



Golden Rule

Property Inspections, LLC

A Locally Owned Professional Inspection Company

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1 Brand New Home, Anywhere Texas



PROPERTY INSPECTION REPORT

Prepared For: Mr. & Mrs. New Homebuyer's
(Name of Client)

Concerning: 1 Brand New Home, Anywhere Texas
(Address or Other Identification of Inspected Property)

By:
ICC Certified Combination Inspector R-5
ICC Certified Residential Building
Inspector B-1; ICC Residential Mechanical
Inspector M-1; ICC Residential Plumbing
Inspector P-1; ICC Residential Electrical E-1
NSPF: Certified Pool and Spa Inspector and Operator
NACHI Certified Inspector 6060660
T.R.E.C. Professional Inspector #09097
Certainteed® Master Shingle Applicator™
Infrared Certified Thermographer Inspector # 0580018

(Name and License Number of Inspector) (Date)

(Name, License Number and Signature of Sponsoring Inspector, if required)

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

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

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

In this report, the inspector will note which systems and components were Inspected (I), Not Inspected (NI), Not Present (NP), and/or Deficient (D). General deficiencies include inoperability, material distress, water penetration, damage, deterioration, missing parts, and unsuitable installation. Comments may be provided by the inspector whether or not an item is deemed deficient. The inspector is not required to prioritize or emphasize the importance of one deficiency over another.

Some items reported as Deficient may be considered life-safety upgrades to the property. For more information, refer to Texas Real Estate Consumer Notice Concerning Recognized Hazards, form OP-I.

This property inspection is not an exhaustive inspection of the structure, systems, or components. The inspection may not reveal all deficiencies. A real estate inspection helps to reduce some of the risk involved in purchasing a home, but it cannot eliminate these risks, nor can the inspection anticipate future events or changes in performance due to changes in use or occupancy. It is recommended that you obtain as much information as is available about this property, including any seller's disclosures, previous inspection reports, engineering reports, building/remodeling permits, and reports performed for or by relocation companies, municipal inspection departments, lenders, insurers, and appraisers. You should also attempt to determine whether repairs, renovation, remodeling, additions, or other such activities have taken

place at this property. It is not the inspector's responsibility to confirm that information obtained from these sources is complete or accurate or that this inspection is consistent with the opinions expressed in previous or future reports.

Items identified in the report do not obligate any party to make repairs or take other action, nor is the purchaser required to request that the seller take any action. When a deficiency is reported, it is the client's responsibility to obtain further evaluations and/or cost estimates from qualified service professionals. Any such follow-up should take place prior to the expiration of any time limitations such as option periods. Evaluations by qualified tradesmen may lead to the discovery of additional deficiencies which may involve additional repair costs. Failure to address deficiencies or comments noted in this report may lead to further damage of the structure or systems and add to the original repair costs. The inspector is not required to provide follow-up services to verify that proper repairs have been made.

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

ADDITIONAL INFORMATION PROVIDED BY INSPECTOR

The following were present during at least part of the inspection: Buyers, Builder and Sales Person.

The property was: Decorated as a Model Home and new construction (Walk through Inspection).

Utilities: All utilities were on.

Approximate Time and Weather: Noon to 3 pm about 70°-90°F & cloudy .

Infrared Thermography Scan performed for an additional fee. Please contact Jerry for pricing.

All directions in this report are as if you are standing in the front yard facing the house.

INACCESSIBLE OR OBSTRUCTED AREAS

Sub Flooring

Floors Covered

Walls/Ceilings Covered or Freshly Painted

Behind/Under Furniture and/or Items

Mold/Mildew investigations are NOT included with this report it is beyond the scope of this inspection at the present time. Any reference of water intrusion is recommended that a professional investigation be obtained.

NOTE: In homes with gas-fired appliances and /or wood burning fireplaces, we recommend the installation of Carbon Monoxide Detectors.

The digital pictures in this report are a random sampling of the conditions or damages in a representative number of areas chosen and should not be considered to show all of the conditions, damages or deficiencies observed. There will be some conditions, damages or deficiencies not represented with digital imaging.

The use of "special equipment" is at the discretion of the inspector in order to form opinions as he sees fit in certain instances.

Attic Space is Limited - Viewed from Accessible Areas

Plumbing Areas - Only Visible Plumbing Inspected

Siding Over Older Existing Siding

Crawl Space Is Limited - Viewed From Accessible Areas

1) The entire report and the inspector named are incapable of identifying and revealing hidden or concealed conditions and latent defects. The Property Inspection Report is the Inspector's opinion as to whether or not the components of this home are presently functioning or are in need of repair.

2) You are my sole employer at this inspection. You cannot sell this report without my written permission; the comments in this report are the intellectual property of Golden Rule Property Inspections, Llc and are not to be used for any other purpose by any other person. This report only reports on the items listed and only the present condition of those items. It reflects only if the items inspected are observed to be "operative" during the inspection or deficient.

3) CLIENT understands that I do not move any personal items or other obstructions. Most of a home's structure is buried underground or hidden behind walls and I do not have super human powers and cannot see underground or inside walls.

(4) Investigating, Identification, sampling, and testing for Asbestos, Carbon Monoxide, Indoor Air Quality, Lead Based Paint, Mold, Potable Water Quality, Radon, Toxic Waste or Spills, and all other Environmental Issues are not included in

this inspection. Contact any of these Agencies for your specific needs and further information. www.cdc.gov Center for Disease Control 1-888-311-3435, www.epa.gov Environmental Protection Agency 1-800-887-6063, www.hud.gov Housing and Urban Development 214-767-8300, www.tdh.state.tx.us Texas Department of Health 1-888-963-7111.

5) Outside the Scope of the Inspection:

Any area which is not exposed to view, is concealed, or is inaccessible because of soil, walls, floors, carpets, furnishings, or anything not included in this inspection. The inspection does not include any destructive testing, or dismantling. Client agrees to assume all the risk for all conditions which are concealed from view at the time of the inspection.

Whether concealed or not, the following are outside the scope of the inspection:

- Building code or zoning ordinances (The codes are safety codes, this inspector is not performing a code inspection but is performing a safety inspection).
- Geological stability or soil condition
- Structural stability or engineering analysis
- Termites, pests or other wood destroying organism
- Asbestos, radon, formaldehyde, lead, water or air quality
- Electromagnetic radiation or any environmental hazards
- Building value appraisal or cost estimates
- Condition of detached buildings
- Pool or spa bodies and underground piping
- Private water or private sewage systems
- Saunas, steam baths, or fixtures and equipment
- Radio-controlled devices, automatic gates, elevators, lifts, dumbwaiters and thermostatic or time clock controls
- Water softener/purifier systems or solar heating system
- Furnace heat exchangers, freestanding appliances, security alarms and personal property
- Adequacy or efficiency of any system or component
- Prediction of life expectancy of any item
- (Some of the items above may be included in this inspection for additional fees, check with your inspector)

This is not a home warranty, guarantee, insurance policy, or substitute for real estate transfer disclosures which may be required by law.

NOTE: Your inspector is a home inspection generalist and is not acting as a licensed engineer, code references are for informational purposes only, and this is not a code compliance inspection. If your inspector recommends consulting other specialized experts, client must do so at client's expense.

NOTE: Any suggestions and recommendations we may provide within our report regarding hazardous and or unsatisfactory condition should immediately be brought to the attention of a qualified licensed contractor or specialist to provide you with a full in-depth evaluation to determine if additional areas of concern exist within the building's components, or systems, and furnish a written cost estimate for corrective work or replacement that may be suggested within our report. It is recommended that a State (Texas) or City Licensed Contractor perform all corrective work.

NOTE: This form is promulgated by the Texas Real Estate Commission (TREC) for use by their licensees during the inspection of existing homes and homes in the resale market. If the house being inspected in new construction, or is being inspected for the 1-year Builders warranty, the TREC form is being used only as a convenience, due to its wide use and acceptance, as TREC does not have jurisdiction over these inspection.

NOTE: The International Residential Code (IRC) is a comprehensive, stand-alone residential code that establishes minimum regulations for the construction of one- and two-family dwellings and townhouses up to three stories in height, including provisions for fire and life safety, structural design, energy conservation, and mechanical, fuel-gas, plumbing, and electrical systems. The inspector can and will reference code, manufacturers installation instructions, industry recommendations, etc. during the inspection. The reference of codes is for safety reasons, and to inform you of the minimum regulation for buildings, and should in no way be construed as a code check inspection.

NOTE: This inspection report is made for the sole purpose of assisting the purchaser to determine his and/or her own opinion of feasibility of purchasing the inspected property. This report is not intended to be used for determining insurability of the structure and may not conform to the Texas Department of Insurance guidelines for property insurability. This report is not to be used by or for any property and/or home warranty company.

All directions in this report are as if you are standing in the front yard facing the house.

Additional pages may be attached to this report. Read them very carefully. This report may not be complete without the attachments. If an item is present in the property but is not inspected, the "NI" column will be checked and an explanation is necessary. Comments may be provided by the inspector whether or not an item is deemed deficient.

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficiency

I	NI	NP	D	Inspection Item
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I. STRUCTURAL SYSTEMS

A. Foundations

Type of Foundation(s): This structure is supported by a concrete slab-on grade type foundation. The type of concrete reinforcement was not determined.

Comments:

Note: Specific Limitations. The foundation performance opinion stated below neither in any way addresses future foundation movement or settlement, nor does it certify floors to be level. Should you have present or future concerns regarding the foundation's condition you are strongly advised to consult with a licensed professional structural engineer for further evaluation before closing.

- × Pre-treatment of the lot for subterranean termites is required by IRC R301.2(6) and R324. Proof of this treatment must be provided in the form of a Structural Pest Control Board of Texas promulgated form *Subterranean Termite Preconstruction*.
- × A complete set of construction documents (building plans) was not on site as required by IRC R 106.3.1 and R 323.3.6.

Foundation Performance Opinion:

In my opinion, the foundation appears to be providing adequate support for the structure based on a limited visible observation today. At this time, I did not observe any evidence that would indicate the presence of significant deflection in the foundation. There were no notable functional problems resulting from foundation movement. The interior and exterior stress indicators showed little effects of movement and I perceived the foundation to contain no significant unlevelness after walking the 1st level floors. *Opinions are based on observations made without sophisticated testing procedures or equipment. Therefore, the opinions expressed are one of apparent conditions and not absolute fact and are only good for the date and time of this inspection.*

Wooden form boards were left in the slab at the rear of the house, recommend removal as this tends to draw Wood Destroying Insects.

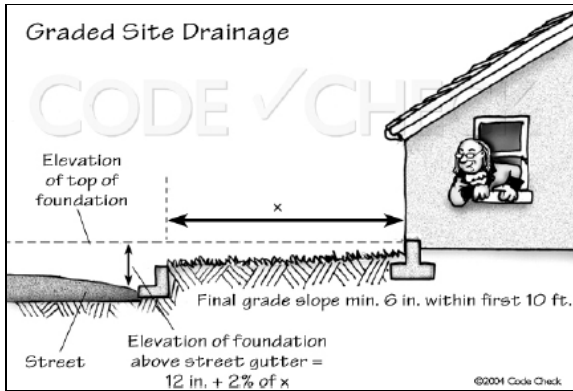
Exposed steel reinforcement (rebar) was observed at the rear of the house. This should be covered to prevent corrosion.

