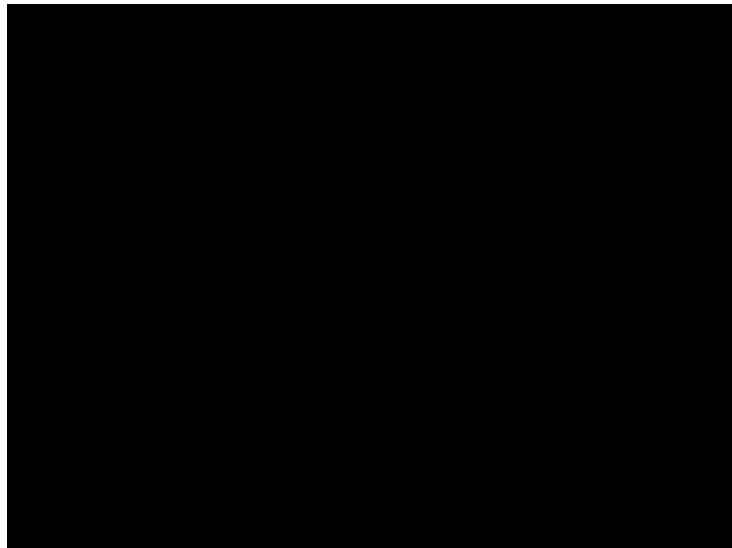


TEXAS INSPECTOR

Texas Inspector
7401 Vineyard Trail
Garland, TX 75044
ICC R-5 Combination Residential Inspector
aaron@texasinspector.com
214-616-0112
<http://www.texasinspector.com>



PROPERTY INSPECTION REPORT

Prepared For: [REDACTED] _____
(Name of Client)

Concerning: [REDACTED] _____
(Address or Other Identification of Inspected Property)

By: Aaron D. Miller, ACI, CEI, CMI, CPI, CRI, [REDACTED]
MTI, RCI

International Code Council (ICC) Residential

Combination Inspector 5082671-R5
International Code Council (ICC) Residential
Building Inspector 5082671-B1
International Code Council (ICC) Residential
Electrical Inspector 5082671-E1
International Code Council (ICC) Residential
Mechanical Inspector 5082671-M1
International Code Council (ICC) Residential
Plumbing Inspector 5082671-P1
American Society of Home Inspectors (ASHI)
Certified Inspector No. 203652
National Association of Home Inspectors
(NAHI) Certified Real Estate Inspector, CRI
200353
International Association of Certified Home
Inspectors (INACHI), Certified Professional
Inspector No. NACHI05060294
Master Inspector Certification Board, Board-
Certified Master Inspector
Texas Professional Real Estate Inspectors
Association (TPREIA) Master TPREIA
Inspector (MTI)
Texas Real Estate Commission (TREC)
Professional Inspector 4336
Texas Department of Agriculture, Structural
Pest Control Service Registered Business No.
11379
Texas Department of Agriculture, Structural
Pest Control Service Certified Applicator No.
40247
Exterior Design Institute (EDI/EIMA) EIFS
Third Party Inspector and Moisture Analyst
(CEI) MA TX-29
Post-Tensioning Institute Level One
Certificate for Unbonded Prestressed Post-
Tensioned Concrete Installer No. 320054833
AAMA InstallationMasters Certified Window
and Door Installer
CertainTeed® Master Shingle Applicator
Building Officials Association of Texas
(BOAT)
Texas Residential Construction Commission,
Legacy
City of Garland, Texas Unified Building
Standards Commission Member
North American Deck and Railing Association
(NADRA), Member
Master Deck Professional Certification,
NADRA
AAMA Door and Window Installation Master
Certification

(Name and License Number of Inspector)

(Date)

PURPOSE, LIMITATIONS AND INSPECTOR / CLIENT RESPONSIBILITIES

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

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

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

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

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

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

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

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

Property conditions change with time and use. For example, mechanical devices can fail at any time, plumbing gaskets and seals may crack if the appliance or plumbing fixture is not used often, roof leaks can occur at any time regardless of the apparent condition of the roof, and the performance of the structure and the systems may change due to changes in use or occupancy, effects of weather, etc. These changes or repairs made to the structure after the inspection may render information contained herein obsolete or invalid. This report is provided for the specific benefit of the client named above and is based on observations at the time of the inspection. If you did not hire the inspector

yourself, reliance on this report may provide incomplete or outdated information. Repairs, professional opinions or additional inspection reports may affect the meaning of the information in this report. It is recommended that you hire a licensed inspector to perform an inspection to meet your specific needs and to provide you with current information concerning this property.

TEXAS REAL ESTATE CONSUMER NOTICE CONCERNING HAZARDS OR DEFICIENCIES

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

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

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

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

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

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

ADDITIONAL INFORMATION PROVIDED BY INSPECTOR

“Under current law, TREC’s (the Texas Real Estate Commission’s) jurisdiction extends to any inspection of real property performed in anticipation of a purchase or sale of real estate. This includes any inspection in connection with the anticipated purchase of real estate from a builder, including phase inspections (but not the inspection of a structure being constructed on land already owned by the homeowner-to-be). Likewise, any inspection performed for an owner in anticipation of selling falls under TREC’s jurisdiction, regardless of whether there is a specific buyer in mind at the time of the inspection.” – Devon Bijansky, Deputy General Counsel, Texas Real Estate Commission.

Additional attachments provided by Texas Inspector that make this inspection report complete are listed but not limited to the following: Property Inspection Agreement, Embedded Links to Additional Information of Systems, Addenda, Information Attached or Provided under Separate Cover, but not Paginated, et al. These contain crucial, pertinent

information and the client is strongly urged to treat them as such. Failure to do so will result in a curtailed understanding of the property condition.

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. All such images remain the property of the Inspector.

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

Any suggestions, and recommendations we may provide within our report regarding hazardous and/or unsatisfactory conditions 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 strongly recommended that a competent, bonded, and insured State- or City-Licensed Contractor perform all corrective work.

You are strongly urged to obtain a C.L.U.E. report on this home in an attempt to discover what, if any, insurance damage claims have been filed on this property, prior to closing escrow on this property. See:

<https://personalreports.lexisnexis.com/>

You are strongly urged to ascertain if any hail damages may have been incurred by this property in the past by referring to:

<http://weathersource.com/zip-code-historical-weather>
<http://www.nws.noaa.gov/climate/>

You are strongly urged to locate, acquire, read and thoroughly understand all documentation pertinent to the construction, remodeling, maintenance and repair of this property including, but not limited to: design drawings, engineering documents, geo-technical testing documents, building inspection permits, surveys, appraisals, seller's disclosure statements, maintenance schedules, mechanical appliance and systems owner's manuals, history of wood-destroying insect activity and treatment reports, et al., prior to the end of any time periods associated with the sale or purchase of this property.

You are strongly urged to verify that all of the items indicated as in need of repair in this report have been properly repaired prior to the end of any time periods associated with the sale or purchase of this property. Additionally, you are strongly urged to have the current owner of the property complete a new and updated Seller's Disclosure of Property Condition form: <http://www.trec.state.tx.us/pdf/contracts/OP-H.pdf> , immediately once the property has been vacated.

The Texas residential real estate resale contract states that the home is being purchased in as-is condition. While it is true that many, if not all, home buyers may negotiate sales prices based upon the condition of the home, ascertaining repair and remodeling costs of the properties inspected lies outside the scope of a general home inspection. In order to obtain the most accurate and realistic repair costs you are strongly urged to consult with a licensed tradesperson or general contractor in the area in which the home is located. Other possible sources for repair costs can be found using publications such as the current version of [RSMeans Contractor's Pricing Guide: Residential Repair & Remodeling](#). Alternately, you can find a wealth of information regarding repair and remodeling costs at websites like <http://www.homewyse.com/> .

