

# Cypress Inspections

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Phone/Text (281) 373-1018 [gtg@cypressinspections.com](mailto:gtg@cypressinspections.com)

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## PROPERTY INSPECTION REPORT

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**Prepared For:** Nisha Alexander & Kevin Klecka

(Name of Client)

**Concerning:** 3611 Windbriar Ct., Houston 77068

(Address or Other Identification of Inspected Property)

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**By:** Greg Genser – TREC Professional Inspector License #2962 6/17/19; 1:45-6:15pm

(Name and License Number of Inspector)

(Date)

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### 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](http://www.trec.texas.gov).

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

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

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

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

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

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.**

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**ADDITIONAL INFORMATION PROVIDED BY INSPECTOR**

**Report:** This report is the property of Greg Genser, d/b/a Cypress Inspections © 2019, all rights reserved. This report is prepared exclusively for the benefit and use of the named client in strict accordance with the terms and conditions of the employment agreement, which by its mention is incorporated within this report, and any notations within this report, and is not transferrable to anyone in any form. Possession of this report does not carry with it the right of publication. This inspection report may not be used for any purpose or by any person other than the party to whom it is addressed without the written consent of the inspector. None of the contents of this report, parts or components of this report or a copy of this report shall be conveyed to the public through any means, purpose or venue without the written consent and approval of the inspector. There will be no consultation with secondary readers of this report unless client has made this fact known to Cypress Inspections. The signatory inspector prepared this report on a computer and an error may occur. Should you encounter a typo or other editing error, please contact Cypress Inspections so that a correction to this report can be made.

The inspection is a non-destructive, non-intrusive inspection performed in a limited period of time. If the client feels a more in-depth and thorough inspection of a particular component-system is needed, a qualified specialist in that field should be consulted for further evaluation. Components-systems reported as deficient should always be referred to a qualified professional in that field who must completely reexamine the entire component-system to determine the appropriate method of repair to ensure that the installation and operation is in a suitable manner. When water damage is observed, fungal growth is possible. Further evaluation by a qualified specialist licensed by the Texas Department of State Health Services in mold assessment may be necessary. If house is occupied at time of the inspection, it is possible that a deficiency may have been concealed. Once owner-occupant vacates the property, any visible deficiency that becomes apparent should be reported to you, the client via an updated Seller's Disclosure Notice form.

There may be an installation deficiency noted in this report. If the deficiency in question is an alternative material, design or method of construction and equipment that has been approved by the building official, it is an acceptable installation. However, no such documentation has been provided to the inspector. Client should request such documentation be provided by the building official, not a 3<sup>rd</sup> party private inspector. There may be a structural deficiency noted in this report. If the deficiency in question was engineer designed and approved by a design professional, it is an acceptable installation. However, no such documentation has been provided to the inspector. Client should request such documentation be provided by the design engineer with their engineer stamp on the document approving such application.

**Definitions of notations within report to help you better understand this report:**

**Deficient** as specified by the TREC Standards of Practice; 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. General deficiencies include inoperability, material distress, water penetration, damage, deterioration, missing components, and unsuitable installation. A system-component may have numerous deficiencies, but all may not be listed within this report. In the inspector's opinion, only deficiencies deemed a priority-safety issue may be listed; an opinion which may differ from yours or that of other professionals.

**Information** as defined by the inspector; is for information purpose only to help better explain the inspector's comment.

**Note** as defined by the inspector; a system-component that is a deficiency-unsuitable installation, which is commonly observed. However, is not in need of immediate repair; an opinion which may differ from yours or that of other professionals.

**Photographs:** Photographs included in this report are intended to illustrate some, but not all deficiencies and to clarify the deficiency noted in this report. All photographs taken may not be included within this report. The photographs are not intended to be all-inclusive or to describe all conditions noted on the property or within this report.

**Excluded Items:** Geophysical surveys, surveys of subsurface conditions, ground testing, adequacy of site drainage; fire sprinkler systems, intercom systems, security systems, phone systems, T.V. systems, outdoor lighting systems, solar systems, water softening or purification systems, refrigerators, washers, dryers, all other specialized systems; damage by wood destroying insects, vermin or pests; floor and wall coverings; counter tops and cabinets; cosmetic items including but not limited to stains, nicks, chips and "dings"; and any items not readily accessible-visible at time of the inspection or mentioned or set forth herein or in the Property Inspection Report are specifically excluded from this inspection. Unless otherwise mentioned in this report; shower liner leak test is excluded; removal of appliance access covers (i.e. heating & A/C equipment, dishwasher) is excluded. An additional list of exclusions can be found in the Texas Real Estate Commission Standards of Practice.

The inspector is not aware whether this property sustained flood, windstorm or any other substantial damage. While there may not be visible evidence of water damage, repairs may conceal such damage. A Comprehensive Underwriting Exchange Report (C.L.U.E ®) may offer additional information on losses, or payments for losses on this property. I recommend that you contact your agent for more information.

Hazardous Substances: The inspection does not encompass any type of environmental survey or related testing for the presence, absence or risk of Asbestos, Chinese Drywall, Radon, Lead (in paint or water), indoor air quality, mold, mildew or any other mineral or chemical substance or thing which may be detrimental to life, health and safety. Even if comments are made regarding one or more of these issues, inspections and determination of the presence and dangers of these issues are specifically excluded from the inspection and report.

Tools used: Any test equipment used (moisture meter, Smart Leveler, thermal imaging camera, thermometers, etc.) is to help locate problem areas. It must be understood that equipment is not an exact science but rather good tools used as indicators of possible problems. At times, because of hidden construction within a ceiling, floor or wall cavity, equipment may get a false reading or no reading at all. Some equipment will pick up on metals, wiring, unique wall finishes, etc. Positive readings do not always mean there is a problem, nor do negative readings necessarily mean there is no problem. For moisture detection equipment, equipment is not used to obtain exact moisture content, but rather to obtain relative readings between suspected problem areas and non-problem areas. This information is then used to help determine potential problem areas which may warrant more investigation.

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Property is pre-owned & vacant. Seller's Disclosure Notice was provided.

MLS Information: 2,856 Sq. Ft. Year built 1979. "The home was previously used as a rental and is being sold AS-IS. It has been refreshed and is turn-key ready for new tenants or owners to make their own. THIS HOME HAS NEVER FLOODED." HCAD Information: Current owner has been owner of record since 8/9/2018.

Present during inspection: Client's. Buyer's agent.

With permission from both me and client, one copy of this report is being emailed to the client's Realtor.

Weather conditions—Rainfall within past 24 hours. Today-Sunny, near 90°F. House appears to face north.



Front view



Rear view

I=Inspected

NI=Not Inspected

NP=Not Present

D=Deficient

I NI NP D

## I. STRUCTURAL SYSTEMS

### ☒ ☒ ☐ ☒ A. Foundations

*Type of foundation(s):* Appears to be slab on ground

*Comments:* At this stage of inspection, portions of the foundation are always obstructed from view by interior floor coverings, personal items; decks, high soil, vegetation, etc. Inaccessible-obstructed foundation areas are excluded from inspection.

**Foundation performance:** In the inspector's opinion, the foundation does not appear to be performing its intended function, as evidence of deflection-differential movement with the foundation was observed. A Foundation Elevation Survey (FES) was performed. The greatest foundation elevation variance measured is 1.3 inches. See FES on page 6 for details. The following was observed but may not be all-inclusive.

1. **Deficient:** Exterior brick cladding crack was observed at some locations. Exterior trim separation from brick was observed at the NE corner.



2. **Deficient:** Evidence of separation-settlement to the fireplace and chimney was observed.



2<sup>nd</sup> floor elevation fireplace about 1" separation.



1<sup>st</sup> floor elevation interior brick separation from crown molding



Fireplace and flatwork settlement

3. **Deficient:** Interior wallboard tape rippling was observed at in the stairway.
4. **Deficient:** Doorway-walkway-window frame opening is not square at some locations. Door is self-closing; binds to the doorframe at one or more locations.



2<sup>nd</sup> floor elevation NE bedroom door binds to doorframe

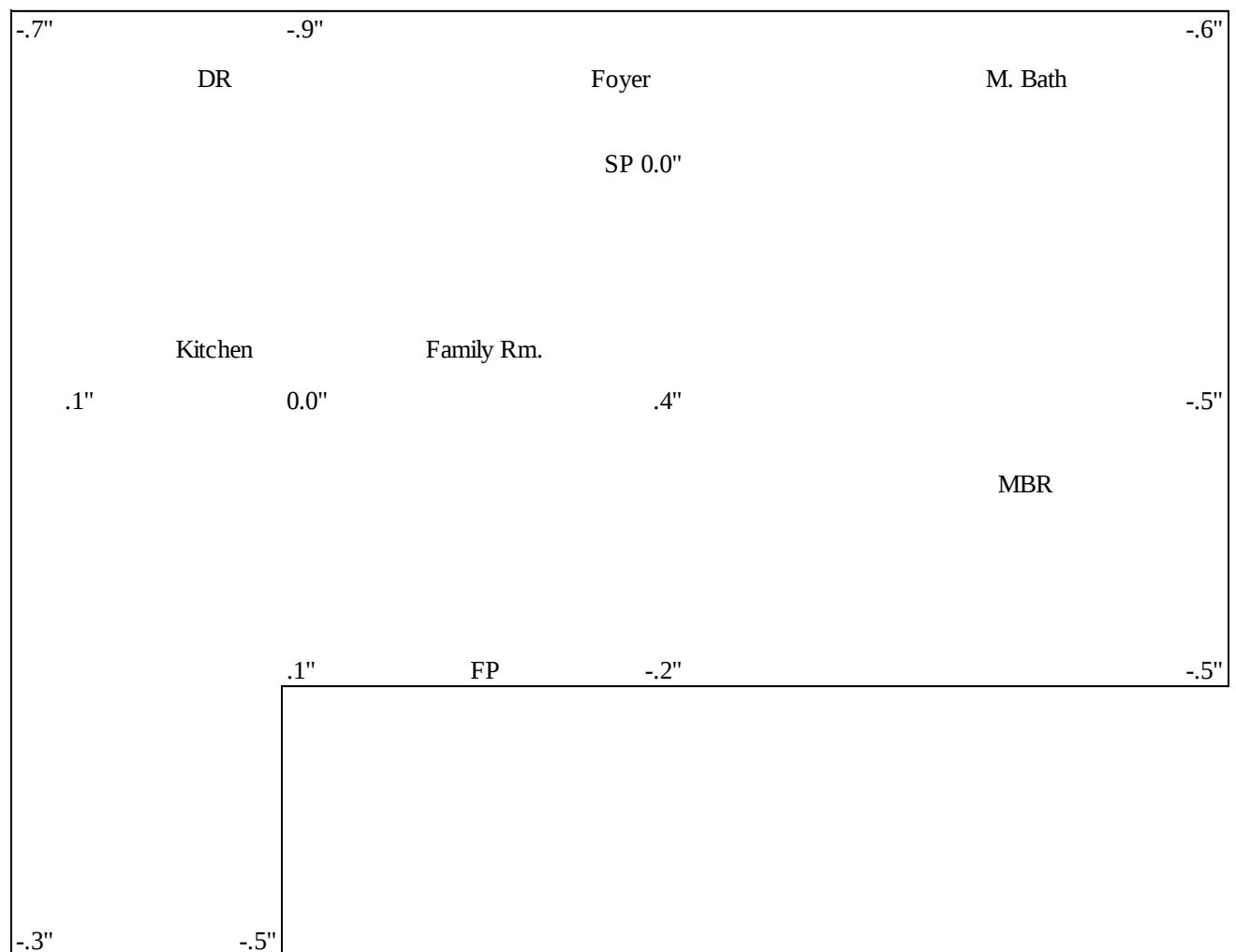
**I=Inspected      NI=Not Inspected      NP=Not Present      D=Deficient**

**I   NI   NP   D**

5. **Deficient:** Roof structure rafter separation from ridge board was observed at some locations.



**Foundation Elevation Survey**



Information: Survey not to scale. A Smart Leveler was used to take a random sampling of measurements. Measurements shown do not adjust for floor coverings differences. Measurements are in 1/10-inch. Starting Position (SP) = 0.0". Greatest foundation variance measured is 1.3 inches.

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☒ ☒ ☒ ☒ **B. Grading & Drainage**

*Comments:* Determining the efficiency or performance of underground or surface drainage systems is excluded from inspection.