FYI- It usually is not possible within the time frame of a single observation to determine the future stability of a foundation, and the inspector was not provided with any historical information pertaining to the structural integrity of the inspected real property. Foundation movements are common in North Texas, therefore, as time passes some movements may occur. These movements could be indicated by small cracks or sticking doors. If however, you notice large cracks or unusual movements you should consult with your builder or a structural engineer as soon as possible. To reduce the risk of future movement a consistent watering maintenance / foliage control program should be maintained. It is important to maintain good drainage around the home while keeping the soils consistently moist. Rainy seasons and droughts are particularly risky periods. Failure to maintain expansive soils at a consistent moisture level can result in foundation movements. This inspection is a cursory and visual observation only of the conditions and circumstances present at the time of this inspection. Opinions are based on observations made without sophisticated

I	NI	NP	R	Inspection Item
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testing procedures or historical documentation. Therefore, the opinions expressed are one of apparent conditions and not absolute fact and are only good for the date and time of this inspection.

B. Grading & Drainage Comments:



Slope of the ground away from the front right of the house is not in compliance; "grading specifications are spelled out clearly in International Residential Code (IRC) R401.3, "Surface drainage shall be diverted to a storm sewer or other approved point of collection so as to not create a hazard. Lots shall be graded so as to drain surface water away from foundation walls. The grade away from foundation walls shall fall a **minimum of 6 inches (152 mm) within the first 10 feet (3048)**". R 401.3 is not the only place in the code requiring this drainage provision. R506.1 and R 403.1.8 instruct builders building slab-on-grade residential buildings on expansive clay soils to adhere to an even stricter commercial building code, that of the International Building Code 1805.8.2, "Slab-on-ground foundations. Slab-on-ground, mat or raft foundations on expansive soils shall be designed and constructed in accordance with WRI/CRSI Design of Slab-on-Ground Foundations or PTI Design and Construction of Post-Tensioned Slabs-On-Ground." PTI Design is the Post-Tensioning Institute."

NOTE: The municipality's plat drainage requirements can exceed those set forth by the IRC, i.e. require more than a 6" drop in elevation in the first 10' out from the perimeter of the foundation, but cannot be less stringent.

However there is an exception to the above rule: Slab-on-ground and other foundation systems which have performed adequately in soil conditions similar to those encountered at the building site are **permitted subject to the approval of the building official.**

GUTTERS & DOWNSPOUTS

There does not appear to be a sufficient number of downspouts for the length of gutters. If practical, additional downspouts should be installed to avoid spilling roof runoff around the building – a potential source of water entry or water damage.

The gutters do not appear to have sufficient slope to drain properly at the rear of the house. If they do not perform as intended, the slope should be adjusted to avoid spilling roof runoff around the building – a potential source of water entry or water damage.

The gutters require cleaning of construction debris along the left side of the house to avoid spilling roof runoff around the building – a potential source of water entry or water damage.

C. Roof Covering Materials

Type(s) of Roof Covering: Fiberglass/Asphalt composition shingle over decking.

Viewed From: Walked on roof.

Comments:

I	NI	NP	R	Inspection Item
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NOTE: You are strongly urged to have a representative of the shingle manufacturer inspect the roof and provide for you an affidavit on company letterhead stating that your shingle warranty is intact, given the current installation.

The roof needs to be checked / repaired by a licensed roof contractor. The observations made to support the rendering of this opinion are listed but not limited to the following:



As seen on the roof, the siding is too close to the shingles and has caused a damming effect. Recommend the siding be raised up to 2" and the debris be removed. You will need to monitor this area and clean out any debris that accumulates and slows the water runoff.



Installing drip edges:

The felt under the shingles is improperly installed. The shingle underlayment (felt or tar paper) is required to lap over the drip edge flashing at the eaves and to go under the drip edge flashing at the rakes of the roof as per the shingle manufacturers installation instructions; the Nat'l Roofing Contractors Association's Roofing and Waterproofing and per IRC R905.2.8.1.



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Inspector noted nail heads protruding through the shingles from them not being driven in all the way, recommend all of these be sealed.



The flashing on the right side of the roof was not painted as the rest of the roof to wall flashing was.

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D. Roof Structure & Attic

Viewed From: Entered attic and performed a visual inspection.
Approximate Average Depth of Insulation: appears to be about 10-13 inches.
Approximate Average Thickness of Vertical Insulation: appears to be 4-6 inches of insulation
Comments:

The attic access is required to be gasketed and insulated to limit uncontrolled air movement into and out of the attic. Per 2000 IECC, think about all the beautiful insulation in the attic, then think of the thin 1/8" piece of plywood on the attic access ladder, with no insulation it is like a heat magnetic.

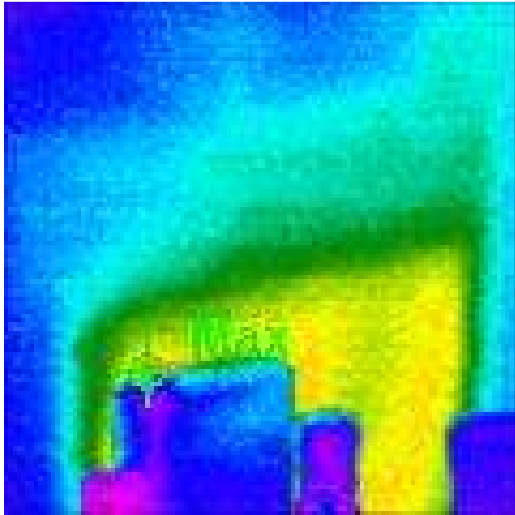
The level of ventilation in the attic is considered marginal. It is generally recommended that one (1) square foot of free vent area be provided for every one hundred and fifty (150) square feet of ceiling area. Proper ventilation will help to keep the attic cooler, thereby keeping the house cooler during warm weather and extend the life of roofing materials. Recommend additional vents be installed by a qualified roof contractor.

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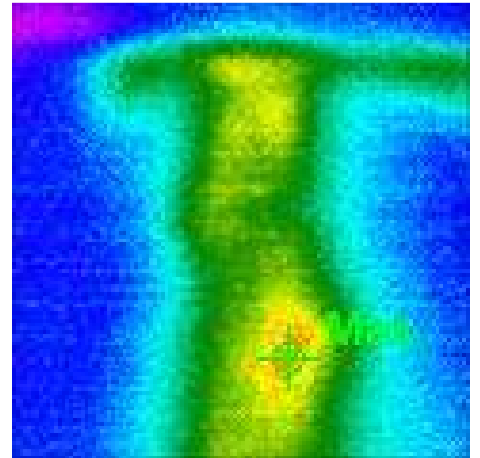
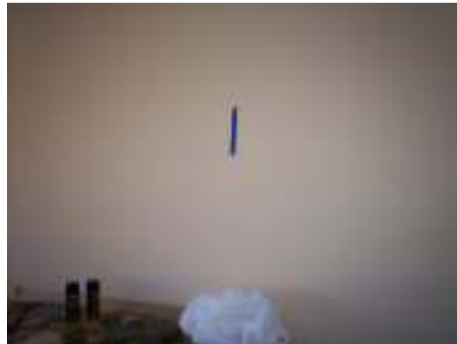
E. Walls (Interior & Exterior) Comments:

Interior Walls: Sheetrock,
Exterior Walls: Brick, stone and Hardie Board siding.

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Infrared thermography scan of the upstairs right rear bedroom, missing insulation noted behind the bookshelf. From that attic this inspector could see that the missing insulation was an attic access hole that was never sealed. Both sides of this room have 4'X4' missing insulation.



IR scan shows heat in the wall

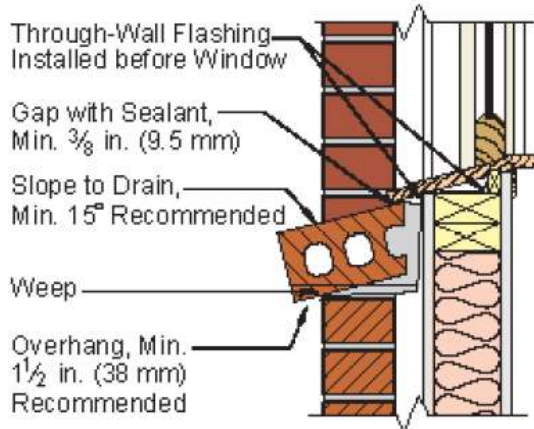
Heat anomaly noted in the wall of the garage over the table with the rocks, (it ran from the ceiling to the floor), this appears to be either a hot electrical line or a hot water pipe that is close to the wall. Recommend checking the blueprints and verifying which is present, if it is an electrical line it should be repaired as it is running hot, if it is a drain line then it should be ok.

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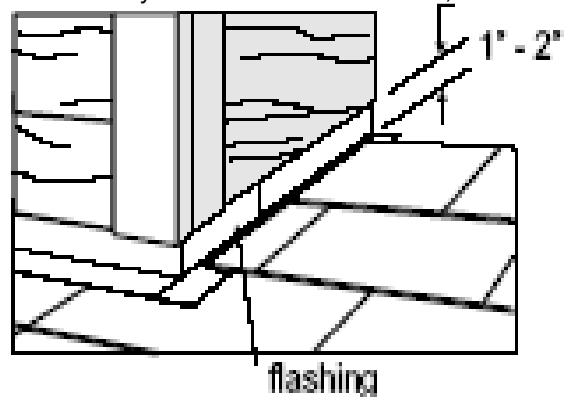


Drywall flaws, paint flaws, nicked corners, minor cracks, missing paint, multi color areas marked throughout the house with tape. Recommend correction as needed. Look at the area under the 2nd or 3rd step, this looks like an entire corner of sheetrock broke off and was just slapped back on.

EXTERIOR WALLS



The slope of the window sill bricks on the exterior of the house is not enough to allow water to drain away "The prime function of a sill is to channel water away from the building". Window sills shall be sloped to drain, a minimum of 15° is recommended. Ref Brick Industry Association Tech note 7, and Tech Note 36.



The siding should not be in contact with the roof surface. Per the Manufacturer It must be installed a minimum of 1"-2" above the roofing surface.

I	NI	NP	R	Inspection Item
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As seen over the left garage door at the dormer, the fascia and soffit boards were cut using a hammer, this is not a professional way to trim a house out. I recommend that these boards be removed and the correctly cut boards be installed.

Improper installation of the lintel (the metal beam over an opening in the exterior wall) over the garage door or windows. The 2003 IRC clearly states that the ends of the lintels should have at least 4 inches of bearing on the exterior wall bricks on each end. "The lintels shall have a length of bearing of not less than 4 inches". Ref 2003 IRC **R703.7.3**. NOTE: this inspector inspected a house that had the same issue with the lintel being supported on less than 4" of brick, the builder said the IRC did not apply, the house was 5 years old when the brick above the garage door started to collapse. Recommend this be corrected.