This report does not constitute a repair list nor is it in any way intended to be used as such. This inspector provides neither repair lists nor summary reports. It is up to the buyer and his agent to make all decisions regarding the negotiation of repairs on this property. Visual inspections are considered the start of a due diligence process by the buyer and not the final or end of due diligence. Prior to closing escrow, you are strongly urged to require the seller of this property to

update the seller's disclosure form once the property has been completely vacated to reflect any issues that may have occurred since the date of this inspection or that were obscured by furnishings, stored items, etc.

IMPORTANT INFORMATION REGARDING THE FOLLOWING SYSTEMS AND MATERIALS CONDITION DESIGNATIONS REQUIRED BY THE TEXAS REAL ESTATE COMMISSION

The definition of Deficient provided by the TREC is as follows: "Deficient - Reported as having one or more deficiencies." Additionally, "Deficiency" is: A condition that, in the inspectors reasonable opinion, adversely and materially affects the performance of a system or component or constitutes a hazard to life, limb, or property as specified by these standards of practice. General deficiencies include but are not limited to inoperability, material distress, water penetration, damage, deterioration, missing parts, and unsuitable installation."

Therefore, the definition of "deficiency" by the TREC is a statutory definition (as published in the Texas Register) and any other definition of "deficient" or "deficiency" would be moot to the inspector in regard to semantics. The previous "In Need of Repair" designation of parts, components and systems historically used up to Feb. 1, 2009, has been replaced by "Deficient" (or "Deficiencies") through statutory change BUT DO NOT EXCLUDE OR DIRECT ANY INTERPRETATION, INTENT OR ACTION OF ANY BUYER EXPECTATIONS OR BUYER DUE DILIGENCE. According to the TREC, the term "deficiency" better describes the broad category of issues in which repair, replacement, or an upgrade is recommended. The "D" ("Deficiency") box on the inspection report should be used just like the ("R") ("Not Functioning or In Need of Repair") box that has been used in the past. It is not the intent of this inspector to interpret or define the terms "deficient" or "deficiency" outside the statutory definition and requirement. If you have a question you are strongly urged to consult with a real estate attorney regarding the definition(s) of "deficient" and "deficiency" as soon as possible during your option period. The responsibility to make a decision as to further analysis, repair, replace or update any item, material or system based upon the Inspector's reasonable opinion or designation of "Deficient" is solely yours. According to the TREC, "the ultimate decision what to do with the reported information, such as making recommended repairs or to simply "live with" a reported deficiency, is a decision to be made by the person for whom the report is prepared". The principle of "caveat emptor" (let the buyer beware) should not be circumvented. (The idea that buyers take responsibility for the condition of the items they purchase and should examine them before purchase. This is especially true for items that are not covered under a strict warranty. See, e.g., SEC v. Zandford, 535 U.S. 813 (2002)). Therefore, visual inspections following the state inspection standards are considered the beginning of a due diligence process by the client and not considered the final or end of due diligence. Sole reliance on this limited visual inspection to purchase property is neither recommended nor prudent. A comprehensive inspection with qualified specialists is available and explained in the first contact.

NOTICE TO BUILDERS AND MUNICIPAL INSPECTORS IN THE EVENT OF INTERIM INSPECTIONS

This report format is being used as a convenience to the buyer client and any agents involved in the sale/purchase of this house. If the inspection is a pre-pour or pre-drywall inspection the TREC Inspector SOP does not apply and was not followed. All interim inspections are performed referencing the building, energy, and electrical codes adopted by the municipality and/or the state of Texas, to include local amendments. Do not attempt to inform the client that this inspector was referencing some other, unrelated set of standards.

In the event of a final inspection where the new home is substantially completed the state of Texas requires that the inspector adhere to the minimal TREC Inspector SOP. This inspector does so and exceeds that standard by referencing the building, energy, and electrical codes adopted by the municipality and/or the state of Texas, to include local amendments. Do not attempt to inform the client that this inspector was referencing some other, unrelated set of standards.

The codes referenced in this report are:
2018 IRC and Sunnyvale Amendments
2018 IBC and Sunnyvale Amendments
2015 IECC and Sunnyvale Amendments
2020 NEC as per TDLR as of 11/1/20

Report Identification: [REDACTED]

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): Unbonded Prestressed Post-Tensioned Monolithic Slab On Grade

Note: Specific Limitations. There is no single formal universally accepted standard for residential building foundation performance. Even if there were, an opinion of the performance of any foundation would necessarily require several pieces of information that are typically not available to the inspector, e.g. a new construction elevation baseline survey on the date that the foundation construction was originally substantially completed, et al. Simply put: an opinion on the performance of a foundation cannot feasibly be based upon a one-time visual inspection of the structure. One cannot extrapolate long-term trends from a short-term sample of facts. This is a report of first impression of what was visible and recognized by the inspector on the date and time of this inspection. 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.

Though the TREC requires inspectors to identify the exact type of foundation of the building being inspected, this is often not practically feasible, e.g. in the case of parged post-tensioned slabs-on-ground, post-tensioned structurally supported slabs, and proprietary engineered systems such as suspended foundations, et al. The type of foundation reported will be reported based solely on the visual cues available and the inspector's experience in the field. No warranty is expressed or implied regarding the accuracy of this assessment.

For additional information on foundations go to:

<http://www.texasinspector.com/files/Foundation-Book-for-Buyers.pdf>

Method of Inspection: The Inspector performed a visual inspection of interior and exterior walls and visible grade beams. There are many limits inherent in this visual inspection as the Inspector does not move private property, furniture or lift carpeting and padding to look for cracks, and does not use any specialized measuring devices (e.g. elevation surveying equipment) to establish relative elevations. These practices are beyond the bounds of the standards of practice. The condition of concealed or covered floors is specifically excluded from the inspection standards and report.

In the presence or absence of any visible defects, the Inspector may not recommend that you consult with a structural engineer or a foundation contractor, but this should not deter you from seeking the opinion of any such expert prior to continuance under your personal responsibility of due diligence. This is a report of first impression of what was visible and accessible by the inspector on the date and time of this inspection. 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.

Type of Inspection: Visual Inspection of Formwork Prior to Concrete Placement

Grounds for Departure: N/A

FOR THE PURPOSE OF THIS REPORT THE HOUSE IS ASSUMED TO FACE SOUTH.

Comments:

GENERAL OBSERVATIONS

The tendon type and placement appear to be in general compliance with the design drawings.

Report Identification: [REDACTED]

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I NI NP D

Inspection Item

Left to right count - 49

Front to back count - 57

Total count - 106

CABLE TAKE OFF

QTY.	LG.	T.LG.
2	17	34
4	20	80
10	23	230
5	24	120
12	41	492
2	47	94
7	53	371
2	55	110
4	61	244
10	62	620
13	63	819
5	87	435
12	90	1080
1	91	91
8	96	768
1	97	97
8	104	832
106	TOTAL	6517

From the
design
drawings.

Except in areas with cave-ins, the footing dimensions appear to be in general compliance with the design drawings.

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I NI NP D

Inspection Item

Width - 10"

Depth - 32"

FORM GEOMETRY

The forms appear to be in compliance with L/360 for flatness of plane using a ZipLevel Pro 2000 precision altimeter leveling instrument.

