

II. ELECTRICAL SYSTEMS

A. Service Entrance and Panels

Service Drop: Overhead

#1 Main Service Panel, Service Size, Service Conductors: GE, 200 AMP, Copper Service Conductors, 2/0 AWG

Rear Exterior



Grounding System: Present, Second Grounding Rod Not Located

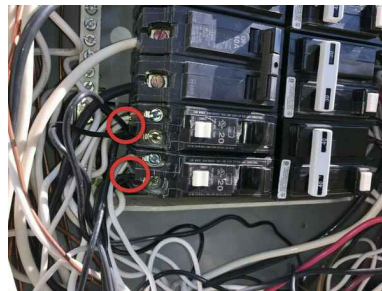
Specific Limitations:

Inspector will not operate breakers/circuits to verify function, or turn on any breakers in the off position.

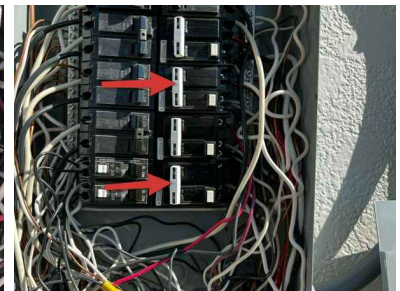
Only accessible components of the electrical system are inspected. This should not be considered an all-inclusive or exhaustive list of deficiencies in the electrical system and many of these items may be technical deficiencies without real need for repair. All electrical repairs listed in report or otherwise noted during estimate of repairs should be made by a qualified licensed electrical contractor, as per code and safety.

1: Service panel needs further review/repairs

- There are only two 120V breakers present. Majority of the panel is installed with 240V double pole breakers.
- The two 120V breaker are tripled and double tapped.
- Two 40 amp breakers are on too small wire size. 40 amp breakers required 8 awg copper wiring.
- 50 amp breaker did not trip when the test button was pressed and is malfunctioning.
- A/C unit is rated for a MAX 45 amp breaker and is on a 50 amp breaker.
- Conductors in the panel should be grouped by wire ties to associated conductors, per today's electrical code.



Triple and double tapped breakers



40 amp breaker on too small wiring

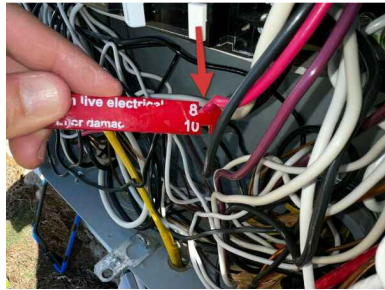
I=Inspected

NI=Not Inspected

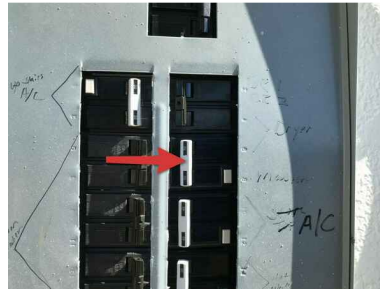
NP=Not Present

D=Deficient

I NI NP D



not 8 awg wire



Breaker did not trip



A/C on 50 amp breaker



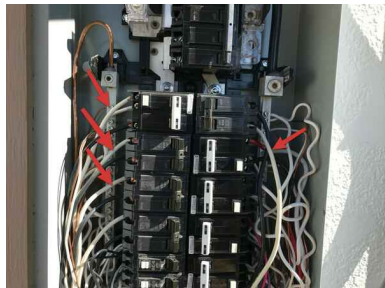
2: Grounding rod is too high

The upper end of the grounding rod should be flush with, or below ground, and installed such that at least 8' of length is in contact with the soil.



3: Label white 240V wire

Label 240V wires red or black to denote wires are being used as a "hot" wire at double pole breakers.



4: Incorrect breaker labeling

All breakers need full and correct labeling as to function in panel box.

I=Inspected

NI=Not Inspected

NP=Not Present

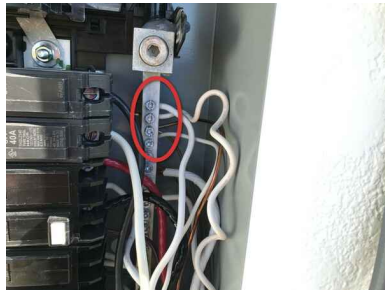
D=Deficient

I NI NP D



5: Neutrals and grounds installed together

Neutrals and grounding wires should be separated at dedicated buss bars.



B. Branch Circuits, Connected Devices, and Fixtures

Branch Wiring: Copper

Smoke and Carbon Monoxide Alarm Note:

Under current building standards, there should be a smoke alarm located in each sleeping area and outside of each separate sleeping area in the immediate vicinity of the sleeping areas, and on each additional story of the dwelling, including basements but excluding crawlspaces and uninhabitable attics.