F. Ceilings & Floors *Comments:*
Ceilings

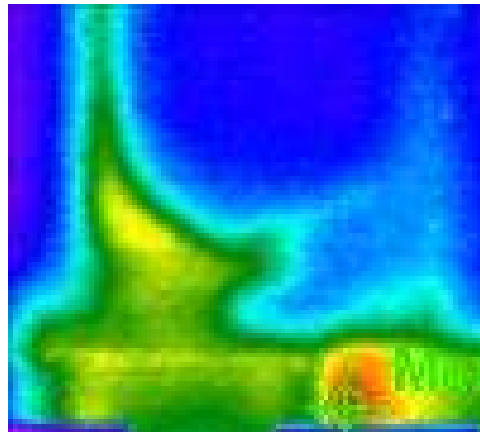
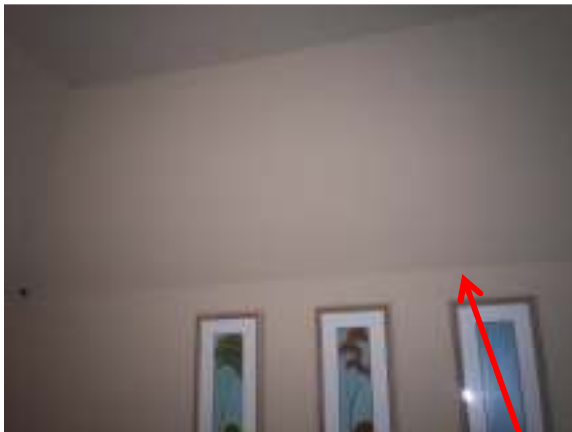
Drywall flaws, paint flaws, nicked corners, minor cracks, missing paint, multi color areas on the ceilings marked throughout the house with tape. Recommend correction as needed.



Water stain, no water detected at this time.

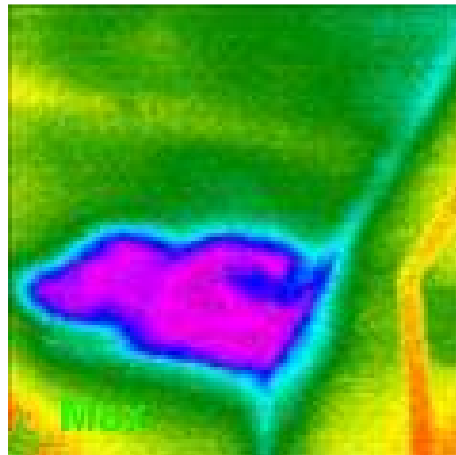
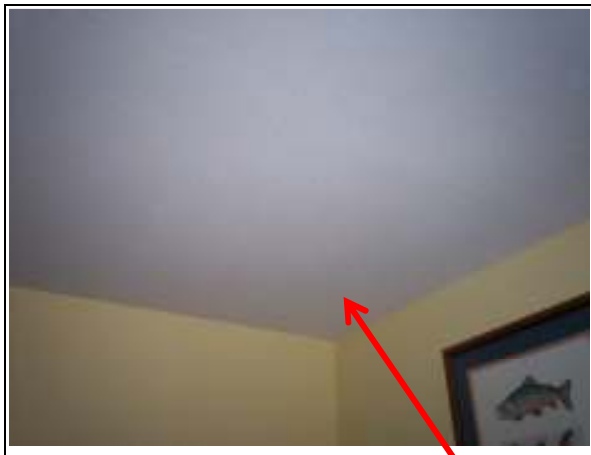
Water stain was noted in the ceilings in the guest and master bathrooms (no evidence of moisture presence at this time). The cause and remedy should be further evaluated and corrected as necessary.

I	NI	NP	R	Inspection Item
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Lacking insulation noted in the ceiling of the front left bedroom over the head of the bed as seen with an infrared thermography camera. Recommend correction as needed.

The hottest spot is here, the angled ceiling in this area has several areas of missing insulation, over these pictures and at the front corner toward the front of the house from these pictures.



Water stain noted in the ceiling under the Jack & Jill bathroom as seen with an infrared thermography camera. Inspector verified the presence of water with a GE Protimeter Surveymaster dual mode pin and non invasive moisture meter. Any moisture reading over 16% relative humidity makes the area conducive to decay, mildew, mold, and wood destroying insects. Recommend investigation and correction as necessary to stop the water penetration.

There is water present at this location, it cannot be seen with the naked eye but the Infrared Thermography Scan detected this leak. Repairs are needed.

FLOORS

Some loose/squeaking sub floor noted in the upstairs playroom this is sometimes caused by nails being used to secure the sub-flooring instead of screws. The cause and remedy should be further evaluated and corrected as necessary.

I	NI	NP	R	Inspection Item
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G. Doors (Interior & Exterior) Comments:

Weatherstripping at the garage door has fallen off at the lower edge, recommend repairs.



The landing outside the garage man door should be better built. This could be a safety problem.

H. Windows Comments:

I. Stairways (Interior & Exterior) Comments:

J. Fireplace/Chimney Comments:
Gas Log Fireplace.



NOTE: the chimney is required to have one inch of clearance from combustibles, if it touching the shingles, recommend correction.

NOTE: In homes with gas-fired appliances and /or wood burning fireplaces, we recommend the installation of Carbon Monoxide Detectors.

K. Porches, Balconies, Decks, and Carports Comments:

II. ELECTRICAL SYSTEMS

A. Service Entrance and Panels Comments:

I	NI	NP	R	Inspection Item
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Main Power/Cable Entrance Underground. 200 Amp Main Panel Breaker box with main disconnect is located in the garage interior.

The Texas Real Estate Commission (TREC) requires that all Inspectors note as deficient the lack of Arc Fault Circuit Interrupters (AFCI) devices serving family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreations rooms, closets, hallways, or similar rooms or areas. 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.



Burned wire as seen inside the electrical panel, very dangerous.

Inspector noted a branch circuit wire in the main panel that had arced and burned the insulating jacket on the wire, this inspector notified the builder directly and shut this circuit off. This is a safety issue and should be repaired immediately for safety reasons.

B. Branch Circuits, Connected Devices, and Fixtures

Type of Wiring: Copper.

Comments:

- Random inspection of outlets / switches performed
- Branch circuit wiring is Grounded 3 wire Ungrounded 2 wire

I	NI	NP	R	Inspection Item
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Inspection of outlets, switches and accessory connections was limited due to concealment.

Smoke Detectors: ARE Present. Current building standards require one smoke detector in a hallway leading to sleeping areas, one smoke detector per bedroom, and one smoke detector per floor of the building. Smoke detectors are required to be interconnected. All batteries should be replaced before taking possession of the house. The presence of smoke detection devices is inspected however each individual unit is not tested.



There is a burned outlet at the exterior of the house near the front door. Repairs are recommended for safety.

An outlet in the living room (to the left of the fireplace, marked with blue tape) has reversed polarity (i.e. it is wired backwards). This outlet and the circuit should be investigated and improved as necessary.

Receptacle in the dining room (near the kitchen door, marked with blue tape) has an open neutral, this is because there is a "break in the path" or simply a loose connection on the white wire at this receptacle, recommend repairs.

The ceiling fan in the master bedroom was observed to be noisy when operated.

III. HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS

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A. Heating Equipment

Type of System: Two-Gas Central Forced Air Furnace. Air handler(s) located in the attic, the furnace(s) are partially accessible, the gas shut off valve(s) are present, and the branch line is flex.

Energy Source:

Comments: The heating unit(s) ARE operating correctly.

NOTE: In homes with gas-fired appliances and /or wood burning fireplaces, we recommend the installation of Carbon Monoxide Detectors.

I	NI	NP	R	Inspection Item
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B. Cooling Equipment

Type of System: Two Electric Central Forced Air Systems located in the attic.

Comments: The cooling system(s) ARE operating correctly.

Condensers:

One-2 ½-ton Condenser

One-3 ½-ton Condenser

The temperature differential for the upstairs unit is 18.1° (OK). Temperature differential readings are a fundamental standard for testing the proper operation of the cooling system. The normal acceptable range is considered approximately between 16°-22° total difference between the return air and supply air. Temperature differential is within the normally accepted standards of temperature.

The temperature differential for the downstairs unit is 17.9° (OK). Temperature differential readings are a fundamental standard for testing the proper operation of the cooling system. The normal acceptable range is considered approximately between 16°-22° total difference between the return air and supply air. Temperature differential is within the normally accepted standards of temperature.

The Emergency Condensate drain pan installed below the air conditioning system contains debris that could block the drain line. This should be cleaned out.



The electrical disconnect panel(s) for the air conditioner(s) condenser units should be moved to an appropriate location. Per IRC E3305.1 &.2 and NEC 110-26a they should have at least 36" deep by 30" wide clearance in front of the panels. The IRC Commentary specifically notes "When a worker is standing in front of a panelboard or air conditioner disconnect switch, for example, he or she should be able to walk up to it and stand in a clear space with no obstructions without having to lean or climb over another piece of electrical equipment or other obstruction". Recommend correction as needed. Note, many cities allow this current yet incorrect installation.



I	NI	NP	R	Inspection Item
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The electrical wire conduit connection going into the condenser has come loose. Recommend it be re-secured.

C. Duct System, Chases, and Vents *Comments:*

Note: Specific Limitations. Not all ducts were accessible or visible during this inspection. Ducts in inaccessible areas of the attic, those concealed by insulation or stored items, and those enclosed in chases, walls, et al were not inspected.

IV. PLUMBING SYSTEM

A. Water Supply System and Fixtures

Location of water meter: At the street in the front yard, the water meter box is flooded from the rains and I could not check for water flow at the meter.

Location of main water supply valve: At the street in the front yard.

Static water pressure reading: The water pressure reading was taken at the back outside water faucet at approximately 3pm. The water pressure was 40 to 80 psi. Normal water pressure is considered to be between 40 to 80 psi.

Comments:

Supply system visible piping appears to be mostly: Could not be determined

Kitchen sink faucet drips on after being shut off, recommend repair.



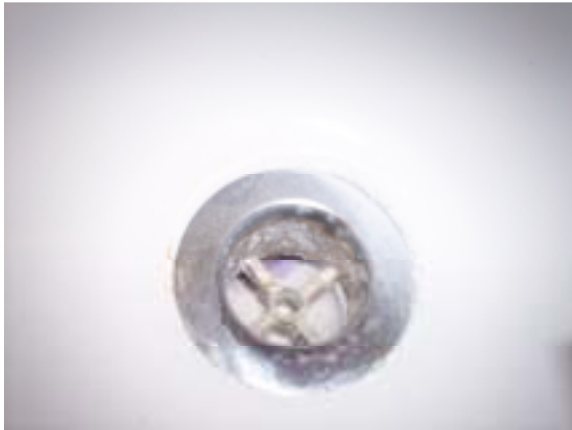
Inspector verified the presence of water behind the master shower with a GE Protimeter BLD 1200 surveymaster dual scan, moisture content is too high. Any moisture reading over 16% relative humidity makes the area conducive to decay, mildew, mold, and wood destroying insects. Recommend investigation and correction as necessary to stop the water penetration. Any wall or floor damage found beneath the enclosure should also be repaired.

The sink in the Jack-n-Jill bathroom leaked water where the drain stop mechanism enters the drain line when operated.

The toilet is loose in the main downstairs half bathroom and should be secured. Recommend installing a new wax seal when repairing this, if necessary.