1. **Deficient:** Finished grade along foundation perimeter is too high at some locations. Proper foundation exposure-grade clearance provides termite protection and minimizes the chance of decay resulting from moisture migrating to the wood framing.

Information: Concrete and masonry foundation walls shall extend above the finished grade adjacent to the foundation at all points a minimum of 4 inches where masonry veneer is used and a minimum of 6 inches elsewhere.



Grade too high; one of several locations



Grade too high; one of several locations

2. **Deficient:** Improper grade-slope and evidence of improper surface water drainage to property was observed at some locations. Proper site drainage is important in preventing erosion, water ponding and possible failure of a foundation system.

Information: Surface drainage shall be diverted to a storm sewer conveyance or other approved point of collection that does not create a hazard. Lots shall be graded to drain surface water away from foundation walls. The grade shall fall a minimum of 6 inches within the first 10 feet.

Exception: Where lot lines, walls, slopes or other physical barriers prohibit 6 inches of fall within 10 feet, drains or swales shall be constructed to ensure drainage away from the structure. Impervious surfaces within 10 feet of the building foundation shall slope a minimum of 2 percent away from the building.



Grade-slope incorrect; one of several locations

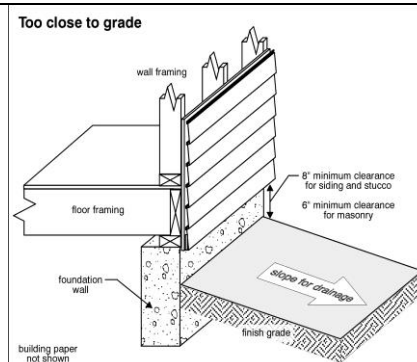


Illustration example of proper grade-slope

3. **Deficient:** Debris was observed in gutter that should be removed to allow for proper water collection and discharge. Installation of a leaf guard should be considered to prevent further gutter obstructions. Gutter downspout does not extend several feet away from the foundation perimeter at some locations. Proper drainage is important in preventing erosion, water ponding and possible foundation failure.

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

Pine needles in gutter



Downspout does not extend away from foundation; one of some locations

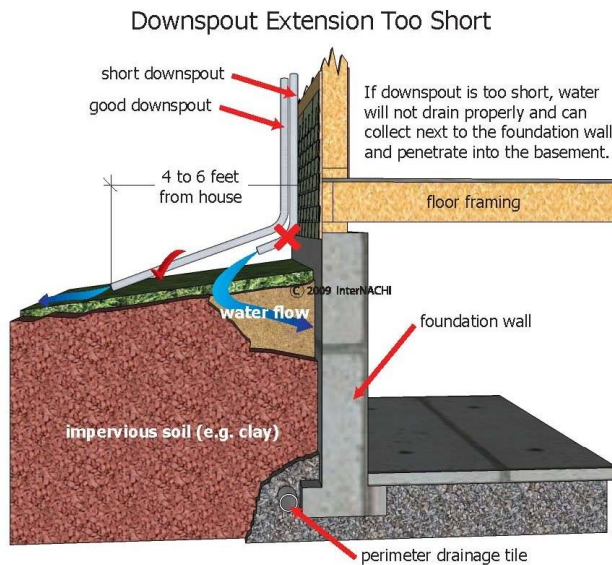


Illustration example of proper gutter discharge at foundation

### ☒ ☐ ☒ ☒ C. Roof Covering Materials

*Types of Roof Covering:* Asphalt shingle

*Viewed From:* Accessing lower rooftop & grade elevation

*Comments:*

1. Information: According to seller's disclosure notice, roof cover is 10 years old. Evidence of repair to roof cover-penetration-flashing was observed at some locations. Additional information about repairs should be obtained from homeowners.



2. **Deficient:** Deterioration to the roof cover was observed; as evidenced by shingle damage, aggregate-granule lose and lack of adhesion. Shingle adhesion is important in preventing shingle uplift, blow-off and water penetration.

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

I NI NP D



Shingle damage



Shingle damage



Lack of adhesion

3. **Deficient:** By random observation, shingle fastening is incorrect at some locations. Proper fastening is important in preventing shingle uplift, blow-off and water penetration. See illustration below for example of proper nail installation.



Shingles not fastened at edge



Shingles incorrectly fastened, sliding off the roof



Nail pop

#### HELP STOP BLOW-OFFS AND CALL-BACKS

A minimum of four fasteners must be driven into the DOUBLE THICKNESS (laminated) area of the shingle. Nails or staples must be placed between – and through – the “fastener area”. CAUTION: Do not use fastener lines for shingle alignment.

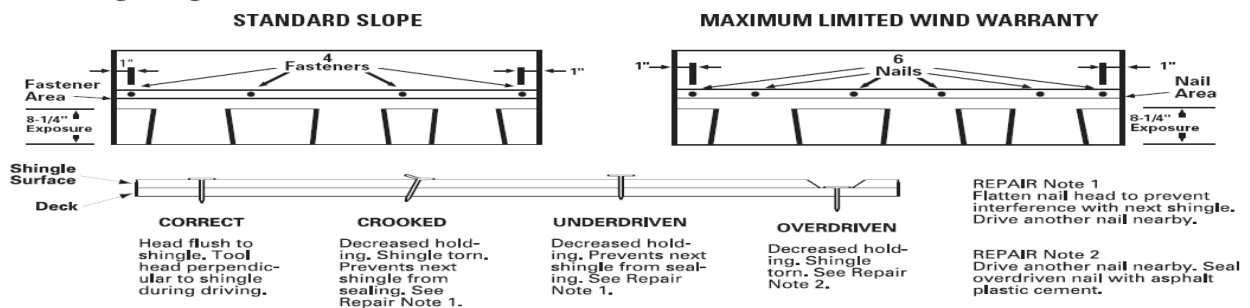


Illustration example of proper nail installation

4. **Deficient:** Fastener head on ridge cap shingle(s)-flashing(s) is exposed.

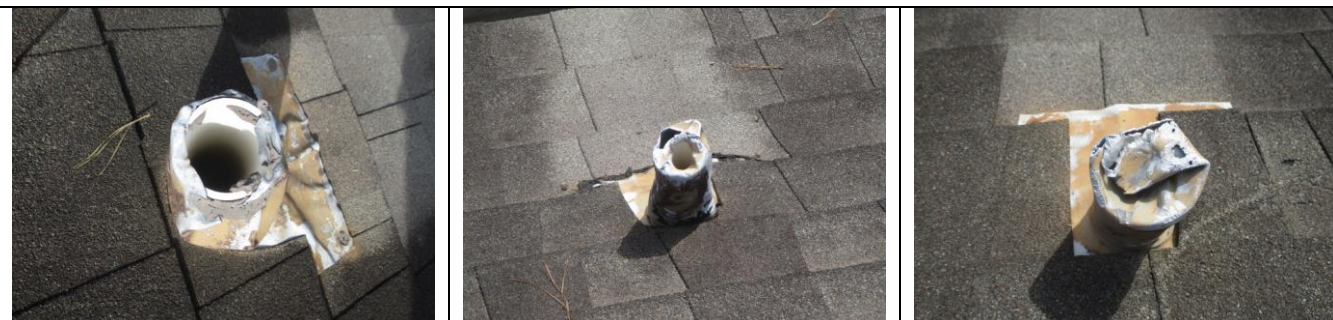
Information: Exposed fasteners will corrode, loosen and can become a path of water penetration into materials and the building. Approved roofing asphalt cement should be applied to seal the exposed fastener(s).



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**I   NI   NP   D**

5. **Deficient:** Plumbing vent pipe roof jack (boot) seal is damaged-incorrectly installed at some locations. A proper seal is important in preventing water penetration into the building.



6. **Deficient:** Flashing is loose-corroded at one or more locations. Proper flashing installation is important in preventing water penetration into the building.



7. **Deficient:** Exterior siding cladding is in contact-too close to the roof cover. Proper clearance minimizes the chance of decay resulting from moisture migrating to the cladding.  
Information: Minimum 1-2 inch clearance should be provided between materials. Due to incorrect clearance, sidewall flashing is not visible-visibility is limited.

8. **Deficient:** Tree-shrub limbs are too close to roof cover. There is tree debris on the roof cover.  
Information: Tree-shrub limbs should be trimmed several feet away from the roof to avoid shingle damage. Debris should be removed to allow for proper roof drainage and avoid possible water penetration through the shingle.

☒ ☒ ☒ ☒ **D. Roof Structures and Attics**

*Viewed From:* Entering 2 dwelling attic areas. Standing on garage attic stairway.

*Approximate Average Depth of Insulation:* 14 inches

*Comments:* A visual inspection was performed with use of a flashlight by standing on the solid attic walkway(s). If no solid walkway is installed, visual inspection is limited to view from the access opening(s). Insulation & personal items are not moved to provide access-observation. All areas are not visible from these vantage points.

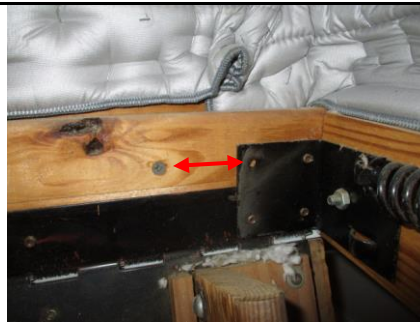
1. **Deficient:** Pull down attic stairways is damaged-incorrectly installed. A properly functional-installed stairway is an important safety requirement. Garage attic access opening cover is not labeled as, and does not appear to be a fire-rated cover. A fire-rated cover is an important safety requirement.  
Information: All nuts and bolts should be firmly secured. 16-16d nails or 16-1/4" x 3" lag screws should be installed in the pull down attic stairway brackets-frame-pivot plate to safely secure the frame to the structure. Stairway should properly open; close and should be flush to the floor. Stairway should be 350 lbs. rated.

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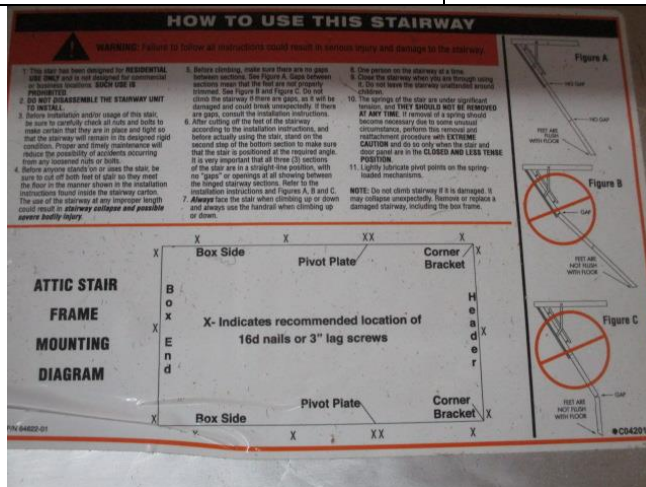
Stairway opens incorrectly



Incorrect fastener(s); fastener(s) not installed.



Stairway opens incorrectly



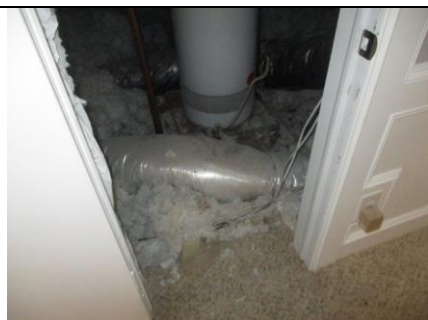
Sample label for correct-incorrect stairway installation



Sample label to indicate cover is fire-rated

2. **Deficient:** Attic access-walkway to water heating equipment for inspection and servicing is incorrect-not installed. Proper and safe equipment access-walkway is an important safety requirement.

Information: Walkway should be a minimum 5/8" sheathing and securely fastened. Cables, pipes and other items should not be on the walkway or infringe the walkway area. Attics containing appliances requiring access shall be provided with an opening and a clear and unobstructed passageway large enough to allow removal of the largest appliance, but not less than 30 inches high and 22 inches wide and not more than 20 feet in length when measured along the centerline of the passageway from the opening to the appliance. The passageway shall have continuous solid flooring not less than 24 inches wide. A level service space at least 30 inches deep and 30 inches wide shall be present along all sides of the appliance where access is required. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches, where such dimensions are large enough to allow removal of the largest appliance.