FORM CONDITION

The concrete form to the south of the front porch is split, in poor condition, and requires sistering or replacement as per ACI 318-19, section 6.1.2. This is a referenced standard in the IRC and must be complied with.



Sister or
replace split
form.

PRE-POUR COMMENTS

Engineer approved soil must be added at the exterior side of many of the forms and compacted to the density of the native soil. All exterior footings shall be placed at least 12 inches (305 mm) below the undisturbed ground surface as per IRC 403.1.

SILL ANCHORS

As per IRC R 403.1.6, the exterior wall sole (sill) plates must be anchored to the foundation with anchor bolts spaced a maximum of 6 feet on center. Anchor bolts shall also be located within 12 inches from the ends of each plate section. No anchor bolts are in place in this foundation. These are often installed just prior to or during concrete placement.

BRACED WALL PROVISIONS

No holdowns are installed and the braced wall plans were not onsite. If embedded holdowns are specified they must be installed prior to concrete placement.

REINFORCEMENT STEEL (REBAR)

Rebar (reinforcing steel bars) shall be placed a minimum of 3" above grade as per IRC R403.1.3 Seismic reinforcing. Concrete footings located in Seismic Design Categories D0, D1 and D2, as established in Table R301.2(1), shall have minimum reinforcement. Bottom

Report Identification: [REDACTED]

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I NI NP D

Inspection Item

reinforcement shall be located a minimum of 3 inches (76 mm) clear from the bottom of the footing. See also: ACI 318.7.7.2.

Rebar was observed to be too close to the side form board. Rebar (reinforcing steel bars) shall be placed a minimum of 1" to 1.5" from side forms as per ACI 318.7.7.2 and IRC 404.1.2.3.7.4.



Rebar in soil contact at sides of beams.



The rebar has insufficient concrete cover. Concrete cover, or the distance between the outer surface of the concrete and the surface of the embedded reinforcement (rebar) as designated by ACI 318, which is a referenced standard in the IRC and required to be followed as clearly stated in IRC 102.4. Briefly, the reasons for minimum cover requirements are as follows:

- (1) to protect the rebar from environmental effects to prevent corrosion;
- (2) to provide thermal insulation, which protects the rebar from fire, and;
- (3) to give rebar sufficient embedding to enable them to be stressed without slipping.

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Inspection Item

The minimum cover allowed by ACI 318 is 40 to 50 mm or 1.575" to 1.9685".

TENDONS

POCKET FORMERS

As per PTI specifications the live or stressing ends of the tendons as well as the attached pocket formers must be properly aligned with and securely attached to the forms. If they are not, concrete slurry will enter the wedge cavity, resulting in problems during the stressing operation.



Pocket
formers not
flush with
face of
form.



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I	NI	NP	D	Inspection Item
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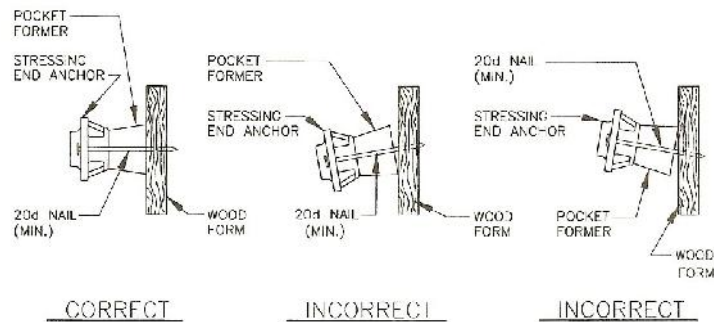


FIG. 2 ANCHOR ATTACHMENT TO FORMS

POST-TENSION STRAND INSTALLATION:

1. All anchors shall be installed 4" (minimum) below top of concrete at edge of slab and 6" (minimum) from corners.
2. Anchors with pocket formers must be securely fastened to form boards in a manner that prevents cement paste from encroaching into wedge canals (20d nails recommended). Fixed anchors should be attached with 3/4" clearance from form board. Secure wiring of anchors is acceptable.

From the engineer's general notes.

CONCRETE COVER

The tendons in the beams where cave-ins have occurred are not positioned to be covered adequately by concrete. These must be repositioned so that they are 3" above the bottoms of the beams.

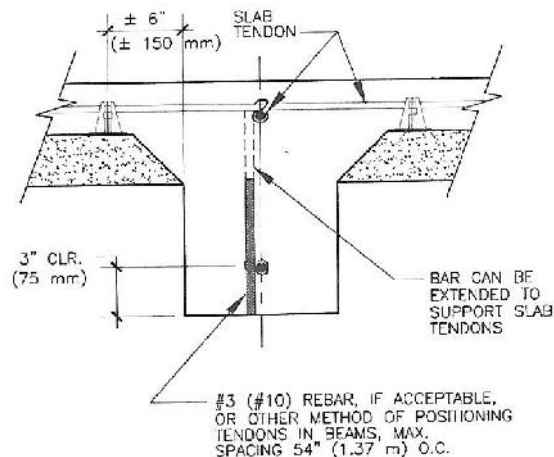


FIG. 10 SLAB TENDONS CROSSING BEAM (SECTION)

PLUMBING

All PVC DWV piping in the foundation that will be in contact with concrete must wrapped with protective sheathing or wrapping tape to protect it against breakage as per IRC 2603.3. This sheathing or wrapping must allow for movement including expansion and contraction of the piping. Foam insulation pipe wrap is the material normally employed for this.

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I NI NP D

Inspection Item

Wrap DWV.



Report Identification: [REDACTED]

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I NI NP D

Inspection Item



Wrap DWV.



Report Identification: [REDACTED]

I=Inspected

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I NI NP D

Inspection Item

Wrap DWV.



Add chairs
to isolate
tendons.



Wrap or
sleeve
DWV.

In two locations where the builder is using large diameter PVC to sleeve the DWV piping the sleeves are damaged and require replacement.

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Inspection Item

PVC sleeve
damaged.



All tendons in contact with or closer than three inches (3") to supply or DWV piping must be relocated or engineer-approved methods of protecting the piping in these areas should be employed.

DWV AT BRICK LEDGES

The DWV piping has been installed so that it will not be completely contained within the wall cavities in some locations. This will leave portions of the piping without insulation or the protection from freezing that is required by IRC 3001.2. The DWV piping must be protected from freezing. P3001.2 Protection from freezing. No portion of the above grade DWV system other than vent terminals shall be located outside of a building, in attics or crawl spaces, concealed in outside walls, or in any other place subjected to freezing temperatures unless adequate provision is made to protect them from freezing by insulation or heat or both, except in localities having a winter design temperature above 32°F (0°C) (ASHRAE 97.5 percent column, winter, see Chapter 3).

DWV in
brick ledge.