B. Drains, Wastes, and Vents *Comments:* Type of visible DWV piping material appears to be mostly: ABS or PVC plastic

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The rear upstairs drain in the tub appears to have been fixed while wet. The paint bubbled and looks bad, recommend repairs.

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C. Water Heating Equipment

Energy Source: 50 gallon gas water heater Located in the garage. (2009)

Capacity:

Comments:



Normal water temperature is 120° - 140°. Water temperature is 125° as measured at the sink in the hall bathroom.

The TPR valve was not operated as the inspector could not observe the termination point at the time of discharge. The gas shut off valve was present. The type of gas branch line was flexible. The type of observable vent pipe is single & double wall.



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The pan installed below the water heater has holes in it. Recommend correction.

Inspector could not find the bond wire that is typically attached to the cold water pipe at the water heater. Recommend an electrician licensed by the State of Texas verify correct application.

- D. Hydro-Massage Therapy Equipment** *Comments:* Inspected and operated correctly on the day of the inspection.

Inspector was not able to locate the required whirlpool access panel. Hydro massage bathtub electrical equipment shall be accessible without damaging the building structure or building finish. Ref IRC E4109.3.

V. APPLIANCES

- A. Dishwasher** *Comments:* Operated correctly on the day of the inspection.

- B. Food Waste Disposer** *Comments:* Operated as intended on the day of the inspection.

- C. Range Exhaust Vent** *Comments:* Operated correctly today. Ducted outside.

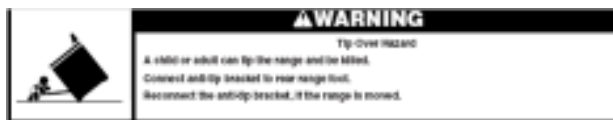


Vent cover for the range exhaust vent is damaged and does not seal well, recommend repairs.

- D. Ranges, Cooktops, and Ovens** *Comments:*

Gas range and oven.

The oven temperature was 350° when the oven was set at 350°. +/- 25° is within the TREC accepted range.



The range does not have an Anti Tip device installed: A risk of range tip-over exists if the appliance is not installed in accordance with the provided installation instructions. The proper use of the ANTI-TIP device minimizes the risk of TIP-OVER.

- E. Microwave Oven** *Comments:* Inspected and operated correctly on the day of the inspection.

- F. Trash Compactor** *Comments:*

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G. Mechanical Exhaust Vents and Bathroom Heaters *Comments:* Operated correctly today.

H. Garage Door Operator(s) *Comments:*

The garage door opener did not automatically reverse under reasonable resistance to closing. **There is a serious risk of injury, particularly to children, under this condition.** Improvement may be as simple as adjusting the sensitivity control on the opener. This should be corrected for reasons of safety.

I. Doorbell and Chimes *Comments:* Worked satisfactorily today.

J. Dryer Vents *Comments:* This Company does not inspect the interior of dryer vents.

The dryer vent terminates on the roof.

VI. OPTIONAL SYSTEMS

A. Lawn and Garden Sprinkler Systems *Comments:*

The inspector will not 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.

Anti Siphon Valve(s) Present Back Flow Preventers Present
 Shut Off Valve(s) Present Location of Shutoff Valve Street
 Number of Zones 5

Landscape sprinkler system: Systems are manually cycled through various zones. Unless specified the following is not determined or inspected: code or construction standard compliance; programmable features or clock operation; rain delays; quality of coverage; underground leakage or freeze damage. Long term spray coverage limitations. Almost all sprinklers will spray onto the home at some point. We recommend you maintain the system to reduce over spray to a minimum so as to reduce the likelihood of wood rot and water penetration. Lawn sprinklers are conducive to attracting termites and insects due to increased moisture availability.

The following sprinkler zones and heads need adjustment / repairs:

Some municipalities now require rain and freeze sensors to be installed on all new installation and pre-existing sprinkler systems; our company does not maintain a list of municipalities that require the installation of rain or freeze sensors sprinkler systems. Please check with your municipality for requirements.

Sprinkler systems equipped with rain or freeze sensor yes or No. NOTE: Per the TREC Inspectors are required to note as Deficient the lack of a rain or freeze sensor.

Front tree sprinkler head did not spray.

The spray from zone 1 is spraying on the house, should be repaired to not spray on the house.

B. Gas Supply Systems *Comments:*

Gas Leak Test Performed Not Performed
 Location of the gas shutoff valve at the right of house.

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Re-Inspection policy: I am often asked if it would be possible to re-inspect the problem areas disclosed in this inspection after repairs are made. I have a minimum fee of half of the cost of the inspection for this service. This fee covers a re-inspection of any two items in the Report Summary and does not include the written report. A written report, if requested, is an additional \$50.00 charge. Additional items to be inspected, in excess of the two items included in the original re-inspection price, are charged at a rate of \$50.00 each.

Criteria:

A licensed contractor must perform the repair work if licensing is required for that trade. The contractor must provide a receipt indicating the type and quantity of materials used and a description of the work performed. The contractor must state whether or not the work is warranted, the length of warranty, and if the warranty is transferable to the new owner. These documents must be available at the house when I arrive for the re-inspection. I do not re-inspect any repairs performed by unlicensed contractors or amateurs.

This is part of the inspection report, please take time to read it.

General statement:

Thank you for using Golden Rule Property Inspections to conduct your warranty inspection. The purpose of the inspection is to provide an overall understanding of the general property condition. Unless departed from this inspection is performed to the Standards of Practice of the Texas Real Estate Commission. Some safety concerns may be reported by the inspector however it is important to understand that this is not a comprehensive safety inspection and all unsafe potentials are not inspected Identification of items that do not meet modern construction standards or codes are not a part of this service and are departed from and any comment regarding such is partial.

It is beyond the scope of the inspection for the inspector to make comments regarding: improvement options, maintenance recommendations; prioritizing discoveries, the safety of the property, the cost of repair potential; life span statements; predicting future performance. There are times however where an inspector may make a comment relative to the aforementioned items solely as an added benefit. Please keep in mind that any additional comments are partial in content, subject to validation by you via a specialist and do not apply or extend to all areas of the inspection.

What is GFCI: When you look at a normal 120-volt outlet in the United States, there are two vertical slots and then a round hole centered below them. The left slot is slightly larger than the right. The left slot is called "neutral," the right slot is called "hot" and the hole below them is called "ground." If an appliance is working properly, all electricity that the appliance uses will flow from hot to neutral. A GFCI monitors the amount of current flowing from hot to neutral. If there is any imbalance, it trips the circuit. It is able to sense a mismatch as small as 4 or 5 milliamps, and it can react as quickly as one-thirtieth of a second.

So let's say you are outside with your power drill and it is raining. You are standing on the ground, and since the drill is wet there is a path from the hot wire inside the drill through you to ground. If electricity flows from hot to ground through you, it could be fatal. The GFCI can sense the current flowing through you because not all of the current is flowing from hot to neutral as it expects -- some of it is flowing through you to ground. As soon as the GFCI senses that, it trips the circuit and cuts off the electricity.

**NOTICE: THIS REPORT IS PAID FOR BY AND PREPARED FOR THE CLIENT NAMED ABOVE.
THIS REPORT IS NOT VALID WITHOUT THE SIGNED SERVICE AGREEMENT AND IS NOT TRANSFERABLE.**

ADDENDUM: MAINTENANCE ADVICE

Upon Taking Ownership

After taking possession of a new home, there are some maintenance and safety issues that should be addressed immediately. The following checklist should help you undertake these improvements:

- Complete all of the improvements recommended in this inspection report.**
- Change the locks on all exterior entrances, for improved security (if this is a new home for you).
- Check that all windows and doors are secure. Improve window hardware as necessary. Security rods can be added to sliding windows and doors. Consideration could also be given to a security system (if not installed already).
- Install smoke detectors on each level of the home (if not present). Ensure that there is a smoke detector outside all sleeping areas. Replace batteries on any existing smoke detectors and test them. Make a note to replace batteries again in one year.
- Create a plan of action in the event of a fire in your home. Ensure that there is an operable window or door in every room of the house. Consult with your local fire department regarding fire safety issues and what to do in the event of fire.
- Examine driveways and walkways for trip hazards. Undertake repairs where necessary.
- Examine the interior of the home for trip hazards. Loose or torn carpeting and flooring should be repaired.
- Undertake improvements to all stairways, decks, porches and landings where there is a risk of falling or stumbling.
- Review your home inspection report for any items that require immediate improvement or further investigation. Address these areas as required.
- Install rain caps and vermin screens on all chimney flues, as necessary.
- Investigate the location of the main shut-offs for the plumbing, heating and electrical systems.

Regular Maintenance

EVERY MONTH

- Check that fire extinguisher(s) are fully charged. Re-charge if necessary.
- Examine heating/cooling air filters and replace or clean as necessary.
- Inspect and clean humidifiers and electronic air cleaners.
- Clean gutters and downspouts. Ensure that downspouts are secure, and that the discharge of the downspouts is appropriate. Remove debris from window wells.
- Carefully inspect the condition of shower enclosures. Repair or replace deteriorated grout and caulk. Ensure that water is not escaping the enclosure during showering. Check below all plumbing fixtures for evidence of leakage.
- Repair or replace leaking faucets or shower heads.
- Secure loose toilets, or repair flush mechanisms that become troublesome.

SPRING AND FALL

- Examine the roof for evidence of damage to roof coverings, flashings and chimneys.
- Look in the attic (if accessible) to ensure that roof vents are not obstructed. Check for evidence of leakage, condensation or vermin activity. Level out insulation if needed.
- Trim back tree branches and shrubs to ensure that they are not in contact with the house.
- Inspect the exterior walls and foundation for evidence of damage, cracking or movement. Watch for bird nests or other vermin or insect activity.
- Survey the basement and/or crawl space walls for evidence of moisture seepage, if applicable.
- Look at overhead wires coming to the house. They should be secure and clear of trees or other obstructions, if not call your local electric provider for correction.

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- Ensure that the grade of the land around the house encourages water to flow away from the foundation.
- Inspect all driveways, walkways, decks, porches, and landscape components for evidence of deterioration, movement or safety hazards.
- Clean windows and test their operation. Improve caulking and weather-stripping as necessary. Watch for evidence of rot in wood window frames. Paint and repair window sills and frames as necessary.
- Test all ground fault circuit interrupter (GFCI) devices, as identified in the inspection report.
- Shut off isolating valves for exterior hose bibs in the fall, if below freezing temperatures are anticipated.
- Inspect for evidence of wood boring insect activity. Eliminate any wood/soil contact around the perimeter of the home.
- Test the overhead garage door opener, to ensure that the auto-reverse mechanisms are responding properly. Clean and lubricate hinges, rollers and tracks on overhead doors.
- Replace or clean exhaust hood filters.
- Clean, inspect and/or service all appliances as per the manufacturer's recommendations.

ANNUALLY

- Replace smoke detector batteries.
- Have the heating, cooling and water heater systems cleaned and serviced.
- Have chimneys inspected and cleaned. Ensure that rain caps and vermin screens are secure.
- Examine the electrical panels, wiring and electrical components for evidence of overheating. Ensure that all components are secure. Flip the breakers on and off to ensure that they are not sticky.
- If the house utilizes a well, check and service the pump and holding tank. Have the water quality tested. If the property has a septic system, have the tank inspected (and pumped as needed).
- If your home is in an area prone to wood destroying insects (termites, carpenter ants, etc.), have the home inspected by a licensed specialist. Preventative treatments may be recommended in some cases.