Walkway not installed

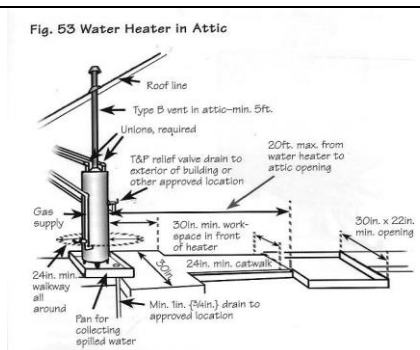


Illustration example of proper equipment access-walkway

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

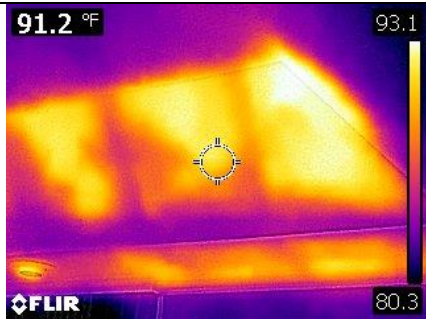
**I   NI   NP   D**

3. **Deficient:** Attic floor-walkway protective guard is not installed. A protective guard is an important safety requirement. Information: Raised floor surfaces located more than 30 inches above the floor below shall have guards not less than 36 inches in height. If an individual would step off the attic floor-walkway, it is more than a 30 inch drop through the ceiling. Ceiling board is not a structural, load-bearing material.

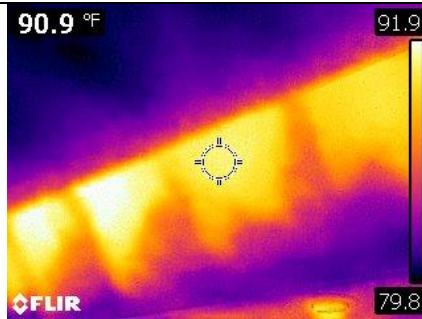


Example of protective guard

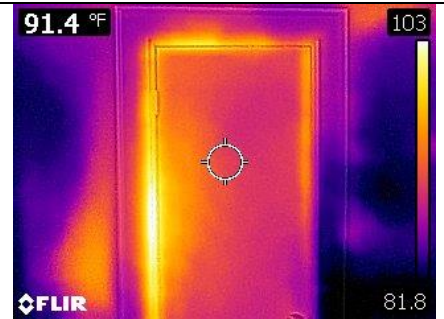
4. **Deficient:** Ceiling insulation is missing; thickness is insufficient at some locations. The residence walk-in attic access opening door is not insulated and weather-stripped. Proper insulation thickness is an important energy saving requirement.



With thermal imaging, bright yellow areas indicate ceiling insulation not installed for game room sloped ceiling.



With thermal imaging, bright yellow areas indicate ceiling insulation not installed for game room sloped ceiling.



With thermal imaging, bright yellow areas indicate walk-in attic door not insulated.

5. Information: A foreign substance has been applied to the underside of the roof structure and deck, which appears to be a radiant heat barrier, in the inspector's opinion. Further information as to this substance should be obtained from the homeowner.



6. Note: Dwelling attic exhaust ventilation is incorrect. Heat and moisture-related problems and shingle deterioration can occur due to improper ventilation. Information: Only one type of exhaust ventilation (ridge, air hawk, turbine, power) should be installed within a common attic area. Exhaust ventilation within a common attic should be at the same elevation and on the same ridge side. Using more than

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one type of vent or vents at different elevations can allow the upper exhaust vent to pull air in from the other vent-lower vent; which can short circuit the system and cause weather infiltration into the attic. Minimum 2 inch sheathing clearance should be provided at each side of the ridge ventilation. Refer to product manufacturer instructions.

7. **Deficient:** Cross ventilation (intake eave ventilation and exhaust roof ventilation) is not installed for the garage. Heat and moisture-related problems and shingle deterioration can occur due to improper ventilation.

#### Recommended amount of attic ventilation

the total vent area is often recommended to be 1/300 of the floor space of the attic

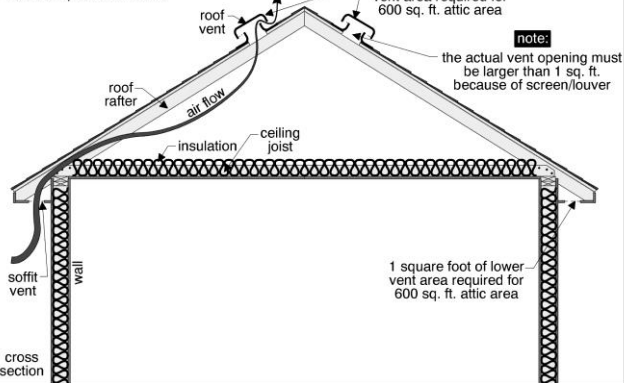


Illustration example of proper ventilation

8. **Deficient:** Evidence of deflection-settlement to the garage roof structure was observed. Dwelling rafter separation from ridge was observed at some locations; ridge-hip-valley rafter is undersized for attached rafter at some locations; roof structure support is incorrect-not installed at some locations.



Evidence of deflection-settlement to the garage roof structure



Rafter separation; one of some locations



Support not installed; one of some locations

#### ☒ ☒ ☒ ☒ **E. Walls (Interior and Exterior)**

##### Comments:

1. **Deficient:** Evidence of interior wallboard water damage was observed behind the dishwasher. Evidence of interior wood paneling water damage was observed in breakfast and family rooms.  
Information: Source of water damage should be located and repaired prior to replacement of water damaged materials. If damage was from previous water penetration-leak that has been repaired, one would assume the water-damaged material(s) would have been repaired-replaced.

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I   NI   NP   D



Water damage behind dishwasher



Water damage in breakfast area



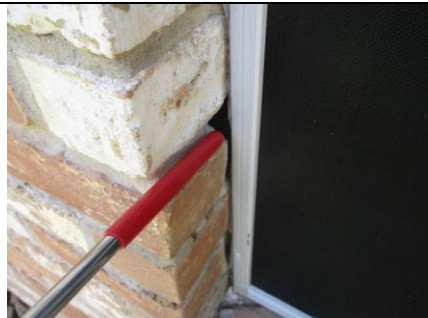
Water damage in family room

2. Information: Evidence of interior wood paneling repair was observed in the stairway.
3. Note: A tire stop is not installed in garage to prevent automobile impact-damage to the wallboard and structure.
4. **Deficient:** Evidence of deflection-sagging to the span above the garage vehicle door opening was observed.
5. **Deficient:** Evidence of water damage to exterior cladding siding-trim was observed at numerous locations. Water-damaged materials should be replaced to minimize the chance of decay resulting from moisture migrating to the wood framing.



6. **Deficient:** Exterior cladding siding-trim clearance is incorrect at some locations. Proper clearance minimizes the chance of decay resulting from moisture migrating to the cladding.  
Information: A minimum 1-2 inch clearance shall be provided at the roof cover and concrete flatwork surface. A minimum 6 inch clearance shall be provided at finished grade.

7. **Deficient:** Exterior sealant is not installed-insufficient at some locations. Properly installed sealant is to prevent direct water penetration through an open joint within the cladding system.  
Information: Exterior sealant should always be properly installed at many locations including; brick cladding cracks, expansion joints, intersection to trim; siding cladding joints and intersection to trim; around pipe penetrations, electrical outlets (A/C equipment disconnect, service equipment; lighting & receptacle), cable penetrations, wall covers; door and window frames.



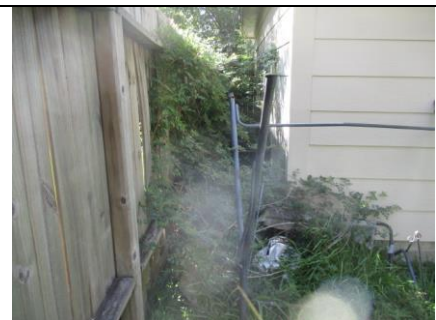
No sealant. Bees entering wall cavity at this balcony location.

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

**I   NI   NP   D**

8. **Deficient:** When pressure was applied to the west side brick cladding, weakness was detected to the brick. In the inspector's opinion, this may indicate the brick is incorrectly fastened and secured to the structure. Exterior brick cladding crack was observed at some locations.

9. **Deficient:** Due to vegetation, exterior west side of the garage is excluded from inspection.



10. Note: Approved corrosion-resistant flashing that extends to the surface of the exterior wall finish with a drip edge is not installed at some locations. Proper cladding drainage-flashing is an important element in preventing moisture from becoming trapped within the system and underlying water damage.

Information: Approved corrosion-resistant flashings shall be installed at locations including: First course of masonry above grade at the foundation and other points of support such as angles-lintels. Exterior window and door openings. Pan flashing at the sill of the exterior window and door openings. Pan flashing shall be sealed or sloped in such a manner as to direct water to the surface of the exterior wall finish or to the water-resistant barrier for subsequent drainage. At the intersection of chimneys or other masonry construction with frame or stucco walls, with projecting lips on both sides under stucco copings. Under and at the ends of masonry, wood or metal copings and sills. Continuously above all projecting trim. Where exterior porches, decks or stairs attach to a wall or floor assembly of wood-frame construction. At wall and roof intersections.

☒ ☒ ☒ ☒ **F. Ceilings and Floors**  
*Comments:*

1. **Deficient:** Evidence of deflection-sagging to the garage ceiling structure was observed.

2. Note: Fireblocking is not installed at 2<sup>nd</sup> floor elevation bathtub drainpipe floor penetration. Proper fireblocking installation is important in the slowdown of fire through the building.

3. **Deficient:** Evidence of deflection-sagging to 2<sup>nd</sup> floor elevation structural floor system was observed. The following was observed but may not be all-inclusive.

2<sup>nd</sup> floor elevation structural floor system popping-unevenness was observed at many locations. Floor tiles are loose in the bathroom.

2<sup>nd</sup> floor elevation door opening is not square at some locations. 2<sup>nd</sup> floor elevation NE bedroom door binds to doorframe. 2<sup>nd</sup> floor elevation bathroom door is self-closing.

☒ ☐ ☒ ☒ **G. Doors (Interior and Exterior)**  
*Comments:*

1. **Deficient:** Water damage, damage to exterior door was observed at several locations. I was unable to open the secondary master bedroom door.

Information: Water-damaged materials should be replaced and door should be installed to prevent water penetration. This defect was not listed in the seller's disclosure notice.

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

**I**   **NI**   **NP**   **D**



Water damage; evidence of water penetration at master bedroom door



Water damage at master bedroom door



Water damage at breakfast room door



Trim damage at breakfast room door

2. **Deficient:** Exterior door weather-stripping is damaged-insufficient at some locations. Proper sealing is an important energy saving requirement.  
Information: Exterior door should be sealed to prevent air leakage (infiltration and exfiltration) through the building thermal envelope.
3. **Deficient:** Glass in some exterior doors is not labeled as tempered glass; therefore may not be tempered glass. Tempered glass is an important safety requirement.  
Information: Glass at hazardous locations shall be permanently labeled as such.
4. **Deficient:** Door is damaged at some locations. Door stop is damaged-not installed at some locations. A door stop is to prevent damage to the door and wallboard.

☒ ☐ ☒ ☒ **H. Windows**

*Comments:*

1. **Deficient:** Window frame lock is missing at some locations. Proper lock installation is an important safety requirement.
2. **Deficient:** Master bathroom shower glass is not labeled as tempered glass; therefore may not be tempered glass. Tempered glass is an important safety requirement.  
Information: Glass at hazardous locations shall be permanently labeled as such.

☒ ☐ ☐ ☒ **I. Stairways (Interior and Exterior)**

*Comments:*

One or more deficiencies were observed. Visit [www.stairways.org](http://www.stairways.org) for additional details. Once at the site, click Codes & Standards, and then click view the IRC 2006 Visual Code Interpretation. A properly installed stairway, handrail and related items are an important safety requirement.

1. **Deficient:** One or more risers are incorrect. One or more treads are incorrect.

