



what is present, particularly in older homes. Today's building codes require GFCI outlets to be installed in all wet locations.

This includes in kitchens, bathrooms, garages, basement areas, and on exterior outlets. In some older homes, I may see GFCI outlets present in bathrooms only and not in the kitchen. Or I may see a single GFCI outlet, for example, in the basement or garage that is then wired to other bathroom or kitchen outlets. This represents the evolution of the code and the changes made to requirements for GFCIs over the years.

Occasionally there are outlets in the panel that are Ground-Fault outlets that trip within the panel and remove all power to the circuit when a ground fault condition occurs.

Top Electrical Issues Found During Home Inspections

During my time as a home inspector, and as a home owner, I have seen a wide range of electrical issues. I thought it would be interesting to our readers to compile the top electrical issues that I have seen.

GFCI Outlets Missing or Defective

This is probably the top electrical issue home inspections find. Because the requirements to have GFCI outlets present has evolved in the building code over the years, and has been adopted at different times by each municipality in the state, we end up seeing quite a variety of

Most home inspectors will test GFCI outlets. Testing can be done via one of two methods. The first is to press the reset button on the outlet to ensure that it responds and trips. The second method is to use a hand-held test device.

These units plug into the outlet and have a test button on them that simulates a ground fault condition. The outlet should then trip and reset. On occasion the outlet will not trip or will not reset once tripped, indicating an aged or defective GFCI outlet.





Ungrounded Outlets

On many older homes from the 1950s and older, I often come across ungrounded outlets. Many are still older 2-prong outlets that clearly are not grounded. But at times the outlets themselves have been updated and are 3-prong style outlets, but are not grounded.

Home inspectors will use a hand-held test device that plugs into the outlet to check for grounding and polarity. If I come across ungrounded outlets, I note this for reference and recommend that you consider upgrading the outlets for safety protection. There are a couple ways to do upgrades and a licensed electrician will be familiar with both.

Reverse Polarity Outlets

This is another safety related concern to be aware of. If an electrical outlet is wired in reverse, this represents a possible safety hazard to both the person plugging in a device and to the device itself. I see this frequently on new construction homes where outlets accidentally get mis-wired. The repair of this concern is straightforward for a qualified electrician and involves re-wiring the outlet properly.

Electrical Panel Age Concerns

While most of the older home electrical panels have been upgraded or replaced by now, I occasionally run across an

older, outdated panel. Just like most all things in life, electrical panels have evolved and improved over time. Experience has shown us that some older panels have known concerns that have developed and need to be addressed. Some are related to the manufacturer of the panel with specific known concerns.

Other issues simply relate to the age, size and performance of the panel. An example is the Federal Pacific electric panel which was installed in the 1960s and 1970s. These panels have known concerns with the breakers. Most commonly seen are older, smaller panels that just do not have the capacity to handle the amount of electrical needs of homes today.

Smaller, older panels may have worked well when the home was built, but if the addition of air conditioning, car charging stations, larger capacity appliances, etc. are needed, these panels may be full or simply cannot accommodate the heavier demands. Upgrading the panel and possibly the incoming electrical service may need to be considered.

Smoke Detector or Carbon Monoxide Detector Concerns

This is another issue that has evolved over time in the building codes and is one of the top electrical issues found at home inspections. I see quite a variety of installed configurations with both smoke and CO detectors. For today's building code, it is required that there be smoke





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detectors present in every bedroom and in the common area of each floor of the home, and that all units be hard-wired to an electrical connection with a battery backup.

And in Minnesota, there are requirements for CO detectors to be present within 10 ft of the entry to all bedrooms. But on older homes the units present are usually battery operated only and not hard wired. And since it is impractical to add wiring to smoke detectors after the fact, I usually am looking to ensure there are at least units within each bedroom for safety.

CO detectors can either be hard-wired, plugged into an outlet or battery operated. Another concern is the age of the units. The standard recommendation is that units older than 10 years should be replaced due to aging internal sensors. Home inspectors will check for all of these items – location, quantity of units, age, and performance.

Home inspectors generally follow a prescribed set of standards when checking electrical concerns in a home. At West Egg, I follow the InterNACHI standards of practice and the electrical inspection requirements. The safety of the occupants of a home is one of the top concerns of a home inspector. Addressing electrical concerns discovered during a home inspection can be done by any licensed electrician. For more information on the inspection services provided by West Egg Inspections, visit our website below.

Owner / CPI

Tim Rubash is trained and certified with AHIT (American Home Inspectors Training), the largest home inspector training organization in the United States. He is also a Certified Professional Inspector and member of InterNACHI (International Association of Certified Home Inspectors) as well as MAHI (Midwest Association of Home Inspectors).

Tim also has a license from the Minnesota Department of Health (MDH) to perform radon measurements and is registered with the National Radon Proficiency Program (NRPP) as a Radon Measurement Professional.