Prevention Is The Best Approach

Although we've heard it many times, nothing could be more true than the old cliché "an ounce of prevention is worth a pound of cure." Preventative maintenance is the best way to keep your house in great shape. It also reduces the risk of unexpected repairs and improves the odds of selling your house at fair market value, when the time comes.

Please feel free to contact my office should you have any questions regarding the operation or maintenance of your home. Enjoy your home!



APPROVED BY THE TEXAS REAL ESTATE COMMISSION (TREC)
P.O. BOX 12188, AUSTIN, TX 78711-2188

10-27-08

TEXAS REAL ESTATE CONSUMER NOTICE CONCERNING HAZARDS OR DEFICIENCIES

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

- 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, recreation 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.

This form has been approved by the Texas Real Estate Commission for voluntary use by its licensees. Copies of TREC rules governing real estate brokers, salesperson and real estate inspectors are available at nominal cost from TREC. Texas Real Estate Commission, P.O. Box 12188, Austin, TX 78711-2188, 1-800-250-8732 or (512) 459-6544 (<http://www.trec.state.tx.us>)

TREC Form No. OP-I

This form is available on the TREC website at www.trec.state.tx.us

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ADDENDUM: REPORT OVERVIEW – NEW CONSTRUCTION

Because homebuilders in the State of Texas are not licensed there is little or no governmental oversight of their building practices. The local city building inspectors are more often than not overworked and underpaid municipal employees. They haven't the available time to perform thorough inspections of houses as they are being constructed. This results in a situation where the minimal building code standards are, in our experience, never fully met. Another way of stating this would be: In our years of inspection experience and after inspecting several hundred houses, we have never – **N-E-V-E-R** – seen a house in the 16-county area comprising the D/FW Metroplex that is, in our opinion, fully in compliance with the prevailing codes. This statement includes houses in all price ranges, of all ages, of all different designs, and by all builders. This house is no exception. It is not the ideal house. The ideal house would be located on the ideal site that has nonexpansive, non-compressive, non-subsiding soil, and a solid substrate that is relatively close to the surface and fully capable of supporting the structure indefinitely. It would have a complete set of roof gutters, area drains, soil that is properly graded away from the foundation, and a significant (8") difference between the elevation of the finish grade and interior floors. The site would be fully irrigated, with no shrubs, trees or swimming pools within 25 feet of the foundation. This house would, of course, be constructed of quality, time-proven materials in both strict compliance with the minimal building standards set forth in the latest versions of the International Residential Code and the National Electrical Code and all materials manufacturer's installation instructions. Additionally, the house would be built in accordance with a multitude of other references and standards in existence that specify best practice scenarios for all facets of residential constructions. (A comprehensive list of these publications is available on request.) The lot and structure would have been both mechanically outfitted and chemically treated with all available options to prevent wood destroying insect activity. This inspection is visual only. A representative sample of building components are viewed in areas that are accessible at the time of the inspection. No destructive testing or dismantling of building components is performed. It is the goal of the inspection to put a home buyer in a better position to make a buying decision. Not all improvements will be identified during this inspection. Unexpected repairs should still be anticipated. The inspection should not be considered a guarantee or warranty of any kind. Please refer to the pre-inspection contract for a full explanation of the scope of the inspection.

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ADDENDUM: BUILDING CODE COMPLIANCE

In dealing with your builder and the municipal building inspection department there are a few things you'll want to know. As of January 2002 ALL municipalities in the State of Texas with a population of over 5000 were required to adopt the 2000 International Residential Code (2000 IRC). With the advent of the Texas Residential Construction Commission (TRCC) in 2003, Texas House Bill 730, Section 430.001 requires that all residential construction in the State of Texas adhere to the IRC and the National Electrical Code (NEC), as well as all materials and systems manufacturers' installation instructions, regardless of incorporation or population. Since building codes are the province of government, the referenced standards have the force of law and must be adhered to.

Municipalities may opt to adopt newer versions of the IRC, such as the 2003 or 2006 versions, or newer versions of the NEC, such as the 2002 or 2005 versions, but the 2000 IRC version and the 1999 NEC versions are entry level requirements. Manufacturers' installation instructions are not allowed to be altered.

Amendments or exceptions to the 2000 International Residential Code (IRC) may not be made by the Chief Building Official of the municipality, and certainly not by your builder. The legislation set forth in Texas Statute 214.212, reads as follows:

§ 214.212 International Residential Code

- (a) To protect the public health, safety and welfare, the International Residential Code, as it existed on May 1, 2001, is adopted as a municipal residential **building code** in this state.
- (b) The International Residential Code applies to all construction, alteration, remodeling, enlargement, and repair of residential structures in municipality.
- (c) A municipality may establish procedures:
 - (1) to adopt local amendments to the International Residential Code; and
 - (2) for the administration and enforcement of the International Residential Code
- (d) A municipality may review and consider amendments made by the International Residential Code Council to the International Residential Code after May 1, 2001.

Added by Acts 2001, 77th Leg., ch 120, § 1, eff. Jan 1, 2002.

Each municipality is required to include in their city ordinances or land development documents all exceptions or changes to the International Residential Code and National Electrical Code that the members of the City Council have agreed upon and officially adopted. **If an exception, deletion or any other alteration of the code has not been formally passed into ordinance, in this Inspector's reading of the law, it is not valid.**

Any city ordinance is the matter of public record and is available for examination either on the city's web site or in the office of the Chief Building Official. Most cities websites and ordinances can be located at www.ci.yourcity.tx.us. Some municipalities' ordinances are available online at www.ordinance.com or www.municode.com. If your builder or municipal inspector cannot produce a copy of the city ordinance specifically excluding any portion of the IRC or NEC, it must be adhered to.

Additionally, according to the International Residential Code R102.4, National Electrical Code 110-3(b), and the TRCC Performance Standard 304.2(a)(5), neither the municipality nor the Chief Building Official may ever override a manufacturer's installation instructions. We do not build our houses of found materials. Thus, all materials in the home are manufactured. The manufacturer of any given material, equipment, appliance or system is the sold arbiter of the manner in which his product is to be installed. Failure to comply with manufacturer's installation instructions both voids the manufacturer's warranty and constitutes flagrant violation of the building codes.

An individual who wishes to file a complaint against a registered municipal code enforcement officer or a code enforcement officer in training may write to:

Complaints Management and Investigative Section
P. O. Box 141369
Austin, TX 78714-1369

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Or call 1-800-942-5540 to request the appropriate form or obtain information.

Having said all that, we should add this: **We are not the Building Police.** Home inspectors in the State of Texas have no authority to compel full compliance with the prevailing building codes. They have no legal basis on which to enforce their opinions. Only a building official for a municipality has that enforcement authority and may direct code compliance. Because we always find discrepancies between what the municipal inspectors allow and the code requires, we feel that juxtaposing these two allows our clients to make a fully informed decision regarding the condition of the home they are buying or have bought.

The International Residential Code Council's "Legal Aspects of Code Administration", 2002 Edition, states in part, "The Latin term **caveat emptor**, means "let the buyer beware". Thus, it is up to the purchaser to determine the soundness of the building prior to the finalization of the purchase or to hire a professional inspector.

You are strongly urged to insure that all items noted as in need of repair in this report are repaired and brought into full compliance with the letter of the code as quoted prior to closing escrow. Once escrow is closed, you will be at the mercy of the newly formed Texas Residential Construction Commission. This is a commission founded by the builders to protect the builders from you and your attorney.

NOTE: If your builder refers to the "city code" he is referring to the municipality's adopted versions of the International Residential Code and the National Electrical Code plus those amendments adopted by the city council. If your builder refers to the "subdivision code" he is referring to the rules set forth by the city in your subdivision for lot setback distances, fence requirements, landscaping requirements, percentage of exterior brick vs. siding requirements, etc. "City code" and/or "subdivision code" do not override the State mandated compliance with the International Residential Code, the National Electrical Code and the materials manufacturers' installation instructions.

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ADDENDUM: TEXAS RESIDENTIAL CONSTRUCTION COMMISSION LIMITED STATUTORY WARRANTY AND BUILDING PERFORMANCE STANDARDS – EFFECTIVE JUNE 1, 2005 (THE TRCC IS SET TO BE ABOLISHED SEPTEMBER 1ST 2009)

In addition to complying with the International Residential Code and the National Electrical Code plus local amendments, your builder is now required to adhere to the mandated performance standards (TRCC Standards) of the Texas Residential Construction Commission (TRCC).

TRCC Standards 304.1 (a) states in part that “all home construction shall comply with applicable Codes”.

TRCC Standards 304.2 (a) (5) states in part that “Manufactured Products. The builder shall install all manufactured products in accordance with the manufacturer’s instructions and specifications”.

You are strongly urged to familiarize yourself with these standards, as they will constitute your home warranty over the next 10 years. They can be viewed at:

[http://info.sos.state.tx.us/pls/pub/readtac\\$ext.ViewTAC?tac_view=5&ti=10&pt=7&ch=304&sch=A&rl=Y](http://info.sos.state.tx.us/pls/pub/readtac$ext.ViewTAC?tac_view=5&ti=10&pt=7&ch=304&sch=A&rl=Y)

Performance Standards for Components of a home subject to a minimum warranty of One Year for Workmanship and Materials:

[http://info.sos.state.tx.us/pls/pub/readtac\\$ext.ViewTAC?tac_view=5&ti=10&pt=7&ch=304&sch=B&rl=Y](http://info.sos.state.tx.us/pls/pub/readtac$ext.ViewTAC?tac_view=5&ti=10&pt=7&ch=304&sch=B&rl=Y)

Performance Standards for Plumbing, Electrical, Heating and Air Conditioning delivery systems subject to a minimum warranty period of Two Years.

[http://info.sos.state.tx.us/pls/pub/readtac\\$ext.ViewTAC?tac_view=5&ti=10&pt=7&ch=304&sch=C&rl=Y](http://info.sos.state.tx.us/pls/pub/readtac$ext.ViewTAC?tac_view=5&ti=10&pt=7&ch=304&sch=C&rl=Y)

Performance Standards for Foundations and major structural components of a home subject to a minimum warranty period of Ten Years.

[http://info.sos.state.tx.us/pls/pub/readtac\\$ext.ViewTAC?tac_view=5&ti=10&pt=7&ch=304&sch=D&rl=Y](http://info.sos.state.tx.us/pls/pub/readtac$ext.ViewTAC?tac_view=5&ti=10&pt=7&ch=304&sch=D&rl=Y)

Your builder is registered and granted the right to build homes through the TRCC. Violations of their regulations can lead to either suspension or revocation of that right.

ADDENDUM: EMF

Typical residential exposures, not close to operating appliances or household wiring, are about 1 mG. A milligauss (mG) is the unit of magnetic field intensity.

Intensity is considered to be related to the potential for risk. Exposure intensity decreases as distance from power lines increases. If there is a risk, then increased distance from power lines would be expected to reduce risk.

Other factors may contribute to exposure intensity in a residence. A magnetic field exposure measurement is best way to assess the exposure situation. Many power companies provide this service.