Report Identification: [REDACTED]

I=Inspected

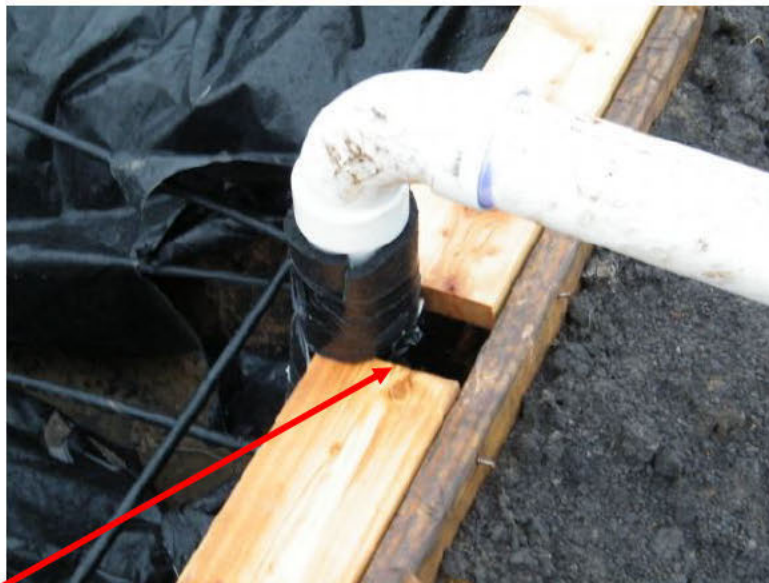
NI=Not Inspected

NP=Not Present

D=Deficiency

I NI NP D

Inspection Item



DWV in
brick ledge.



ELECTRICAL

In the absence of electrical (MEP) plans it is assumed that the kitchen island electrical wiring will originate in the south wall of the kitchen.

The concrete-encased electrode (Ufer) is code compliant.

VAPOR RETARDER

The vapor retarder is damaged, loose, and incompletely installed in several locations. It is crucial that the vapor retarder or vapor barrier be continuous, with no holes, and with all lapped joints taped with an approved tape. Moisture-sensitive finish flooring materials and adhesives will show signs of distress if moisture migrates through the hygroscopic concrete foundation to the interior surface.

Report Identification: [REDACTED]

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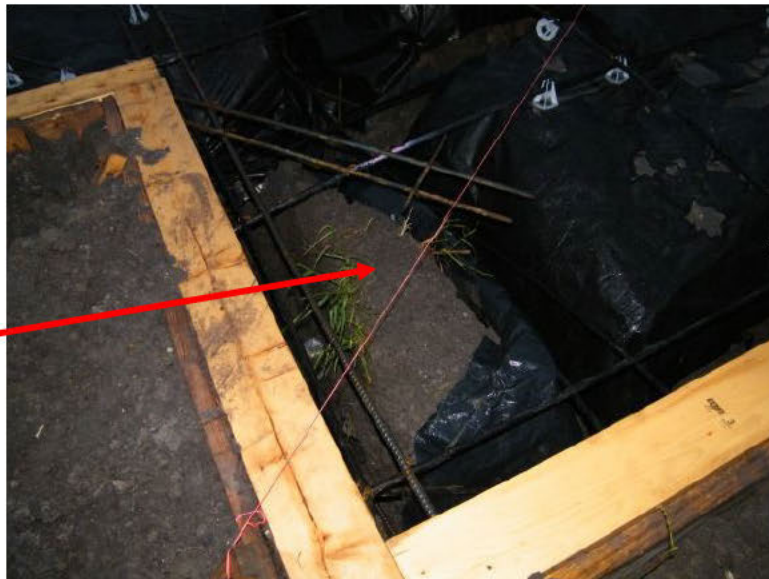
I NI NP D

Inspection Item

Tape vapor
retarder to
plumbing.



Vapor
retarder
missing.



Report Identification: [REDACTED]

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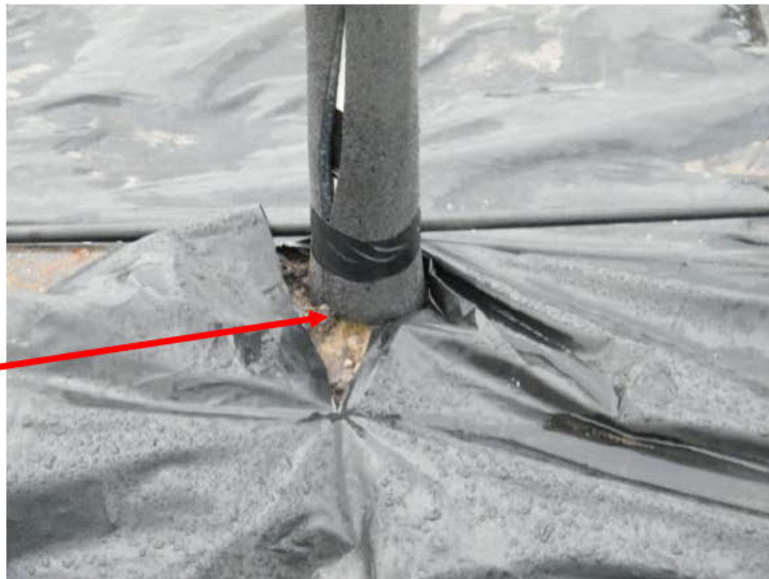
I NI NP D

Inspection Item

Tape all
seams.



Tape vapor
retarder to
plumbing.



Report Identification: [REDACTED]

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficiency

I NI NP D

Inspection Item

Tape all
holes.



Tape all
seams.



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NP=Not Present

D=Deficiency

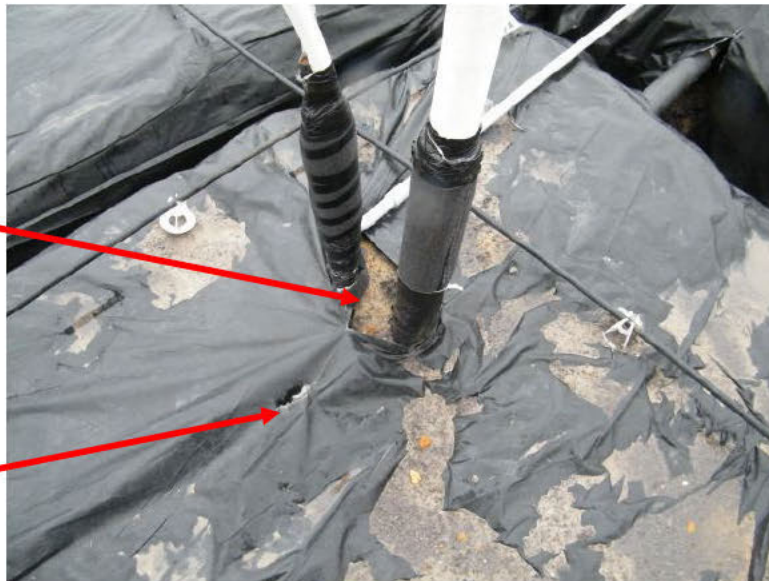
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Inspection Item

Tape vapor
retarder to
plumbing.



Tape vapor
retarder to
plumbing.



Tape all
holes.

Report Identification: [REDACTED]

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I NI NP D

Inspection Item

Tape all
seams.



Tape all
holes.



Report Identification: [REDACTED]

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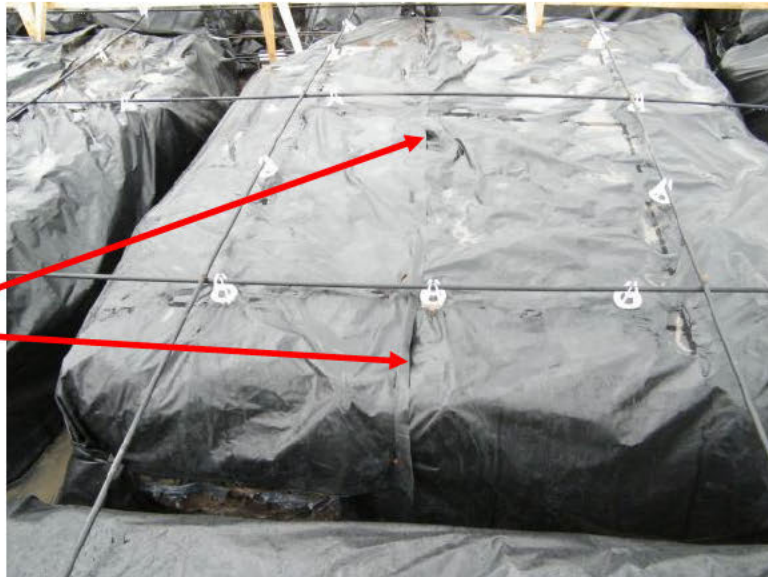
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Inspection Item

Tape all
seams.