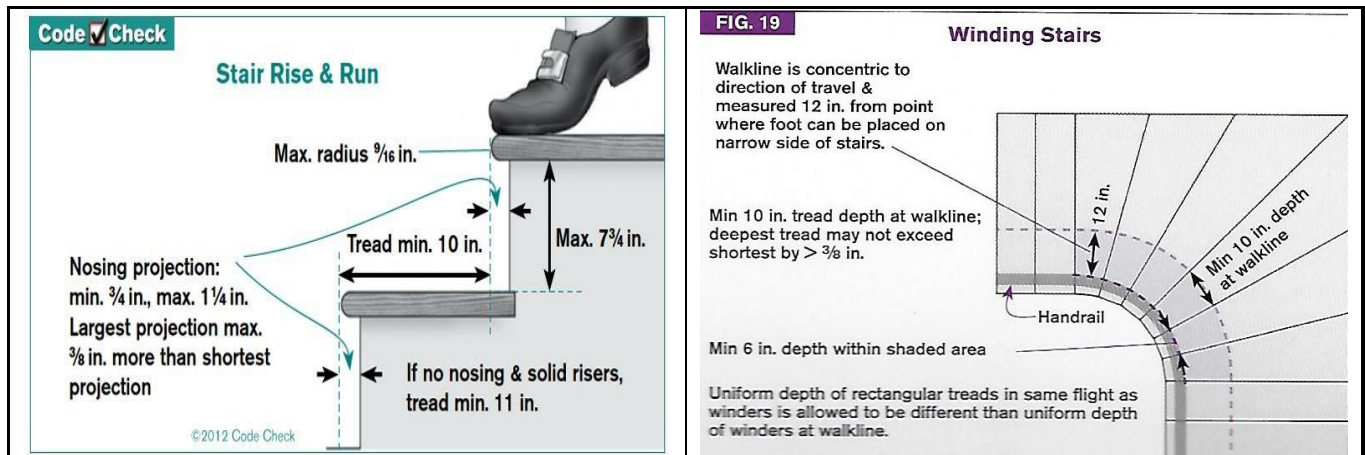
I=Inspected

NI=Not Inspected

NP=Not Present

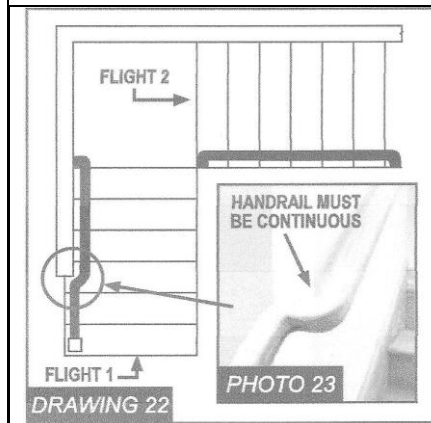
D=Deficient

I NI NP D



2. **Deficient:** Handrail is incorrect.

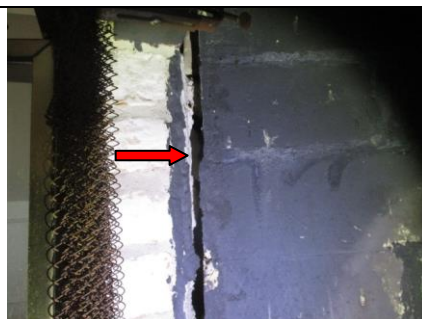
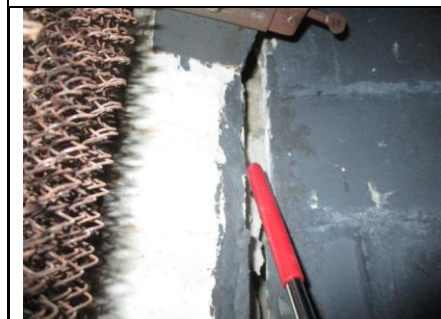
Information: Handrails for stairways shall be continuous for the full length of the flight, from a point directly above the top riser of the flight to a point directly above lowest riser of the flight. Handrail ends shall be returned or shall terminate in newel posts or safety terminals. Handrails adjacent to a wall shall have a space of not less than 1 1/2 inch between the wall and the handrails.



☒ ☒ ☒ ☒ **J. Fireplaces and Chimneys**

**Comments:** Portions of a chimney-vent are not viewable. Inaccessible chimney-vent is excluded from inspection.

1. **Deficient:** Evidence of separation within both fireplaces was observed. See section 1A for additional information. Open joints within fireplaces are not sealed. Properly sealed fireplace is an important safety requirement.
- Information: An approved sealant with a 300°F minimum rating should be installed.



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

**I**   **NI**   **NP**   **D**

2. **Deficient:** Creosote was observed inside the chimney-fireplace. Creosote is a combustible, flammable material. A clean chimney-fireplace is an important safety requirement.

3. **Deficient:** Where is 1<sup>st</sup> floor elevation fireplace gas valve? 2<sup>nd</sup> floor elevation fireplace gas valve is damaged.

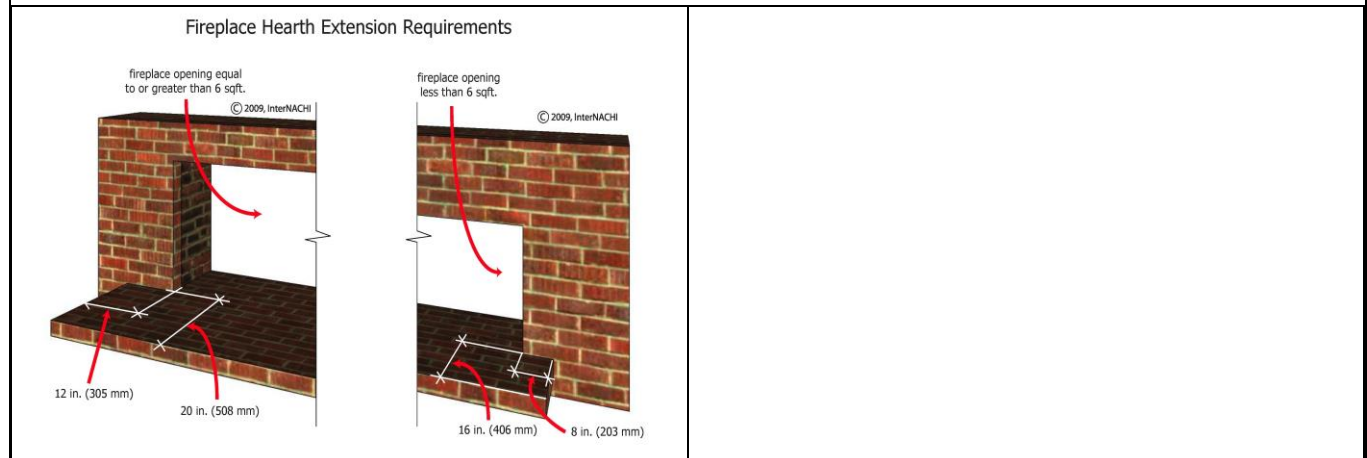
4. **Deficient:** Combustible materials are too close to the fireplace opening. Proper clearance is an important safety requirement.

Information: Woodwork or other combustible materials shall not be placed within 6 inches of a fireplace opening.

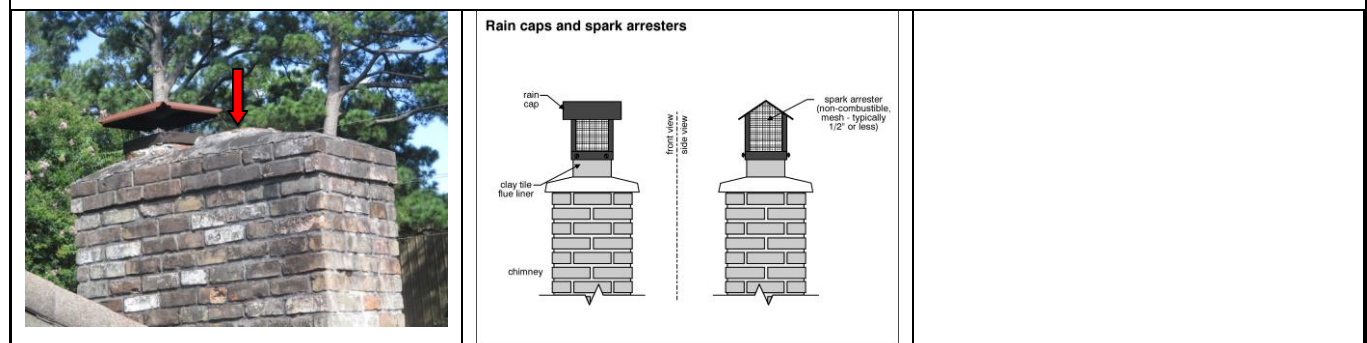
Combustible material within 12 inches of the fireplace opening shall not project more than 1/8 inch for each 1-inch distance from such opening.

5. **Deficient:** Hearth is incorrect. Proper hearth is an important safety requirement.

Information: Hearth extensions shall extend at least 16 inches in front of and at least 8 inches beyond each side of the fireplace opening. Where the fireplace opening is 6 square feet or larger, the hearth extension shall extend at least 20 inches in front of and at least 12 inches beyond each side of the fireplace opening.



6. **Deficient:** Rain cap-spark arrestor is not installed on top of 1 of 2 chimneys. Rainwater will enter chimney and fireplace. I heard birds inside 2<sup>nd</sup> floor elevation chimney. 2<sup>nd</sup> floor elevation fireplace damper did not operate as intended.



## ☒ ☒ ☒ ☒ K. Porches, Balconies, Decks, and Carports

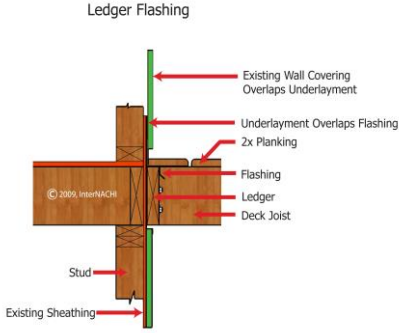
### Comments:

1. **Deficient:** Approved corrosion-resistive flashing is not installed where balcony attaches to the building. Proper cladding drainage-flashing is an important element in preventing moisture from becoming trapped within the system and underlying water damage.

Information: Joist attachment to the structure is not visible. Therefore, this is excluded from inspection.

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

I NI NP D

|                                                                                                                                                            |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|  <p>Illustration example of proper structural attachment and flashing</p> |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|

2. **Deficient:** Exposed joist installation-support is incorrect.

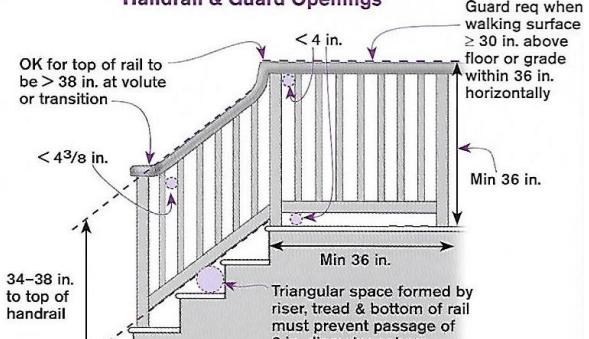
Information: The ends of each joist, beam or girder shall have not less than 1.5 inches of bearing on wood or metal and not less than 3 inches on masonry or concrete except where supported on a 1-inch-by-4-inch ribbon strip and nailed to the adjacent stud or by the use of approved joist hangers.



Joist hangers not installed

3. **Deficient:** Balcony guard is incorrect.

Information: Porches, balconies or raised floor surfaces located more than 30 inches above the floor or grade below shall have guards not less than 36 inches in height. Required guards on open sides of raised floor areas, balconies and porches shall have intermediate rails or ornamental closures which do not allow passage of a sphere 4 inches or more in diameter.

|                                                                                                                                                       |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p><b>FIG. 20</b></p> <p><b>Handrail &amp; Guard Openings</b></p>  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|--|

☒ ☒ ☐ ☒ L. Other

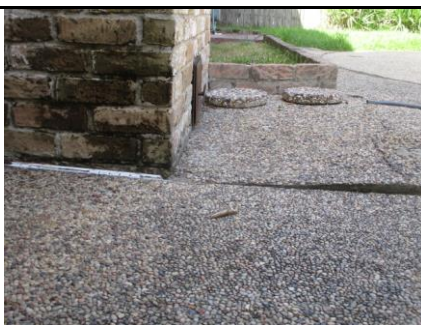
Comments:

1. **Deficient:** Driveway-walkway concrete is damage at some locations.

Information: Damaged-uneven surfaces can create a trip hazard.