So far, EPA has not issued an official statement on the issue of EMF exposure and health risk. However, other credible organizations have evaluated information about exposure and effects and have come to conclusions about risk. The conclusions of two of these assessments follow.

In June , 2001, an expert scientific working group of the International Agency for Research on Cancer (IARC), a World Health Organization agency, concluded that ELF magnetic fields are possibly carcinogenic to humans, based on consistent statistical associations of high level residential magnetic fields with a doubling of risk of childhood leukemia.

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Analyses of data from a number of well-conducted studies show a fairly consistent statistical association between a doubling of risk of childhood leukemia and power-frequency (50 or 60 Hz) residential extremely-low frequency (ELF) magnetic field strengths above 0.4 microTesla (4 milligauss). No consistent evidence was found that childhood exposures to ELF electric or magnetic fields are associated with brain tumours or any other kinds of solid tumors. The epidemiological studies included in the IARC evaluation found that children who are exposed to residential (ELF) magnetic fields less than 0.3 to 0.4 microTesla (3 to 4 milligauss) have no increased risk for leukemia. No consistent evidence was found that residential or occupational exposures of adults to ELF magnetic fields increase risk for any kind of cancer.

In addition, an assessment of health effects from exposure to ELF electric and magnetic fields (EMFs) by an expert working group, organized by the National Institute of Environmental Health Sciences (NIEHS)/National Institutes of Health, found that that EMFs are possible carcinogens for children exposed to EMFs at home (June 1998) based on epidemiological studies of residential exposure and childhood leukemia. The NIEHS working group also concluded that the results of in animal, cellular, and mechanistic studies do not confirm or refute the finding of the epidemiological studies. The NIEHS Working Group Report is available on the EMFRAPID Program website, <http://www.niehs.nih.gov/emfrapid/html/WGReport/emf.pdf>. This inspection is not checking for the presence of EMF.

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ADDENDUM: CARBON MONOXIDE INFORMATION

What is carbon monoxide (CO) and how is it produced in the home?

CO is a colorless, odorless, toxic gas. It is produced by the incomplete combustion of solid, liquid and gaseous fuels. Appliances fueled with gas, oil, kerosene, or wood may produce CO. If such appliances are not installed, maintained, and used properly, CO may accumulate to dangerous levels.

What are the symptoms of CO poisoning and why are these symptoms particularly dangerous?

Breathing CO causes symptoms such as headaches, dizziness, and weakness in healthy people. CO also causes sleepiness, nausea, vomiting, confusion and disorientation. At very high levels, it causes loss of consciousness and death.

This is particularly dangerous because CO effects often are not recognized. CO is odorless and some of the symptoms of CO poisoning are similar to the flu or other common illnesses.

Are some people more affected by exposure to CO than others?

CO exposures especially affect unborn babies, infants, and people with anemia or a history of heart disease. Breathing low levels of the chemical can cause fatigue and increase chest pain in people with chronic heart disease.

How many people die from CO poisoning each year?

In 1989, the most recent year for which statistics are available, there were about 220 deaths from CO poisoning associated with gas-fired appliances, about 30 CO deaths associated with solid-fueled appliances (including charcoal grills), and about 45 CO deaths associated with liquid-fueled heaters.

How many people are poisoned from CO each year?

Nearly 5,000 people in the United States are treated in hospital emergency rooms for CO poisoning; this number is believed to be an underestimate because many people with CO symptoms mistake the symptoms for the flu or are misdiagnosed and never get treated.

How can production of dangerous levels of CO be prevented?

Dangerous levels of CO can be prevented by proper appliance maintenance, installation, and use:

Maintenance:

- A qualified service technician should check your home's central and room heating appliances (including water heaters and gas dryers) annually. The technician should look at the electrical and mechanical components of appliances, such as thermostat controls and automatic safety devices.
- Chimneys and flues should be checked for blockages, corrosion, and loose connections.
- Individual appliances should be serviced regularly. Kerosene and gas space heaters (vented and unvented) should be cleaned and inspected to insure proper operation.
- CPSC recommends finding a reputable service company in the phone book or asking your utility company to suggest a qualified service technician.

Installation:

- Proper installation is critical to the safe operation of combustion appliances. All new appliances have installation instructions that should be followed exactly. Local building codes should be followed as well.
- Vented appliances should be vented properly, according to manufacturer's instructions.
- Adequate combustion air should be provided to assure complete combustion.
- All combustion appliances should be installed by professionals.

Appliance Use:

Follow manufacturer's directions for safe operation.

- Make sure the room where an unvented gas or kerosene space heater is used is well ventilated; doors leading to another room should be open to insure proper ventilation.
- Never use an unvented combustion heater overnight or in a room where you are sleeping.

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Are there signs that might indicate improper appliance operation?

Yes, these are:

- Decreasing hot water supply
- Furnace unable to heat house or runs constantly
- Sooting, especially on appliances
- Unfamiliar or burning odor
- Increased condensation inside windows

Are there visible signs that might indicate a CO problem?

Yes, these are:

- Improper connections on vents and chimneys
- Visible rust or stains on vents and chimneys
- An appliance that makes unusual sounds or emits an unusual smell
- An appliance that keeps shutting off (Many new appliances have safety components attached that prevent operation if an unsafe condition exists. If an appliance stops operating, it may be because a safety device is preventing a dangerous condition. Therefore, don't try to operate an appliance that keeps shutting off; call a service person instead.)

Are there other ways to prevent CO poisoning?

Yes, these are:

- Never use a range or oven to heat the living areas of the home
- Never use a charcoal grill or hibachi in the home
- Never keep a car running in an attached garage

Can Carbon Monoxide be detected?

Yes, carbon monoxide can be detected with CO detectors that meet the requirements of Underwriters Laboratories (UL) standard 2034.

Since the toxic effect of CO is dependent upon both CO concentration and length of exposure, long-term exposure to a low concentration can produce effects similar to short term exposure to a high concentration.

Detectors should measure both high CO concentrations over short periods of time and low CO concentrations over long periods of time - the effects of CO can be cumulative over time. The detectors also sound an alarm before the level of CO in a person's blood would become crippling. CO detectors that meet the UL 2034 standard currently cost between \$35 and \$80.

Where should the detector be installed?

CO gases distribute evenly and fairly quickly throughout the house; therefore, a CO detector should be installed on the wall or ceiling in sleeping area/s but outside individual bedrooms to alert occupants who are sleeping.

Aren't there safety devices already on some appliances? And if so, why is a CO detector needed?

Vent safety shutoff systems have been required on furnaces and vented heaters since the late 1980s. They protect against blocked or disconnected vents or chimneys. Oxygen depletion sensors (ODS) have also been installed on unvented gas space heaters since the 1980s. ODS protect against the production of CO caused by insufficient oxygen for proper combustion. These devices (ODS and vent safety shutoff systems) are not a substitute for regular professional servicing, and many older, potentially CO-producing appliances may not have such devices. Therefore, a CO detector is still important in any home as another line of defense.

Are there other CO detectors that are less expensive?

There are inexpensive cardboard or plastic detectors that change color and do not sound an alarm and have a limited useful life. They require the occupant to look at the device to determine if CO is present. CO concentrations can build up rapidly while occupants are asleep, and these devices would not sound an alarm to wake them.

For additional information, write to the U.S. Consumer Product Safety Commission, Washington, D.C., 20207, call the toll-free hotline at 1-800-638-2772, or visit the website <http://www.cpsc.gov>

ADDENDUM: PROPERTY OWNER POST-TENSION SITE CONSIDERATION FOR FOUNDATION PERFORMANCE

Construction and Maintenance

The performance of residential structures built on ground supported concrete foundations depends not only on proper design and construction, but also on proper foundation environment maintenance performed by the occupant or owner of the property. Many residential foundations have experienced problems as a result of improper installation, maintenance or alterations of the drainage system and landscaping.

A properly designed and constructed foundation may still experience distress from soils which undergo volume changes caused by non-climatic moisture sources such as leaking pipes or irrigation.

Initial site grading shall provide positive drainage away from the foundation perimeter. The site drainage plan developed by the civil engineer should be maintained during the design life of the structure. Positive drainage, to prevent water from ponding next to foundations, is imperative in minimizing soil related foundation problems. Drainage or other discharge channels should be kept clear at all times of all debris in order to allow water discharge away from the building footprint. The most commonly used technique for positive drainage is grading away from the foundation to promote rapid runoff and to avoid ponding water near the foundation. Poor drainage or ponding water can cause a change in soil moisture content, resulting in swelling of the supporting soils, causing foundation movements. Recommendation for positive drainage is 3% to 5% slope for a minimum distance of 10 feet from the edge of the foundation. Berming of landscape beds, while visually appealing, can create a damming effect between the berm and the foundation that may prevent water from draining away. Special attention must be paid to these areas by providing additional precautions, such as area drains. Area drains must be checked periodically to ensure that they are functional.

Should the site drainage be inadequate, properly compacted select fill material can be provided to reestablish positive drainage. The builder can be contacted to obtain information from the geotechnical engineer's report regarding the type of select fill material and the degree of compaction necessary to provide adequate drainage. Proper compaction is required to minimize subgrade settlements near the foundations and to prevent subsequent ponding of surface water.

Improper fill materials and/or compaction may result in the appearance of positive drainage; however, the drainage may not be effective as in the case of permeable sands placed on top of an expansive clay layer that is not sloped away from the foundation. If the reestablishment of positive drainage is not possible, an alternate area drain system may be provided.

Foundation design for sites with greater than 9% slope should insure that ground water is not trapped on the cut (uphill) side of the foundation and that the drainage provided to remove this water from around the structure is far enough away, (minimum 5 feet from the edge of the structure) as to prevent the undermining of the foundation by the water flow. This drainage can also minimize the seepage through backfills into adjacent basement walls.

Subsurface drains may be used to control a rising water table, groundwater, underground streams, and surface water penetrating through pervious, fissured or highly permeable soil; however, drains cannot stop the migration of moisture into the soil beneath the foundation. Moisture barriers, while expensive, can be effective if placed near the edge of the foundation to minimize moisture migration. The geotechnical engineer can recommend the proper depth for a moisture barrier system depending upon the type of soil and the climatic conditions prevalent in the area where the foundation is constructed.

Roof drains should be tied into the area drainage system (where present) or direct water away from the foundations. Property owners should also be aware of the potential hazard of leaky swimming pools, irrigation systems, or plumbing. A noticeable increase in monthly water bills can indicate a problem that should be corrected immediately.

It is important to note that consistent moisture content of the supporting soils is the key to proper foundation performance. In areas where silt or sandy material is present, excessive water can cause the soil to lose bearing capacity. In areas where expansive clays are present, excessive water can increase swelling and insufficient moisture will cause the shrinkage of the supporting soils.

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The following is a list of items to be considered when planning proper foundation maintenance:

- (1) Maintain positive drainage away from the foundation and install drainpipes (if applicable). Never allow water to pond near or against the foundation.
- (2) Replace and compact any loose fill adjacent to the foundation with native soil; do not use sand or a granular material.
- (3) Check gutters and downspouts to be sure that they are clear and that the water is discharged away from the foundation area.
- (4) Avoid seasonal drying around the perimeter of the foundation.
- (5) Existing vegetation near the foundation typically draws added water from the adjacent soil towards the foundation, thus causing added soil movement.