Under today's building standards: carbon monoxide alarm should be installed outside each separate sleeping area in the immediate vicinity of the sleeping rooms when either of the following conditions exist:

- (I) fuel fired appliance are installed in the dwelling; or
- (II) an attached garage with an opening into the dwelling unit.

When more than one alarm is required to be installed within an individual dwelling unit the alarm devices should be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit. The alarm should be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

GFCI Note:

Under current electrical standards ground-fault circuit protection devices are required at the following locations: kitchen countertops, bathrooms, bars, utility/laundry rooms, dishwasher, indoor damp and wet locations, outdoors, crawlspace, basements, garage, accessory buildings, 6 feet with the edge of a sink,

I NI NP D

tub , shower, and electrically heated floors. The lack of this protection is a recognized hazard. Ground-fault circuit interrupting devices are designed to protect people against electrical shock.

AFCI Note:

Under current electrical standards arc-fault circuit interrupting devices are required at the following locations; kitchens, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreations rooms, closets, hallways, laundry area, or similar rooms or areas. The lack of this protection is a recognized hazard. Homes not equipped with arc-fault circuit interrupting devices are not required to convert to them but doing so protects from electrical fires.

Specific Limitations:

GFCI protected receptacles that are supplying, or may be supplying any large freezers, deep freezers, and/or refrigeration units are not tested. Exterior soffit or roof eave receptacles are not tested.

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Low voltage systems are not inspected :

Texas Real Estate Commission: General Provisions 535.227 : Automated or programmable control systems, automatic shutoff, photoelectric sensors, timers, clocks, metering devices, signal lights, lightning arrestor system, remote controls, security or data distribution systems, solar panels or smart home automation components.

Alarm systems are not inspected by this company. Please contact a security alarm company if a security check is required.

1: AFCI protection missing

Bedrooms, Hallways, Dining Area -

AFCI protection for receptacles and switches is not installed at all living areas where required, per current electrical code.

Under current electrical standards arc-fault circuit interrupting devices are required at the following locations: family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreations rooms, closets, hallways, or similar rooms or areas.

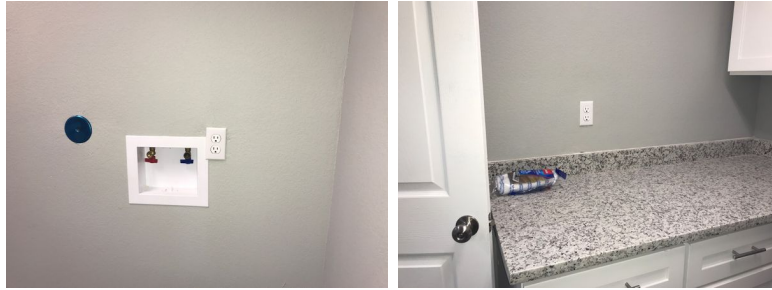
2: GFCI protection missing

Utility room, Dishwasher -

Not all receptacles at home were GFCI protected where currently required. Recommend installing GFCI protected receptacles where missing.

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Under current electrical standards ground-fault circuit protection devices are required at the following locations: kitchen countertops, bathrooms, bars, utility/laundry rooms, dishwasher, exterior, crawlspace, basements, garage and accessory buildings.



3: No GFCI protected

Main Panel

Receptacle at the panel box is not GFCI protected, as required. Junction box is loose and in need of repair.



4: missing faceplates

Exterior

Faceplates need to be installed where missing.



5: Loose receptacle

Kitchen sink

Receptacle needs to be installed and secured in the junction box.

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6: Missing kitchen receptacle

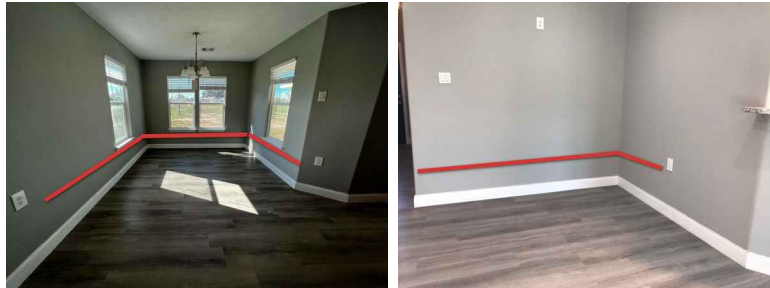
Receptacles for kitchen counter spaces are required at all wall spaces.



7: Missing receptacles in the home

Dining area, Living Room

Receptacles are required to be installed so that no point along the floor line (measured horizontally) is more than 6 feet from a receptacle in that space.



8: Missing receptacle

Front porch

No receptacle is present at the front porch.