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

Driveway damage



Walkway damage

2. **Deficient:** Property fence is damaged-in poor condition at many locations.



3. Information: Specifically excluded from inspection and report are inspections for wood destroying insects (wdi) or damage caused by WDI's. High soil along the foundation perimeter, wood-to-ground contact with the building, evidence of water damage-penetration and damage to outdoor cladding-trim are conducive conditions for wood destroying insects. In the inspector's opinion, client should perform due diligence and have property thoroughly inspected by a licensed pest control inspector prior to the expiration of any time limitations such as an option period.

## II. ELECTRICAL SYSTEMS

### ☒ ☒ ☒ ☒ A. Service Entrance and Panels

#### Comments:

The purpose of the National Electric Code is the practical safeguarding of persons and property from hazards arising from the use of electricity. Electrical equipment shall be installed in a neat and workmanlike manner. In the inspector's opinion, any electrical deficiency noted below should be considered a safety hazard. The following was observed but may not be all-inclusive.

1. **Deficient:** Panelboard is Federal Pacific brand, which is no longer manufactured. Many light fixtures, ceiling fans and receptacles did not operate.

Information: In the inspector's opinion, older equipment-systems may have inherent dangers, including overloaded circuits, overcurrent devices (breaker) that are easily defeated and the likelihood that improper modifications may have been performed. Panelboard and overcurrent devices may be near the end of their intended purpose and usefulness. Client should perform due diligence and consult with their homeowner insurance company prior to the expiration of any time limitations such as an option period to confirm insurability of dwelling with a Federal Pacific panelboard.



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

I   NI   NP   D

2. Information: Service equipment-grounding electrode (rod) and connector are installed below grade, which is a correct installation. Items below grade are excluded from inspection.

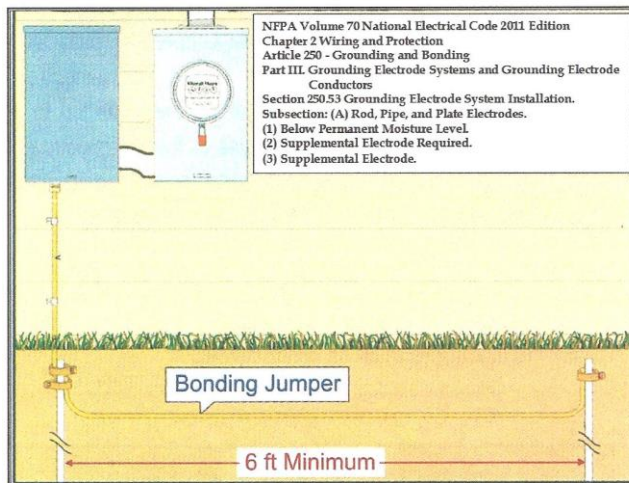
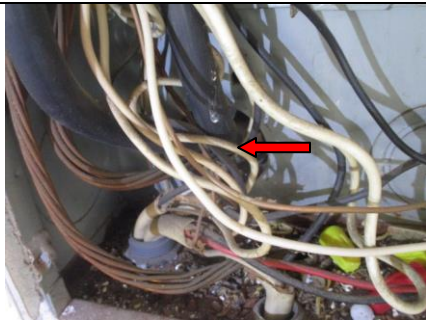


Illustration example of proper electrode installation.  
Illustration courtesy of Wayne Rogers

3. **Deficient:** A conduit with bonding-type locknut is not installed on conduit nipple between the utility meter and panelboard enclosures. Conduit and bonding is an important safety requirement.

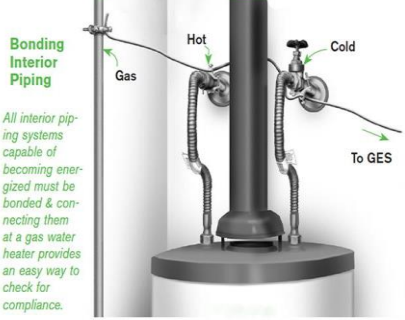
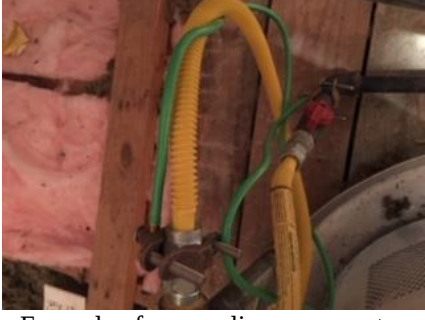


4. **Deficient:** Panelboard bonding jumper-green bonding screw is not installed-was not observed to attach grounding system and metal enclosure to the grounded (neutral) system. Bonding is an important safety requirement.
5. **Deficient:** A bonding jumper is not installed from the service-equipment grounding system to metal pipes. Bonding is an important safety requirement.

Information: Because metal piping might become energized, it must be bonded to the service-equipment grounding system. Bonding metal piping systems together reduces the possibility of a voltage potential between them and the associated shock hazard. Metal pipes that should be mechanically bonded to the service-equipment grounding system include; hot-cold water pipes, water heating equipment water supply connectors (if primary water pipes are non-metallic), gas pipe, gas appliance connectors, gas corrugated stainless steel tubing (CSST), fireplace chimney pipe, water heating equipment gas vent pipe, range hood exhaust pipe and clothes dryer exhaust pipe.

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

**I**   **NI**   **NP**   **D**

|                                                                                                                                               |                                                                                                                                                                                                                    |                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
|  <p>Illustration example of gas &amp; water pipe bonding</p> |  <p>Example of gas appliance connector bonding. Green bonding jumper routed length of the connector and clamped at each end.</p> |  <p>Example of chimney-vent pipe bonding.</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|

6. **Deficient:** Overcurrent devices (breakers) are not clearly-permanently labeled to distinguish from all other devices. Proper device identification is an important safety requirement.
7. **Deficient:** Ground fault current interrupter (gfc) overcurrent device is tripped open and would not reset.
8. **Deficient:** Some grounded (neutral) branch circuit conductors are incorrectly installed. Proper conductor installation and termination is an important safety requirement.  
Information: Only one conductor should be installed per terminal.
9. **Deficient:** Connectors are not installed to secure nonmetallic-sheathed cable (romex) to the enclosure.
10. **Deficient:** Pest feces are in the enclosure, which is incorrect.  
Information: Internal parts of electrical equipment, including busbars, wiring terminals, insulators, and other surfaces, shall not be damaged or contaminated by foreign materials such as paint, plaster, cleaners, abrasives, or corrosive residues.
11. **Deficient:** Some conductors are not properly color-coded and identified for its intended purpose.
12. **Deficient:** Overhead service conductors are too low. Proper conductor clearance-elevation is an important safety requirement.  
Information: Conductors should be minimum 10-feet above finished grade.

☒ ☒ ☒ ☒ **B. Branch Circuits, Connected Devices, and Fixtures**

*Type of Wiring:* Copper

*Comments:*

The purpose of the National Electric Code is the practical safeguarding of persons and property from hazards arising from the use of electricity. Electrical equipment shall be installed in a neat and workmanlike manner. In the inspector's opinion, any electrical deficiency noted below should be considered a safety hazard. The following was observed but may not be all-inclusive.

1. **Deficient:** Electrical deficiencies were observed with the swimming pool and related equipment. See section 6A for details. Bonding, grounding and proper installation is an important safety requirement.
2. **Deficient:** Ground fault current interrupter (gfc) device did not operate at a 6-ma load at locations including; outdoors. Gfc device in panelboard is tripped open and did not reset. Ground fault current interrupter (gfc) protection is not installed for numerous 120-volt receptacles. Gfc protection is an important safety requirement.

Information: Ground fault current interrupter (gfc) protection should be provided for all 120-volt, 15 and 20-ampere receptacles for personnel protection at locations including; bathrooms, garages and accessory buildings, outdoors, crawl spaces, kitchens where serving the kitchen counter top surface, sinks where receptacle is installed within 6 feet of the outside edge of the sink, laundry areas and dishwasher.

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

**I**   **NI**   **NP**   **D**

3. **Deficient:** By random sampling; 120-volt receptacle did not operate, has an open ground and reverse polarity and many locations. A properly grounded-installed-operational receptacle is an important safety requirement.

4. **Deficient:** By random observation, outlet box is set back too far in wood paneling wall. Proper box installation is an important safety requirement.

Information: An approved extension ring can be installed to provide proper outlet box installation. Locations where outlet box typically is set back to far include; wood paneling; kitchen cabinets and kitchen back splash. In walls or ceilings with a surface of concrete, tile, gypsum, plaster, or other noncombustible material, boxes employing a flush-type cover or faceplate shall be installed so that the front edge of the box, plaster ring, extension ring, or listed extender will not be set back of the finished surface more than ¼ in. In walls and ceilings constructed of wood or other combustible surface material, boxes, plaster rings, extension rings, or listed extenders shall be flush with the finished surface or project therefrom.



Outlet box set back too far in kitchen cabinet



Example of extension ring installation

5. **Deficient:** Outdoor receptacle outlet box covers are damaged and not an approved weather-resistant cover. A proper cover is an important safety requirement.



Example of weather-resistant cover

6. **Deficient:** Individual lamp-light fixture and ceiling fan did not operate at many locations.
7. **Deficient:** A disconnect means is not installed for cook top and dishwasher. A disconnect is for the protection of service personnel when inspecting and servicing equipment.
8. **Deficient:** Receptacle-switch outlet box cover is not installed at one or more locations. A cover is an important safety requirement.
9. **Deficient:** Doorbell did not operate.

10. **Deficient:** Exposed 120/240-volt conductor splices were observed beneath the cook top. Junction box-outlet box cover is not installed at one or more locations. A proper wiring installation is an important safety requirement.

Information: Conductor splices should be installed in an approved box with cover.

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

I NI NP D



Exposed conductors beneath cooktop

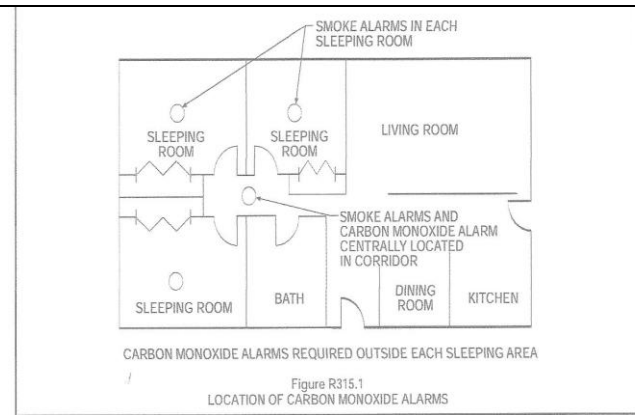


No cover in attic



No cover & loose transformer in attic

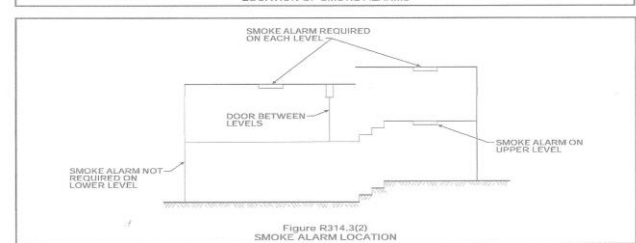
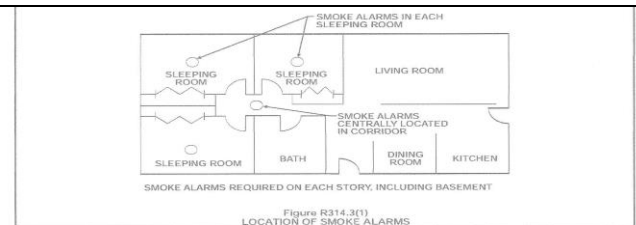
11. **Deficient:** Carbon monoxide alarm is not installed outside of each separate sleeping area in the immediate vicinity of the bedroom. Carbon monoxide alarm is an important safety requirement. Smoke alarm is not installed at all necessary locations for safety purpose. Proper smoke alarm installation-operation is an important safety requirement.



2009 INTERNATIONAL RESIDENTIAL CODE® COMMENTARY

3-107

Illustration example for proper carbon monoxide-smoke alarm placement



2009 INTERNATIONAL RESIDENTIAL CODE® COMMENTARY

3-105

Illustration example for proper smoke alarm placement

12. **Deficient:** Some closet light fixtures are incorrect. Lamp is not protected-enclosed by a protective cover.
13. **Deficient:** By random observation, equipment grounding conductor is not attached to wall-mount switch. Grounding is an important safety requirement.
14. **Deficient:** 240-volt wiring system for kitchen appliance(s)-clothes dryer receptacle is incorrect. The grounded conductor is a bare (non-insulated) conductor that should have been insulated.