The objective of a proper maintenance program is to maintain as near constant moisture content as possible for the soil around the perimeter and under the foundation.

It is recommended that all property owners conduct a yearly survey of their foundation and perform any maintenance necessary to improve drainage and prevent ponding of water adjacent to these structures. This is especially important during the first ten (10) years after construction because this is usually the time when the most severe adjustment between the new foundation and its support soil occurs.

Property owners should also be made aware of the precautions that are to be taken when modifying or cutting holes in foundation slabs reinforced with unbonded post-tensioning tendons. An expert should only ever accomplish this.

Landscaping

Ground supported slabs constructed using proper foundation design, construction techniques and adequate drainage systems can still experience distress if the site slope, type of vegetation, surrounding landscape and irrigation water supply is not properly selected and maintained. One of the most critical aspects of landscaping is the continuous maintenance of properly designed slopes. Installing flowerbeds or shrubs next to the foundation and keeping the area flooded will result in localized swelling. This expansion may result in added edge lift of the foundation system.

It is recommended that initial landscaping or hardscape be done on all sides and that drainage away from the foundation be provided and maintained. Partial landscaping on one side of the foundation may result in swelling on the landscaped side due to added non-climatic irrigation water. This can cause differential movements resulting in non-serviceable slabs or foundations.

Landscaping is often overlooked by property owners as an area that may contribute to possible foundation problems. When planning flowerbeds or locations of trees and shrubs, consideration must be given to the effect that vegetation may have on existing drainage patterns. Landscaping should be installed so as to avoid water ponding or standing at any location around the perimeter of the foundation. Positive drainage away from all foundations and off the property is critical to the performance of any slab foundation supported on the ground. Landscaping and ground cover can help prevent erosion and, if properly maintained, protect the ground from loss of moisture.

Caution must also be taken when new patios and fences are installed. Water must at all times drain away from such structures and follow the drainage pattern previously established. **Remember that any changes in the exterior layout of the property, flowerbeds, decks, patios, fences, trees and shrubs, must be planned such that positive drainage away from any foundation structure and off the property is provided at all times.**

Sprinkler systems are beneficial in maintaining uniform moisture content in the soils that surround the foundation slab; however, they should be placed around the entire perimeter of the foundation. Precautions, such as the proper backfilling of excavations from the sprinkler lines, location of valve boxes a minimum of five feet (5') away from the foundation edge,

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monitoring for leaks and setting controls so that a uniform amount of water is achieved for all areas are important factors to consider if a sprinkler system is to be beneficial.

Trees located near a foundation can be a potential contributing factor to foundation distress. Experience has shown that the presence of or the removal of large trees that are in close proximity to residential foundations can cause long-term problems. Depending on the type of tree, proximity to the edge of the foundation and its size, vertical movements in the foundation by as much as 3 – 5 inches are not uncommon.

This problem can be aggravated in most areas by cyclic wet and dry seasons; however, the condition will be most severe during extreme droughts. Trees that require large amounts of water or that have large surface root systems such as willow, elm or oak are the most detrimental to foundation performance. It is recommended that trees not be planted closer than half of the anticipated canopy diameter of the mature tree or 20 feet from the edge of the foundation, whichever is the larger distance. Existing trees that are closer than this should be thoroughly soaked at least twice each week during dry periods and once each week during periods of moderate rainfall. Close monitoring of the surface root system may indicate that more frequent watering is required. Root barriers are effective in protecting foundation while preserving the beauty of mature trees. The system should be placed adjacent to the foundation, be constructed of monolithic concrete or other impermeable solid material, be a minimum of 36 inches deep and extend the full length of the tree canopy. Whether the barrier will be truly permanent is questionable because the roots may be able to grow around or under the trench; however, it should at least increase the time it takes for the roots to grow back. In all cases you should check first with a certified arborists before installing root barriers.

In areas with expansive soil conditions, the root systems of trees and large bushes tend to dry up the soil. When they are removed, soil swelling or heaving of the soil may occur. Studies have shown that this swelling can last as long as 20 years depending on the size and extent of the root system. Foundations that are built in heavily wooded areas on expansive clay soil should be designed with this anticipated vertical expansion considered. Alternatively, the site can be left alone for several years after removal of the trees and/or large bushes to allow the moisture of the desiccated area to stabilize; however, this option is not generally considered practical. Tree removal can be safely accomplished provided that the tree is no older than any part of the house since the subsequent heave can only return the foundation to its original level. There is no advantage to staged reduction in the size of the tree; therefore, if a tree is to be removed, it should be removed completely at the earliest possible opportunity. When a tree is older than the foundation, it is not considered advisable to remove the tree because of the danger of inducing damaging heave, unless the foundation was designed for the total computed vertical movement. This process does not occur for foundations built on non-expansive sandy soil conditions.

If the anticipated heave caused by the removal of a tree is too large, some kind of pruning, such as crown thinning or crown reduction can be considered. Pollarding, where most of the branches are removed and the height of the main trunk is reduced, though often mistakenly specified, is not a viable option. Most published advise links the height of the tree to the likelihood of damage when in fact it is the leaf area that is most important; therefore, crown thinning or reduction in which some branches are shortened or removed is the preferred method. Pruning should be done in such a way as to minimize future growth while maintaining shape and without leaving the tree vulnerable to disease. In all cases this should be done by a qualified arborists (preferable), or a tree surgeon or landscaping contractor under the supervision of an arborist. In some cases there may be some opposition to the removal or reduction of size of an offending tree. The property owner, a neighbor, local authorities or a Tree Preservation Order may require that alternate methods, such as root barriers, be utilized. In this case, the property owner needs to be made aware of the risk of property damage that can result from leaving the tree.

Every property owner should conduct a yearly survey of the foundation and perform any preventative maintenance necessary to improve drainage and minimize the effects of landscaping and existing vegetation on the foundation. Special attention is important during the first 10 years after the foundation is constructed as this is the time of the most severe adjustment between the new construction and the environment; however, this condition can change yearly for the life of the foundation.

ADDENDUM: ARC FAULT CIRCUIT INTERRUPTER (AFCI) DEVICES

THE AFCI

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The “AFCI” is an arc fault circuit interrupter. AFCIs are newly developed electrical devices designed to protect against fires caused by arcing faults in the home electrical wiring.

THE FIRE PROBLEM

Annually, over 40,000 fires are attributed to home electrical wiring. These fires result in over 350 deaths and over 1,400 injuries each year¹. Arcing faults are one of the major causes of these fires. When unwanted arcing occurs, it generates high temperatures that can ignite nearby combustibles such as wood, paper, and carpets. Arcing faults often occur in damaged or deteriorated wires and cords. Some causes of damaged and deteriorated wiring include puncturing of wire insulation from picture hanging or cable staples, poorly installed outlets or switches, cords caught in doors or under furniture, furniture pushed against plugs in an outlet, natural aging, and cord exposure to heat vents and sunlight.

HOW THE AFCI WORKS

Conventional circuit breakers only respond to overloads and short circuits; so they do not protect against arcing conditions that produce erratic current flow. An AFCI is selective so that normal arcs do not cause it to trip.

The AFCI circuitry continuously monitors current flow through the AFCI. AFCIs use unique current sensing circuitry to discriminate between normal and unwanted arcing conditions. Once an unwanted arcing condition is detected, the control circuitry in the Ault, Singh, and Smith, “1996 Residential Fire Loss Estimates”, October 1998, U.S. Consumer Product Safety Commission, Directorate for Epidemiology and Health Sciences.

AFCI trips the internal contacts, thus de-energizing the circuit and reducing the potential for a fire to occur. An AFCI should not trip during normal arcing conditions, which can occur when a switch is opened or a plug is pulled from a receptacle.

Presently, AFCIs are designed into conventional circuit breakers combining traditional overload and short-circuit protection with arc fault protection. AFCI circuit breakers (AFCIs) have a test button and look similar to ground fault circuit interrupter (GFCI) circuit breakers. Some designs combine GFCI and AFCI protection. Additional AFCI design configurations are anticipated in the near future.

It is important to note that AFCIs are designed to mitigate the effects of arcing faults but cannot eliminate them completely. In some cases, the initial arc may cause ignition prior to detection and circuit interruption by the AFCI. The AFCI circuit breaker serves a dual purpose – not only will it shut off electricity in the event of an “arcing fault”, but it will also trip when a short circuit or an overload occurs. The AFCI circuit breaker provides protection for the branch circuit wiring and limited protection for power cords and extension cords. Single-pole, 15- and 20- ampere AFCI circuit breakers are presently available.

WHERE AFCIs SHOULD BE USED

The 1999 edition of the National Electrical Code, the model code for electrical wiring adopted by many local jurisdictions, requires AFCIs for receptacle outlets in bedrooms, effective January 1, 2002. Although the requirement is limited to only certain circuits in new residential construction, AFCIs should be considered for added protection in other circuits and for existing homes as well. Older homes with aging and deteriorating wiring systems can especially benefit from the added protection of AFCIs. AFCIs should also be considered whenever adding or upgrading a panel box while using existing branch circuit conductors.

INSTALLING AFCIs

AFCI circuit breakers should be installed by a qualified electrician. The installer should follow the instructions accompanying the device and the panel box. In homes equipped with conventional circuit breakers rather than fuses, an AFCI circuit breaker may be installed in the panel box in place of the conventional circuit breaker to add arc protection to a branch circuit. Homes with fuses are limited to receptacle or portable-type AFCIs, which are expected to be available in the near future, or AFCI circuit breakers can be added in separate panel boxes next to the fuse panel box.

TESTING AN AFCI

AFCIs should be tested after installation to make sure they are working properly and protecting the circuit. Subsequently, AFCIs should be tested once a month to make sure they are working properly and providing protection from fires initiated

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by arcing faults. A test button is located on the front of the device. The user should follow the instructions accompanying the device. If the device does not trip when tested, the AFCI is defective and should be replaced.

AFCIs vs. GFCIs

The AFCI should not be confused with the GFCI or ground fault circuit interrupter. The GFCI is designed to protect people from severe or fatal electric shocks while the AFCI protects against fires caused by arcing faults. The GFCI also can protect against some electrical fires by detecting arcing and other faults to ground but cannot detect hazardous across the line arcing faults that can cause fires.

A ground fault is an unintentional electric path diverting current to ground. Ground faults occur when current leaks from a circuit. How the current leaks is very important. If a person's body provides a path to ground for this leakage, the person could be injured, burned, severely shocked, or electrocuted.

The National Electrical Code requires GFCI protection for receptacles located outdoors; in bathrooms, garages, kitchens, crawl spaces and unfinished basements; and at certain locations such as near swimming pools. A combination AFCI and GFCI can be used to satisfy the NEC requirement for GFCI protection only if specifically marked as a combination device.

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REPORT SUMMARY

Special Notice: The "Report Summary" section is intended to be a tool to assist our clients and their representative(s) in preparing a repair request, if and when applicable. The Report Summary is intended to follow the flow of the main body of the Property Inspection Report and is not a suggested priority repair list. The order of repair priority is left up to the sole discretion of the client and your Inspector will not be able to assist you in specifying order of importance. Further, this summary contains only those items identified as "Not Functioning or In Need of Repair". There may be other items listed in the full body of the Property Inspection Report that could be important to you and you may consider adding to your repair request if and when applicable.