IRC R506.2.3 requires that the 6-mil polyethylene vapor retarder joints be lapped a minimum of 6" and that it be continuous without tears or voids. All damaged areas must be repaired. All voids in the barrier must be sealed.

"International Residential Code R506.2.3 Vapor retarder. An approved vapor retarder with joints lapped not less than 6 inches (153 mm) shall be placed between the concrete floor slab and the base course or the prepared subgrade where no base course exists."

"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." Post-Tensioning Institute's Construction and Maintenance Procedures Manual for Post-Tensioned Slab-On-Grade Construction, 2nd Edition, "4.3 Vapor Barrier (Vapor Retarder) – A minimum 6-mil. (0.15mm) vapor barrier or vapor retarder may be placed over the prepared subgrade material, if required by the engineer's drawings or geotechnical report. When required, the vapor barrier should be lapped to provide a continuous sheet under the entire slab. Care must be taken to ensure that the vapor barrier does not become entangled or hung-up in the reinforcing causing voids or thin spots to occur in the slab during concrete placement. For ribbed foundation slabs, securing the vapor barrier material to the sides of the beam excavations and cutting the material in the bottom of the beams before concrete placement is recommended."

Additionally, American Concrete Institute's ACI 302 Guide for Concrete Floor and Slab Construction requires that the vapor barrier be sealed with an approved tape at all utility penetrations.

NOTE TO OWNERS WITH WOOD FLOORS

Currently, a vapor barrier (10-mil Polyethylene sheeting or black plastic) is typically applied over a layer of granular fill (sand) to try to minimize the wicking effect of ground moisture. Of course, if the vapor retarder is penetrated, it will not be effective in preventing moisture migration. Seams must be properly sealed, heavy grade materials must be used where traffic may cause a penetration, and the lowest possible grade of permeance should be used. The concrete slab is then poured directly over the vapor barrier.

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Inspection Item

Anyone that has had to face a moisture problem with a concrete slab understands the damage that excess moisture can cause. Moisture in concrete can occur from a variety of sources: ground moisture that contacts the slab through either capillary action or as water vapor, high air humidity or drastic changes in relative humidity in its environment, leaking plumbing that passes through the slab, and more. Excess moisture can cause pH changes in concrete that adversely affect adhesives. Even an excess of moisture that was retained from the original concrete mixture will cause problems if the slab was sealed prematurely.

While the installer of your wood flooring may or may not install a moisture "barrier" and wood or composite underlayment prior to installing your wood flooring, many of the builder's-grade wood floors are glued directly to the slab. You are strongly urged to insure that all holes and seams in the vapor barrier are properly sealed to prevent future wood flooring failure.

FOOTINGS (BEAMS)

All cave-ins, water, vegetation and construction debris must be removed from the footings (beams) prior to placement of the concrete as per IRC 408.5, 506.2, and ACI 318 (a referenced standard in the IRC).



Cave-in at beam.

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Inspection Item

Cave-in at beam.



WATER IN FOOTINGS

This is a very common problem, particularly during the predominantly rainy Spring construction season. Concrete, as we know, is a basic mixture of water, cement, sand and large aggregate. There are also chemicals in virtually all of modern mixes for a variety of performance enhancements. One of the most critical parts of the mix design is the specified water-cementitious material ratio (w/cm). This specification will ultimately determine the effective strength properties of the mix as well as controlling the volumetric change during the hardening changes. This column has previously addressed the nature of increased water in mix designs.

At the very heart of this issue is the basic idea that, if a concrete mix is placed into water, it will be harder for it to dry and therefore harden to be strong enough to support the structure. After all, most homeowners see concrete as a fluid that must first dry to get hard and if even more water is present, it must be like the glue their children use in school and weaken as the water mixes in. Although the homeowner may be justified with some concern for the presence of standing water, the strength of the concrete in the foundation is more than likely not part of it.

As a contractor, one's duty is to provide assurance for the performance of your construction. When it comes to a concrete mix, that assurance includes some basic facts:

The strength of a concrete mix comes from the ratio of water to cement (or cementitious material) and is referred to as the w/cm.

Once created at the ready mix plant, the introduction of water "into" the mix will weaken the concrete and may upset the w/cm ratio more than the design calls for.

Concrete weighs more than water and it will displace the water when introduced into any container or form rather than mixing with that water.

Concrete hardens due to a chemical reaction and does not "dry" to harden. Water is required for the chemical reaction to occur with the cementitious material. Concrete piers for a bridge over a body of water is an excellent example of concrete hardening in water.

ACI 332-141 states in the commentary section R6.2.4:

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...**If the footing form permits water to exit**, the hydraulic pressure of the concrete placement is sufficient to displace the water from the formed areas and prevent segregation.

This commentary builds on the minimum code requirement for not placing concrete in confined areas with water. This section provides recognition that concrete has a mass greater than that of water and during a placement operation, the concrete will displace or move the water due to a combination of this mass and the force of discharge creating a greater hydraulic pressure than the water can withstand. Moving ahead of the concrete placement, the water will exit the formed footing space at the first opportunity. If the footings are excavated into the undisturbed soil and there is no point at which the slope produces a natural exit, the concrete placement force and weight is still likely to force the water to exit over the top of the footing space. **As long as the placement proceeds to fully displace the water**, there should be no cause for concern. Only when the concrete does not fully displace the water will the partial volume of concrete and water result in segregation of the concrete mix where the large aggregate is separated from the cement paste.

Some precautions to follow include:

Prevent the water from segregating the mix or being incorporated in the mix by pushing the water with the flow of the concrete. A recommended practice for all concrete placement, this keeps the hydraulic pressure of the concrete flow influencing the water.

Provide a way for water to escape during the placement at key junctures in the forms if possible.

The homeowner is likely also concerned with seeing mud, knowing that mud is softer than dry soil and thinking it is not ready to carry the load of the concrete foundation and therefore the house. There are some facts that can assure the homeowner for this concern as well:

Footings and foundations are prepared on an excavation of "undisturbed" soil. This means the surface of the soil is cohesive or of a consistent strength.

Standing water does not absorb quickly or easily into the surface of a cohesive soil.

Water can be removed from an excavation without requiring compaction of the soil.

Water present on the top of soil does not immediately present a problem as saturation takes time. Depending on the type of soil and likely for most soils encountered for a foundation, that time can be considerable. However, the contractor must determine if the water presence has been sufficient to alter the surface of the prepared excavation. The IRC provides reference to this condition as follows in section R401.4.2:

Compressible or shifting soil. Instead of a complete geotechnical evaluation, when top or subsoils are compressible or shifting, they shall be removed to a depth and width sufficient to assure stable moisture content in each active zone and shall not be used as fill or stabilized within each active zone by chemical, dewatering or presaturation.

