, control box, rain sensor or the effectiveness and sizing of anti-siphon valves or back flow preventers. Watering coverage for the system was not verified as part of this inspection as heads, spray direction and wind condition can and will vary and coverage should be monitored for periodic adjustment and cleaning of the system to ensure even and satisfactory watering of any required landscaping. The inspection is only for function of installed components and pressure or leakage testing is not performed. Any underground piping, solenoids, valves and wiring cannot be inspected.

(g) Specific limitations for lawn and garden sprinkler system. The inspector is not required to inspect the automatic function of the timer or control box, the rain sensor or the effectiveness and sizing of anti-siphon valves or backflow preventers.

Consult a verified/qualified/licensed irrigation contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

X ☐ ☐ X **B. Gas Lines Comments:** Gas leak detection is only performed at the safely accessible meter, service cutoff valve connections and appliance connections. No unions or piping are disassembled nor is pressure testing performed, as these activities require a plumbing license to perform. Gas Fueled appliances should have Carbon monoxide (CO) detectors installed at all of the required locations. Advise immediate installation at all required locations when CO detectors are not present or not functioning as intended.
http://www.aga.org/Kc/resourcesbydiscipline/OperationsEngineering/codesandstds/factfheetsandreports/

42, 45- Install a sediment trap as required at the cooktop gas supply. Where a sediment trap is not incorporated as part of the gas utilization equipment, a sediment trap shall be installed downstream of the equipment shutoff 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.



88- A possible leak was detected at the gas shut off valve and at the ignition area for the fireplace have a qualified plumber check all gas components associated with this unit.

Pipe type: Metallic Steel pipe wherever visible

36- Meter Location: Mounted at the right garage exterior wall.

Consult a verified/qualified/licensed contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

AFI=Appears to Function as Intended **NC**=No Comments
I=Inspected **NI**=Not Inspected **NP**=Not Present **D**=Deficient

I	NI	NP	D	Inspection Item
☐	X	☐	X	**C. Security Systems Comments:** Surveillance, Security Systems and other luxury features are not inspected. 58- Numerous alarm wiring penetrations have air leakage present advise installation of caulk sealant at all locations. The subject property appears to be prewired at numerous locations for a security alarm system. This shall not be considered as meaning the entire structure is wired at all of the required or necessary locations or that all equipment is present and functional. Consult your security provider for further evaluation and information.

Special Comments and Miscellaneous Page:

1. I, as an inspector am a generalist and do not claim to be an expert in any one area or field. I was hired to provide a written opinion on the specific items and their function during the time of this inspection only. “In the event a verified/qualified/licensed contractor or expert disagrees with my statements, in this report, I suggest they provide written documentation supporting their opposition and sign their name to it.”
2. Have all noted repairs completed by qualified licensed, insured, and bonded professional contractors. All repairs shall strictly adhere to Manufacture Installation Specifications, National, State, Local codes, and the Authority Having Jurisdiction (AHJ). Because the inspector does not dismantle equipment, perform invasive inspections or destructive testing the contractor's subsequent examination may reveal additional required repairs.
3. Repair cost estimator: http://www.homewyse.com/costs/index.html
4. PRE-CLOSING WALK-THROUGH
   The walk-through is the time for the Client to inspect the property. Conditions can change between the time of the inspection and the time of closing. Restrictions that existed during the inspection may have been removed for the walk-through. Defects or problems that were not found during the inspection may be discovered during the walk-through. The Client should be thorough during the walk-through. Any defect or problem during the walk-through should be addressed with the owner/seller of the property prior to closing. Purchasing the property with a defect or problem releases the Inspector of all responsibility. Client assumes all responsibility for all defects after settlement.
   The following are recommendations for the pre-closing walk through of your new property. Consider hiring an inspector to assist you if you are uncomfortable. ADAIR INSPECTION provides this service please contact Barry at 972-487-5634 to discuss your specific needs and schedule your appointment.
   1. Check the heating and cooling system. Turn the thermostat to heat mode and turn the temperature setting up. Confirm the heating system is running and making heat. Turn the thermostat to off and wait 20 minutes. Turn the thermostat to cooling mode and turn the temperature down and the system is making cool air. The cooling system should not be checked if the outdoor temperature is below 65 degrees F or if the temperature was below freezing the previous night.
   2. Operate all appliances
   3. Run water at all fixtures and flush all toilets. Look for any plumbing leaks
   4. Operate all interior doors and windows and locks
   5. Test smoke and carbon monoxide alarms and replace batteries upon possession or the next time change in areas where daylight savings time is observed
   6. Ask for all remote controls and operate all remote required appliances such as but not limited to garage doors, ceiling fans, fireplaces, etc.
   7. Inspect areas that may have been restricted during the inspection
5. Maintain mature plantings a minimum of 5’ from the roof, all overhead wiring and 3’ minimum from walls, A/C condensing unit(s) and any pool/spa equipment.
6. Maintain all exterior finishes, caulking, and other sealants at any dissimilar material abutments and all penetrations to the walls and roof. This inexpensive task prevents moisture intrusion and saves costly repairs.
7. Investigating, sampling, and testing for any Environmental Issues is beyond the scope of this Inspection. Contact any of these Agencies for further information. Center for Disease Control www.cdc.gov 1-888-311-3435, Environmental Protection Agency www.epa.gov 1-800-887-6063, Housing and Urban Development www.hud.gov 214-767-8300, Texas Department of State Health Services www.dshs.state.tx.us/ 1-888-963-7111.
8. Product recalls and consumer product safety alerts are added almost daily. To best address your specific concerns visit www.recalls.gov or www.cpsc.gov Item(s), brand name(s), and model number(s) are required for

Consult a verified/qualified/licensed contractor for evaluation of the entire system and components when deficiencies/repairs are noted. This should include repair, retrofit, replacement or upgrade recommendations and cost estimates of any items deemed necessary before the end of your inspection contingency option period.

AFI=Appears to Function as Intended **NC**=No Comments
I=Inspected **NI**=Not Inspected **NP**=Not Present **D**=Deficient

I	NI	NP	D	Inspection Item

proper research identification of any recalled products.

9. Due to the age of some properties. Items noted as in need of repair are possible retrofits or upgrades to operating systems or fixtures already in place. Occupant health, safety, and welfare are paramount!
10. Some items not noted on this report were delivered verbally onsite when the Client is present.
11. Protect your home and family from natural disasters: http://www.flash.org/index.html
12. The entire report is not, nor is the inspector named licensed to perform any code inspections pertaining to this specific property. Any Code Enforcement questions must be directed to the Authority Having Jurisdiction. Contact the local Building Department for further details.
13. **TEXAS REAL ESTATE CONSUMER NOTICE CONCERNING HAZARDS OR REPAIRS**

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:

• improperly installed or missing ground fault circuit protection (GFCI) devices for electrical receptacles in garages, bathrooms, kitchens, and exterior areas;
• improperly installed or missing arc fault protection (AFCI) devices for electrical receptacles in family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreations rooms, closets, hallways, or similar rooms or areas;
• ordinary glass in locations where modern construction techniques call for safety glass;
• the lack of fire safety features such as smoke alarms, fire-rated doors in certain locations, and functional emergency escape and rescue openings in bedrooms;
• excessive spacing between balusters on stairways and porches;
• improperly installed appliances;
• improperly installed or defective safety devices; and
• lack of electrical bonding and grounding.

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 requires 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.

View as a PDF form: http://www.trec.state.tx.us/pdf/contracts/OP-I.PDF

Thank you for choosing ADAIR INSPECTION
Safety-Security-Serenity