We strongly encourage you to read and understand the entire Property Inspection Report prior to completing any repair request. This report contains technical information, if you do not understand or are unclear about some of the information contained in the body of this report; please call the office to arrange for a verbal consultation with your inspector.

Items in need of Repair: denotes a system or component which is missing or which needs corrective action to assure proper and reliable function.

ITEMS IN NEED OF REPAIR

1. Wooden form boards were left in the slab at the rear of the house, recommend removal as this tends to draw Wood Destroying Insects.
2. Exposed steel reinforcement (rebar) was observed at the rear of the house. This should be covered to prevent corrosion.
3. Slope of the ground away from the front right of the house is not in compliance; "grading specifications are spelled out clearly in International Residential Code (IRC) R401.3, "Surface drainage shall be diverted to a storm sewer or other approved point of collection so as to not create a hazard. Lots shall be graded so as to drain surface water away from foundation walls. The grade away from foundation walls shall fall a minimum of 6 inches (152 mm) within the first 10 feet (3048)". R 401.3 is not the only place in the code requiring this drainage provision. R506.1 and R 403.1.8 instruct builders building slab-on-grade residential buildings on expansive clay soils to adhere to an even stricter commercial building code, that of the International Building Code 1805.8.2, "Slab-on-ground foundations. Slab-on-ground, mat or raft foundations on expansive soils shall be designed and constructed in accordance with WRI/CRSI Design of Slab-on-Ground Foundations or PTI Design and Construction of Post-Tensioned Slabs-On-Ground." PTI Design is the Post-Tensioning Institute."

NOTE: The municipality's plat drainage requirements can exceed those set forth by the IRC, i.e. require more than a 6" drop in elevation in the first 10' out from the perimeter of the foundation, but cannot be less stringent.

However there is an exception to the above rule: Slab-on-ground and other foundation systems which have performed adequately in soil conditions similar to those encountered at the building site are permitted subject to the approval of the building official.

4. There does not appear to be a sufficient number of downspouts for the length of gutters. If practical, additional downspouts should be installed to avoid spilling roof runoff around the building – a potential source of water entry or water damage.
5. The gutters do not appear to have sufficient slope to drain properly at the rear of the house. If they do not perform as intended, the slope should be adjusted to avoid spilling roof runoff around the building – a potential source of water entry or water damage.
6. The gutters require cleaning of construction debris along the left side of the house to avoid spilling roof runoff around the building – a potential source of water entry or water damage.
7. As seen on the roof, the siding is too close to the shingles and has caused a damming effect. Recommend the siding be raised up to 2" and the debris be removed. You will need to monitor this area and clean out any debris that accumulates and slows the water runoff.
8. The felt under the shingles is improperly installed. The shingle underlayment (felt or tar paper) is required to lap over the drip edge flashing at the eaves and to go under the drip edge flashing at the rakes of the roof as per the shingle manufacturers installation instructions; the Nat'l Roofing Contractors Association's Roofing and Waterproofing and per IRC R905.2.8.1.
9. Inspector noted nail heads protruding through the shingles from them not being driven in all the way, recommend all of these be sealed.

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10. The flashing on the right side of the roof was not painted as the rest of the roof to wall flashing was.
11. The attic access is required to be gasketed and insulated to limit uncontrolled air movement into and out of the attic. Per 2000 IECC, think about all the beautiful insulation in the attic, then think of the thin 1/8" piece of plywood on the attic access ladder, with no insulation it is like a heat magnetic.
12. The level of ventilation in the attic is considered marginal. It is generally recommended that one (1) square foot of free vent area be provided for every one hundred and fifty (150) square feet of ceiling area. Proper ventilation will help to keep the attic cooler, thereby keeping the house cooler during warm weather and extend the life of roofing materials. Recommend additional vents be installed by a qualified roof contractor.
13. Infrared thermography scan of the upstairs right rear bedroom, missing insulation noted behind the bookshelf. From that attic this inspector could see that the missing insulation was an attic access hole that was never sealed. Both sides of this room have 4'X4' missing insulation.
14. Heat anomaly noted in the wall of the garage over the table with the rocks, (it ran from the ceiling to the floor), this appears to be either a hot electrical line or a hot water pipe that is close to the wall. Recommend checking the blueprints and verifying which is present, if it is an electrical line it should be repaired as it is running hot, if it is a drain line then it should be ok.
15. Drywall flaws, paint flaws, nicked corners, minor cracks, missing paint, multi color areas marked throughout the house with tape. Recommend correction as needed. Look at the area under the 2nd or 3rd step, this looks like an entire corner of sheetrock broke off and was just slapped back on.
16. The slope of the window sill bricks on the exterior of the house is not enough to allow water to drain away "The prime function of a sill is to channel water away from the building". Window sills shall be sloped to drain, a minimum of 15° is recommended. Ref Brick Industry Association Tech note 7, and Tech Note 36.
17. The siding should not be in contact with the roof surface. Per the Manufacturer It must be installed a minimum of 1"-2" above the roofing surface.
18. As seen over the left garage door at the dormer, the fascia and soffit boards were cut using a hammer, this is not a professional way to trim a house out. I recommend that these boards be removed and the correctly cut boards be installed.
19. Improper installation of the lintel (the metal beam over an opening in the exterior wall) over the garage door or windows. The 2003 IRC clearly states that the ends of the lintels should have at least 4 inches of bearing on the exterior wall bricks on each end. "The lintels shall have a length of bearing of not less than 4 inches". Ref 2003 IRC R703.7.3. NOTE: this inspector inspected a house that had the same issue with the lintel being supported on less than 4" of brick, the builder said the IRC did not apply, the house was 5 years old when the brick above the garage door started to collapse. Recommend this be corrected.
20. Drywall flaws, paint flaws, nicked corners, minor cracks, missing paint, multi color areas on the ceilings marked throughout the house with tape. Recommend correction as needed.
21. Water stain was noted in the ceilings in the guest and master bathrooms (no evidence of moisture presence at this time). The cause and remedy should be further evaluated and corrected as necessary.
22. Lacking insulation noted in the ceiling of the front left bedroom over the head of the bed as seen with an infrared thermography camera. Recommend correction as needed.
23. Water stain noted in the ceiling under the Jack & Jill bathroom as seen with an infrared thermography camera. Inspector verified the presence of water with a GE Protimeter Surveymaster dual mode pin and non invasive moisture meter. Any moisture reading over 16% relative humidity makes the area conducive to decay, mildew, mold, and wood destroying insects. Recommend investigation and correction as necessary to stop the water penetration.
24. Some loose/squeaking sub floor noted in the upstairs playroom this is sometimes caused by nails being used to secure the sub-flooring instead of screws. The cause and remedy should be further evaluated and corrected as necessary.
25. Weatherstripping at the garage door has fallen off at the lower edge, recommend repairs.
26. The landing outside the garage man door should be better built. This could be a safety problem.
27. NOTE: the chimney is required to have one inch of clearance from combustibles, if it touching the shingles, recommend correction.
28. The Texas Real Estate Commission (TREC) requires that all Inspectors note as deficient the lack of Arc Fault Circuit Interrupters (AFCI) devices serving family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreations rooms, closets, hallways, or similar rooms or areas. These conditions may not have violated

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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.

29. Inspector noted a branch circuit wire in the main panel that had arced and burned the insulating jacket on the wire, this inspector notified the builder directly and shut this circuit off. This is a safety issue and should be repaired immediately for safety reasons.
30. There is a burned outlet at the exterior of the house near the front door. Repairs are recommended for safety.
31. An outlet in the living room (to the left of the fireplace, marked with blue tape) has reversed polarity (i.e. it is wired backwards). This outlet and the circuit should be investigated and improved as necessary.
32. Receptacle in the dining room (near the kitchen door, marked with blue tape) has an open neutral, this is because there is a “break in the path” or simply a loose connection on the white wire at this receptacle, recommend repairs.
33. The ceiling fan in the master bedroom was observed to be noisy when operated.
34. The Emergency Condensate drain pan installed below the air conditioning system contains debris that could block the drain line. This should be cleaned out.
35. The electrical disconnect panel(s) for the air conditioner(s) condenser units should be moved to an appropriate location. Per IRC E3305.1 &.2 and NEC 110-26a they should have at least 36” deep by 30” wide clearance in front of the panels. The IRC Commentary specifically notes “When a worker is standing in front of a panelboard or air conditioner disconnect switch, for example, he or she should be able to walk up to it and stand in a clear space with no obstructions without having to lean or climb over another piece of electrical equipment or other obstruction”. Recommend correction as needed. Note, many cities allow this current yet incorrect installation.
36. The electrical wire conduit connection going into the condenser has come loose. Recommend it be re-secured.
37. Kitchen sink faucet drips on after being shut off, recommend repair.
38. Inspector verified the presence of water behind the master shower with a GE Protimeter BLD 1200 surveymaster dual scan, moisture content is too high. Any moisture reading over 16% relative humidity makes the area conducive to decay, mildew, mold, and wood destroying insects. Recommend investigation and correction as necessary to stop the water penetration. Any wall or floor damage found beneath the enclosure should also be repaired.
39. The sink in the Jack-n-Jill bathroom leaked water where the drain stop mechanism enters the drain line when operated.
40. The toilet is loose in the main downstairs half bathroom and should be secured. Recommend installing a new wax seal when repairing this, if necessary.
41. The rear upstairs drain in the tub appears to have been fixed while wet. The paint bubbled and looks bad, recommend repairs.
42. The pan installed below the water heater has holes in it. Recommend correction.
43. Inspector could not find the bond wire that is typically attached to the cold water pipe at the water heater. Recommend an electrician licensed by the State of Texas verify correct application.
44. Inspector was not able to locate the required whirlpool access panel. Hydro massage bathtub electrical equipment shall be accessible without damaging the building structure or building finish. Ref IRC E4109.3.
45. Vent cover for the range exhaust vent is damaged and does not seal well, recommend repairs.
46. The range does not have an Anti Tip device installed: A risk of range tip-over exists if the appliance is not installed in accordance with the provided installation instructions. The proper use of the ANTI-TIP device minimizes the risk of TIP-OVER.
47. The garage door opener did not automatically reverse under reasonable resistance to closing. There is a serious risk of injury, particularly to children, under this condition. Improvement may be as simple as adjusting the sensitivity control on the opener. This should be corrected for reasons of safety.
48. Front tree sprinkler head did not spray.
49. The spray from zone 1 is spraying on the house, should be repaired to not spray on the house.

ADDITIONAL INFORMATION THAT YOU NEED TO GET

I	NI	NP	R	Inspection Item
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1. Pre-treatment of the lot for subterranean termites is required by IRC R301.2(6) and R324. Proof of this treatment must be provided in the form of a Structural Pest Control Board of Texas promulgated form Subterranean Termite Preconstruction.
2. A complete set of construction documents (building plans) was not on site as required by IRC R 106.3.1 and R 323.3.6.
3. NOTE: You are strongly urged to have a representative of the shingle manufacturer inspect the roof and provide for you an affidavit on company letterhead stating that your shingle warranty is intact, given the current installation.