### III. HEATING, VENTING, AND AIR-CONDITIONING SYSTEMS

#### ☒ ☒ ☒ ☒ A. Heating Equipment

*Type of Systems:* Forced air type system

*Energy Sources:* 1 Natural gas system(s)

*Comments:*

In the inspector's opinion, the system appears to be performing its intended function of heating. However, one or more deficiencies were observed including;

- Information: Equipment appears to have been manufactured in 2001 by Payne. Seams and the body of a heat exchanger are concealed from view and are always excluded from inspection. In order to inspect a heat exchanger the unit must be disassembled, which is beyond the scope of this inspection, as there is no visual test to determine the condition of a heat exchanger. If concerned about its condition a competent HVAC contractor should be contacted to make an inspection of the heat exchanger prior to the expiration of any time limitations such as an option period.

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

**I**   **NI**   **NP**   **D**

2. **Deficient:** A sediment trap is not installed on gas supply pipe near the equipment. See section 4A for details. Gas vent pipe termination above roof elevation is incorrect. See section 3C for details.

☒ ☒ ☒ ☒ **B. Cooling Equipment**

*Type of Systems:* 1 Central, forced air type system(s) and electric

*Comments:*

In the inspector's opinion, the system appears to be performing its intended function of cooling. Using TREC SOP as a minimum standard, the temperature differential between supply and return air systems (Delta T) should be between 15°F-20°F and nearer to 20°F. The temperature differential detected with a thermometer at either side of the evaporator coil is 20.6°F. However, one or more deficiencies were observed including;



System temp. differential 20.6°F



System Condenser information  
Manufacturer - Carrier  
Year manufactured - 2011  
Refrigerant type - R-22



System Evaporator information  
Manufacturer - Appears to be Aspen  
Year manufactured - appears 1997  
Refrigerant type - R-22

1. Information: According to equipment manufacturer labels, system uses R-22 refrigerant. Per The US Environmental Protection Agency beginning January 1, 2020, R-22 refrigerant will no longer be imported or produced; only stockpiled and recycled R-22 refrigerant will be available for maintenance. In the inspector's opinion, equipment using R-22 refrigerant is near the end of its intended purpose-usefulness.

2. **Deficient:** Evaporator coil is dirty.

Information: Servicing-cleaning of the coil appears necessary. A clean coil is more efficient and helps reduce air flow resistance through the coil.



3. **Deficient:** Evaporator cabinet pipe-penetration(s) is incorrectly sealed. A properly sealed cabinet-penetration is an important energy savings requirement.

Information: Cabinet and penetrations shall be made substantially airtight by means of tapes, mastics, liquid sealants, gasketing or other approved closure systems.

4. **Deficient:** Refrigerant pipe insulation is damaged in the attic at one or more locations.

Information: Condensation from exposed pipe(s) could result into water damage within attic-dwelling. Primary condensate drainpipe should be insulated a minimum 10 feet from the coil.

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

I NI NP D

5. Note: An evaporator auxiliary pan overflow shut off switch is not installed.

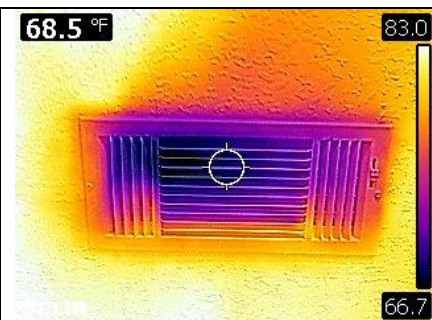
Information: An auxiliary pan drainpipe is installed that terminates outdoors. In the inspector's opinion, installation of overflow switch is important in preventing possible water damage to the building in the event of a primary condensate drainpipe obstruction.

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

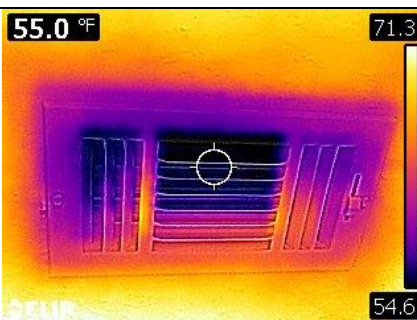
1. **Deficient:** Duct system is not properly sealed at one or more-some locations. Proper duct system sealant will prevent air leakage.

Information: Joints of duct systems shall be made substantially airtight by means of tapes, mastics, liquid sealants, gasketing or other approved closure systems. The duct system includes ducts, fittings, dampers, plenums, fans and air-handling equipment.

2. **Deficient:** Poor air flow to the game room was detected.

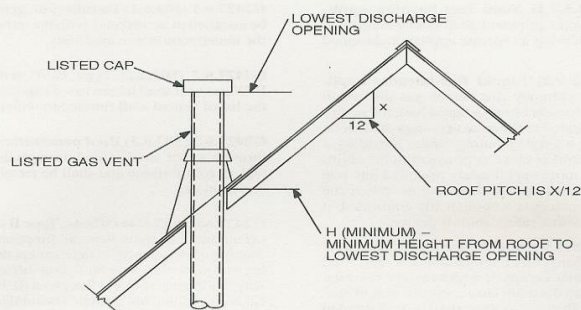


With thermal imaging, air temperature detected about 68.5°F.



Other air supply detected much lower.

3. **Deficient:** Appliance gas vent pipe termination above the roof elevation is incorrect. See attached table for proper height above roof.



| ROOF PITCH                              | H (minimum) ft | m    |
|-----------------------------------------|----------------|------|
| Flat to $\frac{6}{12}$                  | 1.0            | 0.30 |
| Over $\frac{6}{12}$ to $\frac{7}{12}$   | 1.25           | 0.38 |
| Over $\frac{7}{12}$ to $\frac{8}{12}$   | 1.5            | 0.46 |
| Over $\frac{8}{12}$ to $\frac{9}{12}$   | 2.0            | 0.61 |
| Over $\frac{9}{12}$ to $\frac{10}{12}$  | 2.5            | 0.76 |
| Over $\frac{10}{12}$ to $\frac{11}{12}$ | 3.25           | 0.99 |
| Over $\frac{11}{12}$ to $\frac{12}{12}$ | 4.0            | 1.22 |
| Over $\frac{12}{12}$ to $\frac{14}{12}$ | 5.0            | 1.52 |
| Over $\frac{14}{12}$ to $\frac{16}{12}$ | 6.0            | 1.83 |
| Over $\frac{16}{12}$ to $\frac{18}{12}$ | 7.0            | 2.13 |
| Over $\frac{18}{12}$ to $\frac{20}{12}$ | 7.5            | 2.27 |
| Over $\frac{20}{12}$ to $\frac{21}{12}$ | 8.0            | 2.44 |

For SI: 1 foot = 304.8 mm.

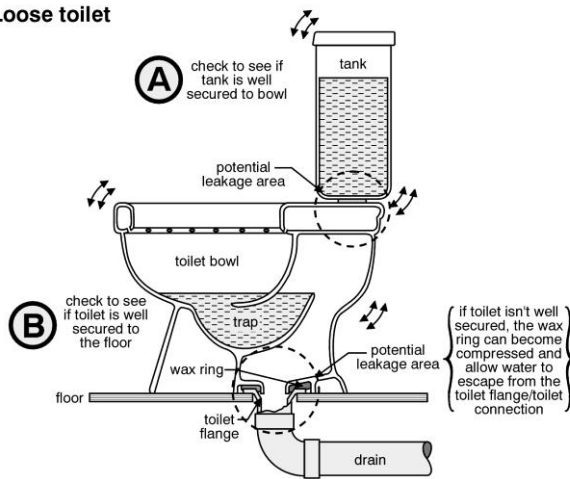
FIGURE G2427.6.5 (503.6.6)  
GAS VENT TERMINATION LOCATIONS FOR LISTED CAPS 12 INCHES  
OR LESS IN SIZE AT LEAST 8 FEET FROM A VERTICAL WALL

**I=Inspected****NI=Not Inspected****NP=Not Present****D=Deficient****I NI NP D****IV. PLUMBING**
☒ ☐ ☒ ☒ **A. Plumbing Supply, Distribution Systems and Fixtures**
*Location of water meter:* Right-of-way*Location of main water supply valve:* outdoors behind A/C unit*Static water pressure reading:* about 55 PSI*Comments:*

1. **Deficient:** Kitchen – Faucet is loose. Water leakage from hot water valve fitting was observed.

2. **Deficient:** All 3 toilet bases are loose.

Information: Wax seal ring and drainpipe flange appear in need of replacement prior to base being securely fastened in place.

**Loose toilet**

3. **Deficient:** Master bathroom – Sink basin surface is cracked. 1 of 2 sink drain stops is not installed. Bathtub drain stop did not operate. Evidence of electrolysis-oxidation was observed to water supply pipe behind the bathtub.



Basin surface is cracked



Evidence of electrolysis-oxidation

4. **Deficient:** 2<sup>nd</sup> floor elevation bathroom – Water inside toilet runs continuously. Water fill valve inside toilet water tank is damaged. Water leakage occurred at the showerhead pipe fitting and bathtub faucet-to-shower diverter.

5. **Deficient:** Bar – I was unable to turn either faucet handle.

6. **Deficient:** Laundry area – Washer water supply fixture handles are not identified as hot-cold. Proper identification allows for correct water hook-up/equipment installation.

7. **Deficient:** Water supply pipe in attic is not insulated at one or more locations.

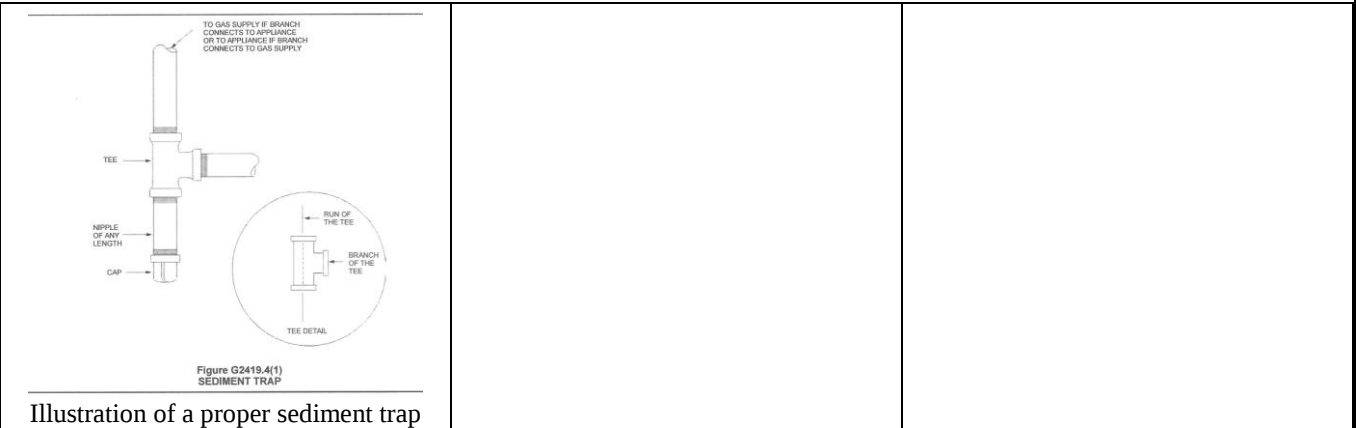
I=Inspected      NI=Not Inspected      NP=Not Present      D=Deficient

I   NI   NP   D

8. **Deficient:** Atmospheric vacuum breaker is not installed at outdoor water faucets. An atmospheric vacuum breaker is an important health safety requirement.  
Information: An atmospheric vacuum breaker is designed to prevent any connection between potable and wastewater.



9. **Deficient:** Gas distribution system sediment trap is not installed at the water heating equipment-central heating equipment.



## ☒ ☒ ☒ ☒ B. Drains, Wastes and Vents

### Comments:

1. **Deficient:** In the inspector's opinion; due to age of system and evidence of foundation deflection-differential movement, client should perform due diligence and have the underground drain system thoroughly examined by a qualified plumber that specializes in underground leak detection prior to the expiration of any time limitations such as an option period.
2. **Deficient:** Main drainpipe clean out was not located. An accessible clean out should be provided that extends above finished grade.
3. **Deficient:** Kitchen – Drainpipe installation is incorrect.