In other words, when the surface condition of the excavation is changing or no longer holds the condition of the designed soil capacity, remediation needs to occur. This is often a last resort that can be prevented with some common precautions including:

Limit the time water stands in the excavation by moving forward with concrete placement or removing the water.

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Control the amount of traffic in the excavation. Foot traffic in areas of standing water will accelerate working the moisture into the soil, impacting the surface condition and the compaction of that top layer.

Prior to concrete placement, all loose silty soils should be removed with a shovel along the bottom of the formwork, exposing the cohesive base.

Saturated soils do have a lower bearing capacity than the predicted or assumed condition. This is mainly due to expansion of the soils as the volume is increased with water. If concrete placement can be achieved soon enough, it is unlikely the water will have moved into the soil sufficient to disturb the compaction and bearing capacity will be maintained.

When soils are determined to be saturated or when the placement could not be made quickly enough, the excavation should be cleared of the loosened soils, mud and water sufficient to re-establish the soil-bearing capacity assumed for the design.

Contractors should not be surprised to hear this concern from the homeowner. The contractor should have kept an eye on the local weather forecast and anticipated the inclement weather, and as stated previously, designed the forms for the movement of water.

WEATHER CONSIDERATIONS

Rule number one is not to place concrete during rainfall or if rainfall is imminent. Rainfall during placement of concrete flatwork can present challenges to achieving a quality concrete, potential outcomes range from no damage to a weakened nondurable surface, only time will tell at which end of the range your situation will fall.

Best case and worst case scenario follow: Best case: The concrete is protected as much as possible from the falling rain. After the rain has stopped, the water that has fallen on the surface is allowed to evaporate just as bleed water from the original concrete mixture must be allowed to evaporate prior to proceeding with finishing operations. To substantially change the water-cement ratio of the concrete at the surface of the slab, energy must be added to the system, typically in the form of troweling passes with excess water on the concrete surface. If the water is allowed to evaporate, the water-cement ratio remains reasonably low, and since the ratio governs the strength of the concrete there is no substantial damage to the finished surface.

In extreme cases it is not uncommon to physically remove excess water from the slab surface by dragging a garden hose or a broom across the concrete surface to lower the volume of water that must evaporate. With proper timing and process, the durability of the concrete is not affected.

Worst case: the concrete is not protected from the rain; the water is not allowed to evaporate from the slab surface; and multiple passes of the floats and trowels used to finish the surface are made with the surface moisture in place. The energy supplied by the finishing operations mixes the excess water into the slab surface creating a high water-cement ratio in the near surface of the concrete reducing its strength and thus its durability.

The damage to the concrete surface is readily apparent since the texture of the surface is easily damaged or removed after the initial curing period. (Slab is dusty after 14 days of curing there is likely to be a problem with the concrete.) If the surface strength is only slightly affected, the long term durability of the concrete may be reduced, however, the concrete strength and durability below the surface would not be affected.

INDUSTRY STANDARDS

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Slab-on-ground, ribbed, mat or raft foundations on expansive soils shall be designed and constructed in accordance with WRI/CRSI-96 Design of Slab-on-Ground Foundations, PTI Design and Construction of Post-Tensioned Slabs-On-Ground, International Residential Code R402.2, R403.1.6, R403.1.8 (and hence IBC 1805.8, as well as IBC 1805.8.2), R506, American Concrete Institute ACI 318-08, ACI SP-2(07), ACI 302, ASTM C94 and E1745, to include Post-Tensioning Institute CCS-1, and Construction and Maintenance Procedures Manual for Post-Tensioned Slab-On-Grade Construction, et al. as specified in the design professionals construction documents as they relate to the foundation.

NOTE: Be aware that home inspectors in Texas are presently required by the Texas Real Estate Commission to render an opinion on the performance of foundations. This requirement is both incredibly unreasonable and impossible to meet. The performance of any foundation requires a beginning point of reference with which to compare the current state of the foundation. In the absence of a complete foundation elevation survey at the time of the foundation's construction, an opinion on the performance of a foundation is specious at best. **WE DO NOT RECOMMEND THAT YOU RELY SOLELY UPON THE OPINION STATED HEREIN REGARDING FOUNDATION PERFORMANCE.**

FOUNDATION DESIGN INFORMATION

The [Texas Engineering Practice Act](#) requires all Texas homes built on expansive soil to have engineered slabs. The ability of the foundation to withstand the forces of expansive soils where expansive soils are present can neither be determined nor opined by a limited visual inspection. That determination is an act and process of engineering which is beyond the scope of this inspection and the state inspection standards of practice. If you have a question, concern or suspected failure contact the certifying designer/engineer of record.

SOIL TYPE AND SUITABILITY

See the USGS soil type and use information provided to you in a separate report along with this inspection report for more information regarding the type of soil on your lot and the suitability of the soil type for construction of reinforced slab-on-ground foundations.

CONSTRUCTION DOCUMENTS (PLANS)

"R106 A complete set of construction documents (building plans) was not on site as required by: IRC R 106.3.1 Approval of construction documents. When the building official issues a permit, the construction documents shall be approved in writing or by a stamp which states "REVIEWED FOR CODE COMPLIANCE." One set of construction documents so reviewed shall be retained by the building official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection. . .", and, "R323.3.6 Construction documents. The construction documents shall include documentation that is prepared and sealed by a registered design professional that the design and methods of construction to be used meet the applicable criteria of this section."

"This section provides the minimum requirements for construction documents that an applicant must provide along with the permit application form for the application package to be considered complete. Construction documents are not just a set of drawings. Construction documents are the entire set of all submitted forms and information necessary to accurately communicate the scope of the construction. The submittals may include written special inspection and structural observation programs, construction drawings and details, reports, calculations, specifications, shop drawings, manufacturer's installation instructions, site plans and other graphic and written forms that will describe the proposed work in detail."

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While it may be true that the IRC allows the building official a certain amount of latitude, in R104.1, to interpret the code for the purpose of clarification, it does not obviate his responsibility to insure that the intent and letter of the code is enforced.

"R104.1 General. The building official is hereby authorized and directed to enforce the provisions of this code. The building official shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in conformance with the intent and purpose of this code. **Such policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.**"

IRC Commentary: The building official is appointed by the legislative body of the jurisdiction to serve as the employee with the authority and responsibility for the proper administration of the code enforcement agency. The building official establishes policies and procedures that will clarify, and not nullify, the applications of the code. The development of those policies and procedures should not be simply for the convenience of the jurisdiction's employees but should be viewed as a way to effectively communicate to all interested parties involved in the construction process how the department will process applications, review construction documents, make inspections, approve projects, and determine and clarify the application of the code provisions. Properly developed, these policies and procedures can make the code enforcement department more predictable for those who are regulated and will also establish improved code compliance and public relations.

When interpretation of the code is needed, the building official is the one individual of the jurisdiction with the legal authority to interpret the code and determine how the provisions should be applied, in both general and specific cases. Some departments formalize the interpretation process and require the person with a question to submit their question in writing. Departments are encouraged to develop policies for both formal (written) and informal (verbal) requests for code interpretations. **Any such interpretations must be in conformance with the intent and letter of the code and may not waive any requirements.** It may be necessary in some cases for the building official to write these code interpretations into the permit.

IMPORTANT: If your builder refuses to supply you with a set of plans for your house you are strongly advised to obtain them from the municipal building inspections department.

Below is from https://www.texasattorneygeneral.gov/sites/default/files/2018-06/PIA_handbook_2018_0.pdf

"If a copy of public information is requested, a governmental body must provide "a suitable copy . . . within a reasonable time after the date on which the copy is requested." However, the Act does not authorize the removal of an original copy of a public record from the office of a governmental body. If the requested records are copyrighted, the governmental body must comply with federal copyright law.

Open Records Decision No. 660(1999) (Federal Copyright Act "may not be used to deny access to or copies of the information sought by the requestor under the Public Information Act," but a governmental body may place reasonable restrictions on use of copyrighted information consistent with rights of copyright owner)."

Also see: <http://foift.org/resources/texas-public-information-act/>

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Get the plans as soon as you can. The city is only required to retain them for 180 days after the certificate of occupancy is issued or the final inspection is approved.

See also: <http://www.texasinspector.com/files/BOAT-Plans-on-Site.pdf>

MANUFACTURERS' INSTALLATION INSTRUCTIONS

A complete set of materials and systems manufacturers' installation instructions was not maintained on site during this inspection as required by IRC 106.1.2.

NEW HOME DOCUMENTATION

You are strongly urged to obtain the following documents from you builder or from the municipal building inspection department.

- 1) Geotechnical engineering reports and associated laboratory testing results to include, but not limited to, soil testing (e.g. standard penetration test reports, boring logs, et al.) and fill soil designations.
- 2) Site soil compaction certification letter.
- 3) Design firm engineering documents to include engineering drawings, engineer's notes, inspection reports, et al.
- 4) Post-tensioning materials documents, e.g. shipping invoices, tendon mill reports and certifications, et al.
- 5) Post-tensioning jack calibration and maintenance records for the equipment used on this site.
- 6) Post-tensioning tendon stressing logs.
- 7) Concrete plant, shipment and placement records.
- 8) Concrete slump test records.
- 9) Concrete core sample testing records.
- 10) Final grading certificate by a licensed civil engineer or surveyor.
- 11) Geotechnical engineer's soil compaction letter.
- 12) Engineer design and approval for all departures from building code-prescribed construction methods, as well as any alterations or repairs of any items of engineered design.
- 13) Engineering drawings and approval letters for all retaining walls.
- 14) Framing and MEP drawings.
- 15) Manuals for all mechanical equipment.
- 16) Manuals for all appliances.
- 17) Installation instructions for all proprietary building materials used.
- 18) Initial Foundation Elevation Survey
- 19) Proof of termite treatment on Texas Department of Agriculture-promulgated form.
- 20) HERS rater documentation.
- 21) All permits and inspection tags/reports from the municipality.
- 22) All reports from special inspectors.
- 23) Surveyor's documentation to include flood plain information.
- 24) Plumbing static pressure test results for the supply and DWV piping as well as gas piping.
- 25) Builder's warranty.

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B. Grading and Drainage

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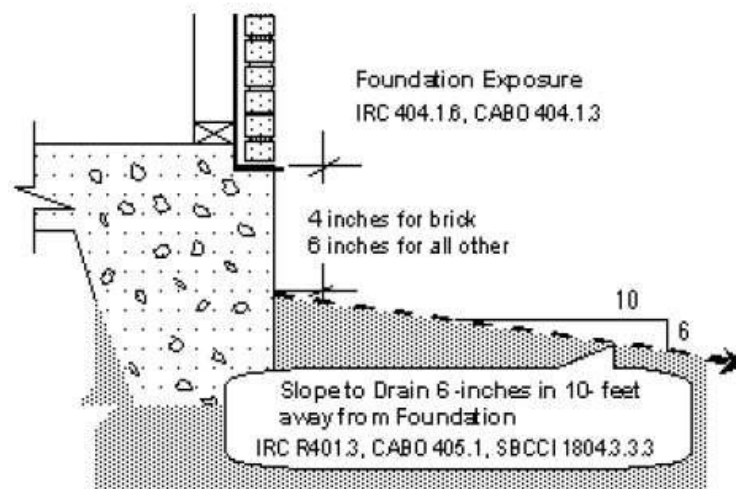
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All residential lot drainage in the DFW area must be designed in accordance with the guidelines contained in the "Storm Water Management Design Manual" incorporating the City of Fort Worth Local Criteria Section and the North Central Texas Council of Governments (NCTCOG) integrated Storm Water Management (iSWM) Design Manual for Site Development. These standards were first promulgated in 2006, and are commonly referred to as I-SWIM Standards.

Comments:

GRADING

The grading around the perimeter of the foundation must be improved to promote the flow of storm water away from the house. This can usually be accomplished by the addition of topsoil. The ground should slope away from the house at a rate of 6 inches in the first 10 feet adjacent to the foundation edge as per IRC 401.3.



- Site grading shall attain 5% minimum fall away from structure for first 5' around slab perimeter. Grading and drainage shall be maintained to prevent water collection or ponding adjacent to slab. Builder shall advise home owner of proper foundation maintenance. Moisture content fluctuations to be minimized by appropriate irrigation and landscaping considering seasonal climactic changes of temperature and precipitation.

From the engineer's notes.

DRAINAGE

The swales on the north and south sides of the lot are improperly sloped and will not perform as intended and required. Swales must slope a minimum of ¼" per foot as per accepted engineering practice.

See: <http://www.foundationperformance.org/projects/FPA-SC-01-0.pdf>

6.1.1.1 Site Grading

Site grading causes excess water to flow away from the foundation via surface sloping and drainage swales. Adequate surface drainage slopes are essential to minimize foundation movement and damage. Current International Residential Code requires 6" minimum fall the first 10' out from and perpendicular to building walls, and 2% minimum elsewhere to drain

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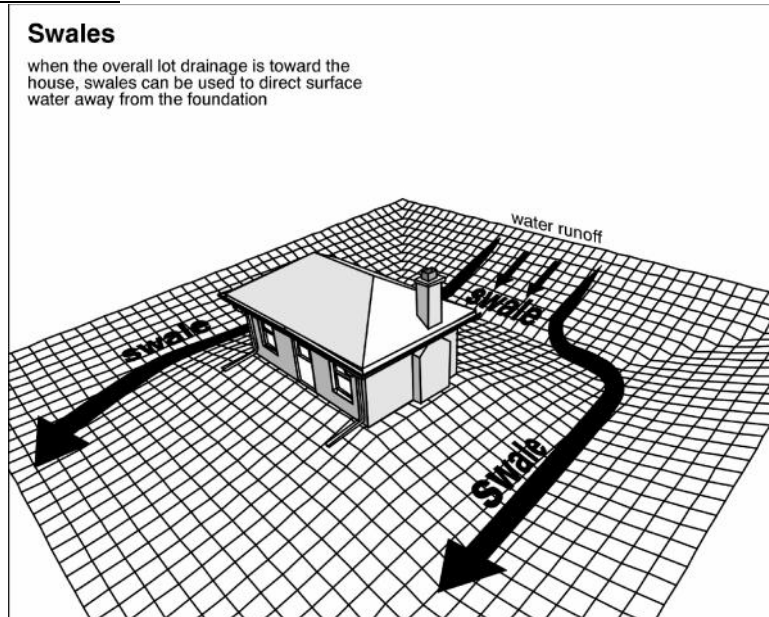
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off lot. Because current building practices sometimes have homes built closer than 10' to the adjacent structure or lot line, it is necessary to have greater slopes so that the 6" minimum is maintained.



See: <http://www.texasinspector.com/files/Drainage-Improvement-Primer.pdf>
<https://www.youtube.com/watch?v=anRdSVc-2X8>

Water is destructive. It can flow through fissures in the soil, rise under hydrostatic pressure or capillary action, and even find a path through solid surfaces, and few structures may be immune to its power. Grading and drainage are probably the most significant aspects of a property, simply because of the direct and indirect damage that moisture can have on structures. More damage has probably resulted from moisture and expansive soils than from most natural disasters, and for this reason we are particularly diligent when we evaluate site conditions. In fact, we compare all sites to an ideal.