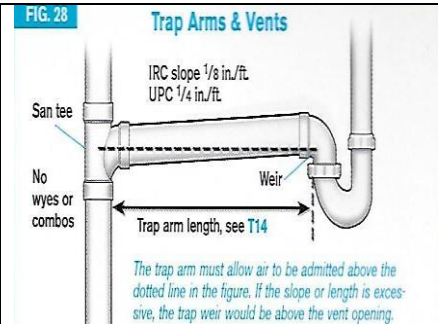
I=Inspected      NI=Not Inspected      NP=Not Present      D=Deficient

I   NI   NP   D

4. **Deficient:** Wastewater from both bathtubs drains poorly through the drainpipe.

5. **Deficient:** Powder bathroom – Sink trap arm drainpipe is incorrectly installed.

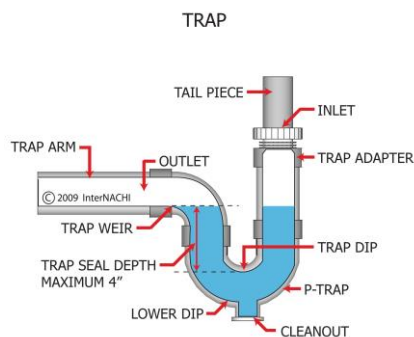
Information: Drainpipe should slope in direction of wastewater travel.



6. **Deficient:** Master bathroom – Wastewater leakage occurred from the left sink drainpipe. One sink drainpipe trap arm is incorrect.



Leak



### ☒ ☒ ☒ ☒ C. Water Heating Equipment

*Energy Sources:* Natural gas

*Capacity:* 40 Gallons

*Comments:*

Equipment appears to be performing its intended function of water heating. However, one or more deficiencies were observed including:

1. Information: Equipment was manufactured in 2005 by GE. In the inspector's opinion, equipment 14 years or older may be near the end of its intended purpose and usefulness. Due to equipment age-one or more defects with equipment, operation-testing of the temperature and pressure relief valve (T&p) is excluded from inspection. Many manufacturers state that the valve should be replaced every 3 years. A properly functional T&p valve is an important safety requirement to protect equipment-dwelling from potential damage.
2. **Deficient:** Attic access-walkway to equipment for inspection and servicing is incorrect. See section 1D for details. A sediment trap is not installed on the gas supply piping near the equipment. See section 4A for details. Gas vent pipe termination above the roof elevation is incorrect. See section 3C for details.
3. **Deficient:** Hot water temperature is 131.6°F. Water temperature over 120°F can cause scalding-severe burns. Proper hot water temperature is an important safety requirement.

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

Water temperature recorded at 131.6°F

TIME AND TEMPERATURE RELATIONSHIP TO SERIOUS BURNS

| WATER TEMPERATURE | Adults<br>(skin thickness of 2.5 mm)           | Children<br>(skin thickness of 0.56 mm) |
|-------------------|------------------------------------------------|-----------------------------------------|
|                   | Time required for a third-degree burn to occur |                                         |
| 155°F 68°C        | 1 second                                       | 0.5 second                              |
| 148°F 64°C        | 2 seconds                                      | 1 second                                |
| 140°F 60°C        | 5 seconds                                      | 1 second                                |
| 133°F 56°C        | 15 seconds                                     | 4 seconds                               |
| 127°F 52°C        | 1 minute                                       | 10 seconds                              |
| 124°F 51°C        | 3 minutes                                      | 1.5 minutes                             |
| 120°F 48°C        | 5 minutes                                      | 2.5 minutes                             |
| 100°F 37°C        | Safe temperature for bathing                   | Safe temperature for bathing            |

For SI: 1 inch = 25.4 mm, °C = ((°F) - 32)/1.8 or  $\left(\frac{°F + 40}{1.8}\right) - 40 = °C$ .

Figure P2708.3  
TEMPERATURE BURN CHART

4. **Deficient:** There is insulation in the drain pan; which is incorrect and can obstruct the drainpipe. A pan free from defect is important in preventing potential water damage to the residence-structure.



5. **Deficient:** T&p safety relief valve drainpipe and safety drain pan drainpipe are incorrectly installed.  
Information: T&p valve drainpipe should terminate no more than 6-inches above finished grade. Pan drainpipe should terminate no more than 18-inches above finished grade.

6. **Deficient:** Gas vent pipe-draft hood is loose. Gas vent pipe is too close to the combustible roof structure. Heat-related damage can occur when proper clearances are not provided.  
Information: Sheet metal screws or other approved means of fastening shall be installed to firmly secure pipe-draft hood in place. Strapping shall be installed at proper intervals to secure pipe in place. Vent pipe shall maintain a minimum 1inch clearance from the combustible roof sheathing.

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

## V. APPLIANCES

☒ ☐ ☒ ☒ **A. Dishwashers**  
*Comments:*

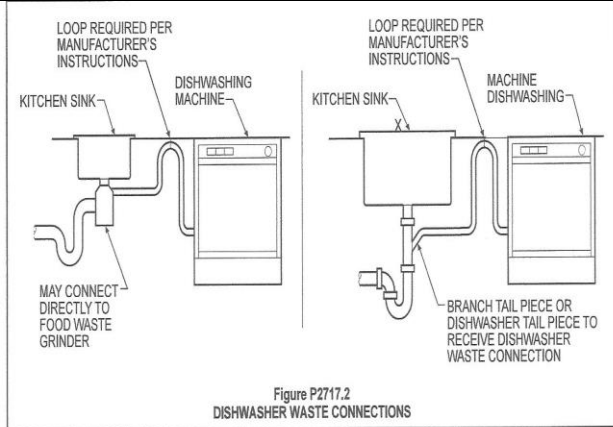
Equipment appeared to operate as intended. However, one or more deficiencies were observed including;

1. **Deficient:** Dishwasher is loose.

Information: Equipment should be firmly fastened to cabinet or bottom of the counter top.

**I=Inspected****NI=Not Inspected****NP=Not Present****D=Deficient****I NI NP D****2. Deficient:** Backflow prevention for equipment drainpipe is not installed.

Information: A properly installed drainpipe prevents backflow of contaminants from the disposer or sink drainpipe back into the appliance. The dishwasher drainpipe should be secured to the underside of the counter top to create an upside down "U" in the drainpipe.



2009 INTERNATIONAL RESIDENTIAL CODE® COMMENTARY

27-15

Illustration example of proper drainpipe loop

☒ ☐ ☐ ☒ **B. Food Waste Disposers**
*Comments:***1. Deficient:** Wastewater leakage occurred from equipment and equipment did not operate.

Information: This defect was not listed in the seller's disclosure notice.


☒ ☐ ☐ ☒ **C. Range Hood and Exhaust Systems**

*Comments:* Portions of exhaust duct may not be accessible-observable. Inaccessible duct is excluded from inspection.

**1. Deficient:** Filter is partially obstructed with paint. Exhaust duct does not terminate to the outdoors.

Information: Range hoods shall discharge to the outdoors through a single-wall duct. The duct serving the hood shall have a smooth interior surface, shall be airtight and shall be equipped with a backdraft damper. Ducts serving range hoods shall not terminate in an attic or crawl space or areas inside the building.

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

Filter partially obstructed by paint



Exhaust duct terminates into attic

☒ ☐ ☐ ☐ **D. Ranges, Cooktops, and Ovens**
*Comments:*
☒ ☐ ☐ ☒ **E. Microwave Ovens**
*Comments:*

1. **Deficient:** Equipment did not operate.

Information: This defect was not listed in the seller's disclosure notice.


☒ ☒ ☐ ☒ **F. Mechanical Exhaust Vents and Bathroom Heaters**

*Comments:* Portions of exhaust duct(s) may not be accessible-observable. Inaccessible duct is excluded from inspection.

1. **Deficient:** Bathroom exhaust does not vent to the outdoors.

Information: Bathrooms, water closet compartments and other similar rooms shall be provided with aggregate glazing area in windows of not less than 3 square feet, one-half of which must be openable. Exception: The glazed areas shall not be required where artificial light and a mechanical ventilation system are provided. The minimum ventilation rates shall be 50 cfm for intermittent ventilation or 20 cfm for continuous ventilation. Ventilation air from the space shall be exhausted directly to the outside, not into the attic.



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

I   NI   NP   D

### ☒ ☒ ☒ ☒ G. Garage Door Operators

*Comments:*

1. **Deficient:** Equipment is apart from the garage door; power supply is unplugged and equipment is not operational.  
Information: This defect was not listed in the seller's disclosure notice.



### ☒ ☐ ☐ ☐ H. Dryer Exhaust Systems

*Comments:*

1. Information: Clothes dryer exhaust systems are a potential fire hazard because of the combustible lint and debris that can accumulate in the duct and the heat source of the appliance, and in situations where a gas-fired clothes dryer is installed the combustion product in the exhaust. Periodic cleaning of the exhaust system will be needed.

## VI. OPTIONAL SYSTEMS

### ☒ ☒ ☒ ☒ A. Landscape Irrigation (Sprinkler) Systems

*Comments:*

1. **Deficient:** A water supply shut off valve to isolate this system from the dwelling water supply system is not installed-was not observed. I was unable to locate the solenoids (automatic water valves). An atmospheric vacuum breaker (backflow prevention device) is not installed-was not observed. Device is an important safety device to prevent possible potable water contamination.

Information: The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric-type vacuum breaker, a pressure-type vacuum breaker or a reduced pressure principle backflow preventer. A valve shall not be installed downstream from an atmospheric vacuum breaker. Where chemicals are introduced into the system, the potable water supply shall be protected against backflow by a reduced pressure principle backflow preventer.

2. **Deficient:** Each zone within the control panel is not labeled-identified. A rain sensor device is not installed. This device is important for water conservation.
3. **Deficient:** Some spray heads are damaged. One or more spray heads are in need of adjustment.  
Information: Direct water spray onto the exterior cladding should be avoided.



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

I   NI   NP   D

☒ ☒ ☒ ☒ **B. Swimming Pools, Spas, Hot Tubs and Equipment**

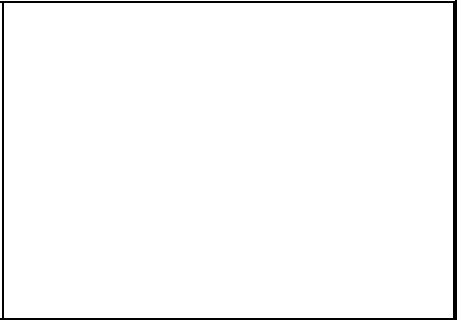
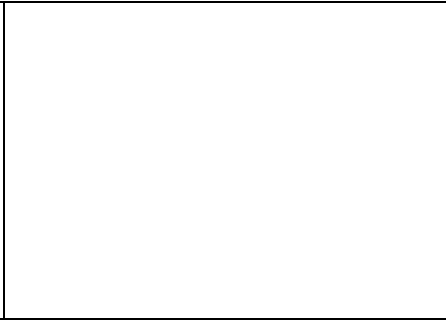
*Type of construction:* Appears to be gunite & plaster

*Comments:*

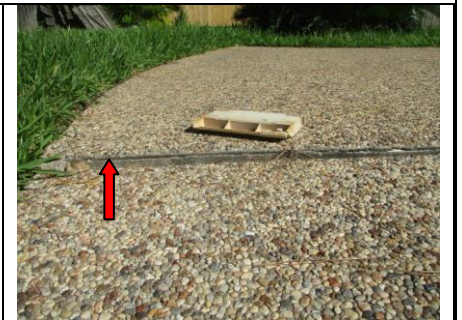
1. Information: Water chemical testing was not performed and is excluded from all inspections.
2. **Deficient:** Swimming pool plaster surface is damaged-discolored at some locations.



3. **Deficient:** Coping mortar joint is damaged-open at some locations.  
Information: A sealant should be installed to prevent direct water penetration through the open joint.



4. **Deficient:** Concrete deck cracking, heaving and settlement were observed at some locations.



5. **Deficient:** Skimmer basket(s) are full of debris. A weir is not installed at the skimmer opening(s).  
Information: A weir prevents debris from back-flowing into the pool.