In short, the ideal foundation placed on expansive and contractive earth will have soils that slope away from the house [ref: R401.3 and the typical on grade foundation design], and the interior floors will be at least 4-6 inches higher than the exterior grade [ref: R404.1.6]. Also, the residence will have gutters and downspouts that discharge into area drains with catch basins that carry water away to hard surfaces. If a property does not meet this ideal, we will not endorse it, even though there may be no readily visible evidence of moisture intrusion, and recommend that you consult with a qualified grading and drainage contractor or geotechnical engineer.

Additionally, grading and drainage cannot be adequately inspected under a visual inspection unless done so in a hard rain. We have discovered evidence of moisture intrusion inside homes when it was raining that would not have been apparent otherwise. Grading and drainage that does not measure up to this ideal condition is more likely to affect foundation performance, exacerbate water ponding and allow moisture intrusion into any hairline cracks that may be present in the foundation. Also, in conjunction with the cellulose materials found in most modern homes, moisture can facilitate the growth of biological organisms that can

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compromise building materials and produce microorganism like substances that can have an adverse affect on health; and encourage wood-destroying insects.

WARNING:

Proper lot and adjacent municipal drainage provisions are absolutely necessary to insure proper foundation performance. This includes all areas that will be paved; cut and fill slopes; channel, swales, detention basins including completed outlet structures, terraces, berms, and other drainage facilities as indicated on the plans and as specified in the adopted building codes. This also includes all drainage facilities and final stabilization measures as required by the approved plans and as specified in the adopted building codes. It is important to note that your builder's 10-year structural warranty will be voided if the grading and drainage of the lot are not properly installed and maintained.

NOTE: All grading and drainage elevation measurements were observed using a Technidea Zip Level Pro precision altimeter leveling instrument which was calibrated onsite per the manufacturer's instructions. This level is easily as accurate as any surveyor's transit over distances encountered on residential lots.

ADDENDUM: NEW HOME REPORT OVERVIEW

If you've come away from the reading of this report regarding your new home with a feeling of surprise or disappointment due to the number of items marked as "deficient", please consider the following:

Because homebuilders in the State of Texas are not licensed there is little or no governmental oversight of their building practices. The local municipal 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. It is often the case that they are not certified code inspectors. This results in a situation where the minimal building code standards are never fully met. Another way of stating this would be: In our many years of inspection experience and after inspecting several thousand 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 existing 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 non-expansive, 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 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. For an existing home, the residence would have been meticulously maintained by the homeowners through the services of licensed and qualified professionals in every field.

ADDENDUM: Building Code Compliance

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Anyone who tells you that the “(Fill in Your City) Building Code” for single-family residential buildings is not the International Residential Code is either ignorant of the facts or being deceptive.

If your builder tells you that you cannot have the house inspected he is either ignorant of the facts or being deceptive. You have a legal right under the Texas Business and Commerce Code to have the property inspected by your agent prior to purchasing it. See

<http://www.statutes.legis.state.tx.us/Docs/BC/htm/BC.2.htm>

Sec. 2.513. BUYER'S RIGHT TO INSPECTION OF GOODS. (a) Unless otherwise agreed and subject to Subsection (c), where goods are tendered or delivered or identified to the contract for sale, the buyer has a right before payment or acceptance to inspect them at any reasonable place and time and in any reasonable manner. When the seller is required or authorized to send the goods to the buyer, the inspection may be after their arrival.

Further, the International Code Council's, Legal Aspects of Code Administration, admonishes home buyers that: "...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"

NOTE: It is important to understand that merely because the municipality has permitted an installation does not make it code compliant. R105.4 Validity of permit. The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the building official from requiring the correction of errors in the construction documents and other data. The building official is also authorized to prevent occupancy or use of a structure where in violation of this code or of any other ordinances of this jurisdiction.

Additionally, everyone working on a project is required to adhere strictly to the code, regardless of what the building official has to say. IRC 105.8 Responsibility. It shall be the duty of every person who performs work for the installation or repair of building, structure, electrical, gas, mechanical or plumbing systems, for which this code is applicable, to comply with this code.

The municipality and the municipal inspector are required to enforce the adopted codes and can be held liable by Texas law if they do not as per the Texas Tort Claims Act, Title 5, Governmental Liability, Section 101.0215 which reads in part:

"Sec. 101.0215. LIABILITY OF A MUNICIPALITY. (a) A municipality is liable under this chapter for damages arising from its governmental functions, which are those functions that are enjoined on a municipality by law and are given it by the state as part of the state's sovereignty, to be exercised by the municipality in the interest of the general public, including but not limited to: (28) building codes and inspection"

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:

<https://www.tdlr.texas.gov/complaints/ComplaintForm.aspx?strRadiobutton=Code%20Enforcement%20Officers>

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. Additionally, we are not interpreting the building code. That is a solely a matter for the Authority Having Jurisdiction, i.e. the municipality in question. However, we always find discrepancies between what the municipal

Report Identification: [REDACTED]

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

I	NI	NP	D	Inspection Item
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inspectors allow and stated code requirements, and feel that juxtaposing these two allows our clients to make a fully informed decision regarding the condition of the home they are buying.

When confronted with the facts many builders will fall back on any number of different logical fallacies as arguments. These are specious and of no importance. Your inspector was professional enough to provide you with the facts in this written report and to justify and support each comment with building code and industry regulation citations. If your builder disagrees with anything in this report you should insist that he responds in kind: in writing, on his company letterhead, and support each matter of contingency with the applicable building code, industry standard, manufacturers' installation instructions, et al. citation. If he cannot, he is merely providing you with so much hot air, distorting the facts to support his theories, and wasting your time.

Also bring the municipal inspector into the discussion by scheduling a meeting between you, the builder, and the chief building inspector of your city. Provide each of the two a copy of my report. Ask them to illustrate to you in writing on company and city letterhead where in the adopted building code the report is wrong. If they are unwilling to do so this should raise a huge red flag.

ADDENDUM: THE CONSTRUCTION BOARD OF APPEALS

Once you have attempted to persuade your builder to address the issues listed in this report as deficient, and should he be reluctant to make the necessary repairs, how should you proceed? First, request that the builder meet you at the building site along with the Chief Building Official (CBO) of your municipality. Have both the builder and the CBO illustrate to you *in writing in the applicable building code* where it is stated that the items in question do not need to be improved. If they cannot do so, then any decision that they make regarding the content of this report is purely subjective and specious. While they may not be purposely misleading you, they have just agreed upon a **different kind of truth**.

If the CBO rules in the builder's favor without producing adequate supporting documentation, you then should take your case to the municipal Construction Board of Appeals. Each municipality is required to form such a board as per International Residential Code R112, which says in part:

SECTION R112

BOARD OF APPEALS

R112.1 General.

In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The building official shall be an ex officio member of said board but shall have no vote on any matter before the board. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the building official.

R112.2 Limitations on authority.

An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equally good or better form of construction is proposed. The board shall have no authority to waive requirements of this code.

R112.3 Qualifications.

The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction.

R112.4 Administration.

The building official shall take immediate action in accordance with the decision of the board.

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In the event that the Board of Appeals rules in the Building Official's favor you still have the ability to appeal this decision in the applicable district court.