6. **Deficient:** Pool cleaner pump did not operate. Due to vegetation and improper clearance, I could not access water heating equipment and air blower. Gas supply is off to the water heating equipment.



7. **Deficient:** Atmospheric vacuum breaker is not installed for water supply to swimming pool. An atmospheric vacuum breaker is an important health safety requirement.

Information: An atmospheric vacuum breaker is designed to prevent any connection between potable and wastewater.

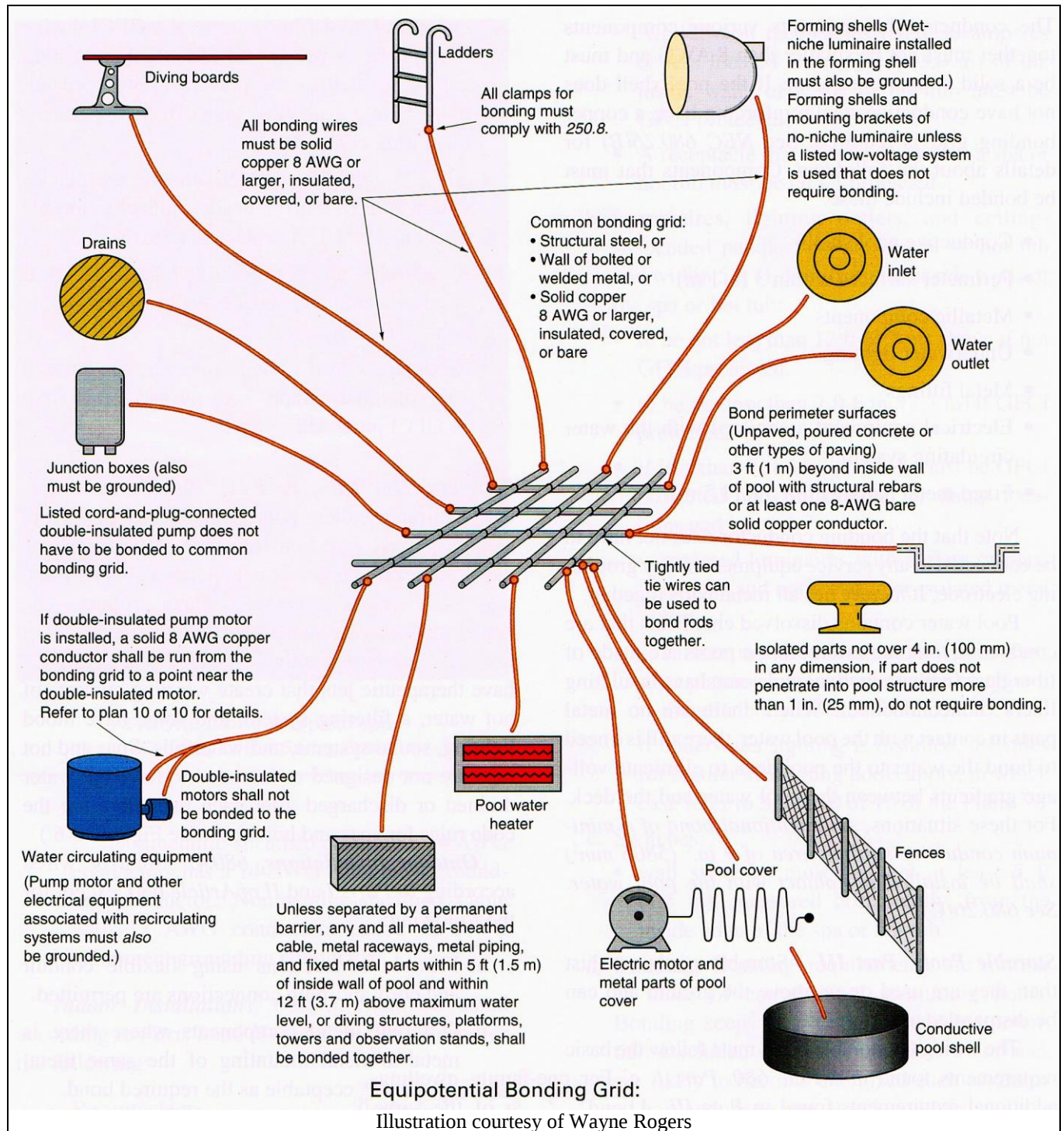


8. **Deficient:** Water pipes-valves are not clearly-permanently labeled to indicate their intended purpose.
9. **Deficient:** Equipment-grounding conductor is not attached to timer controls. Grounding is an important safety requirement. Timer controller is installed behind equipment, which is incorrect. Proper access-working clearance is an important safety requirement.
- Information: A minimum unobstructed depth of 3-feet should be provided in front of equipment.
10. **Deficient:** Underwater lamp-light fixture(s) did not operate.

11. **Deficient:** An equipotential bonding jumper is not installed-was not observed. Equipotential bonding is an important safety requirement.

Information: Conductive pool shells, perimeter surfaces, metallic components, underwater lighting, metal fittings, electrical equipment and metal wiring methods and equipment, fixed metal parts within 5 feet horizontal from inside wall of the shall all be bonded together to reduce voltage gradients in the pool area. Bonding jumper shall be minimum #8 solid copper conductor.

Equipotential” means equal potential (the same voltage). A difference in voltage between two bodies, objects or surfaces is referred to as a “potential” because of the potential for current flow when the two bodies objects or surfaces are electrically connected. The intent of such bonding is to eliminate or reduce voltage gradients (differences) between any and all conductive parts between which a living creature could place itself and thereby endanger itself. Voltage differences of only a few volts can be dangerous to occupants in the water or near the water.



### **Voltage travels through the pool water in “Voltage Gradients”.**

- 1). The radio voltage is 120 volts which is (120 volts (RMS) times 1.414) = 169.7 volts.
- 2). The voltage at the swimmers foot is (90 volts (RMS) times 1.414) = 127.3 volts.
- 3). The voltage at the swimmers hand is (60 volts (RMS) times 1.414) = 84.4 volts.
- 4). The voltage difference is 127.3 volts minus 84.4 volts = 42.9 volts.
- 5). The resistance of the swimmers body in water is approximately 100 Ohms.
- 6). The current through the swimmers body is calculated by Ohms Law:  
 $I \text{ (amps)} = E \text{ (volts)} \text{ divided by } R \text{ (resistance) or } 42.9 \text{ volts divided by } 100 \text{ ohms}.$   
 The swimmer has a current of .429 amps moving through his heart and diaphragm.  
Killing current is from 100 to 200 milliamps which is .1 to .2 amps.  
This swimmer has over 2 times the current required to “Electrocute Him”.

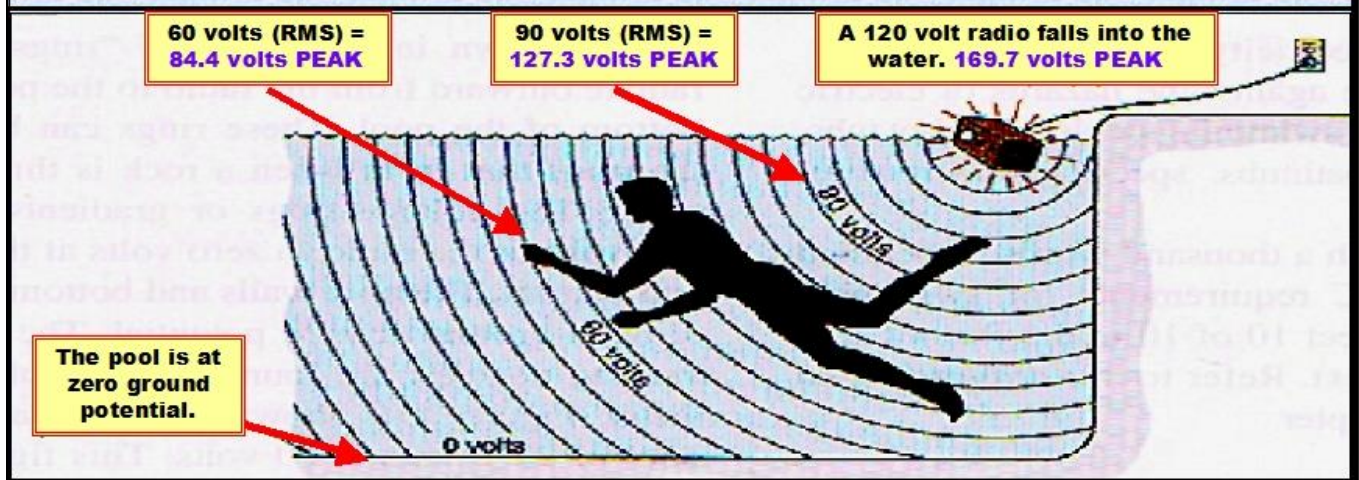


Illustration courtesy of Wayne Rogers

12. **Deficient:** A proper barrier is not installed, which poses a potential drowning hazard for children and pets. A proper barrier is an important safety requirement.

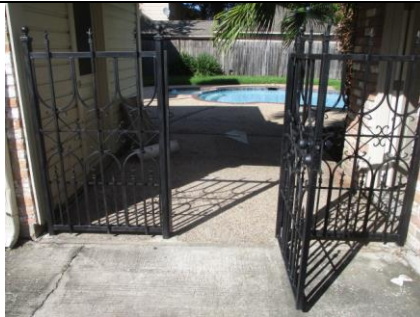
Information: An outdoor swimming pool, including an inground, aboveground or on-ground pool, hot tub or spa shall be provided with a barrier which shall comply with the following:

1. The top of the barrier shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an aboveground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).
2. Openings in the barrier shall not allow passage of a 4-inch-diameter (102 mm) sphere.
3. Solid barriers which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.
4. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1.75 inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.
5. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.
6. Maximum mesh size for chain link fences shall be a 2.25-inch (57 mm) square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to not more than 1.75 inches (44 mm).

7. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than 1.75 inches (44 mm).
8. Access gates shall comply with the requirements of Section AG105.2, Items 1 through 7, and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool and shall be self-closing and have a self-latching device. Gates other than pedestrian access gates shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the gate, the release mechanism and openings shall comply with the following:
- 8.1. The release mechanism shall be located on the pool side of the gate at least 3 inches (76 mm) below the top of the gate, and
- 8.2. The gate and barrier shall have no opening greater than 0.5 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.
9. Where a wall of a dwelling serves as part of the barrier one of the following conditions shall be met:
- 9.1. The pool shall be equipped with a powered safety cover in compliance with ASTM F1346; or
- 9.2. All doors with direct access to the pool through that wall shall be equipped with an alarm which produces an audible warning when the door and its screen, if present, are opened. The alarm shall sound continuously for a minimum of 30 seconds immediately after the door is opened and be capable of being heard throughout the house during normal house-hold activities. The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means, such as touchpad or switch, to temporarily deactivate the alarm for a single opening. Such deactivation shall last for not more than 15 seconds. The deactivation switch(es) shall be located at least 54 inches (1372 mm) above the threshold of the door; or
- 9.3. Other means of protection, such as self-closing doors with self-latching devices, which are approved by the governing body, shall be acceptable so long as the degree of protection afforded is not less than the protection afforded by Item 9.1 or 9.2 described above.
10. Where an aboveground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then:
- 10.1. The ladder or steps shall be capable of being secured, locked or removed to prevent access, or
- 10.2. The ladder or steps shall be surrounded by a barrier which meets the requirements of Section AG105.2, Items 1 through 9. When the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch-diameter (102 mm) sphere.



Separate fence is not installed around pool-spa



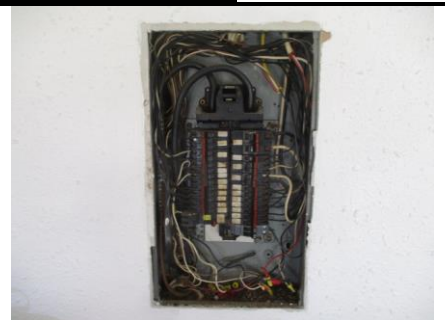
Fence gate are not self-closing, self-latching

**Additional pictures for information only to illustrate thoroughness of this inspection**

Roof surface was walked-Bird's eye view



Attic areas were entered



Electric panelboard cover was removed



Bathtub access covers were opened-removed to inspect for water leakage.



Dishwasher kick plate was removed to inspect for water leakage



Oven temperature detected at 350°F. Oven operating as intended, within +/- 25°F of 350°F setting.