

Adoption of the 2023 National Electrical Code



What is the National Electrical Code (NEC)?

- ▶ The NEC is a comprehensive set of standards for the safe installation of electrical wiring and equipment in the United States.
- ▶ Developed and updated every three years (3) by the National Fire Protection Association (NFPA).
- ▶ It reflects the latest advancements in electrical technology, safety research, and best practices.
- ▶ Adoption by local jurisdictions ensures consistent standards.
- ▶ Texas has already adopted the 2023 NEC with an effective date of September 1, 2023, as the minimum standard for all electrical work in the state. Local entities are expected to follow.

Changes to the 2023 NEC:

▶ **Ground Fault Circuit Interrupter (GFCI) Protection:**

- Expanded requirements for GFCI protection in areas with sinks and permanent provisions for food/beverage preparation (not just kitchens).
- New requirement for GFCI protection for specific appliances like electric ranges, wall-mounted ovens, cooktops, clothes dryers, and microwaves, regardless of location.

▶ **Arc Fault Circuit Interrupter (AFCI) Protection:**

- Requirement extended to sleeping quarters in firehouses, police stations, and similar facilities.

▶ **Tamper-Resistant Receptacles:**

- Expanded required locations in residential occupancies to include boathouses, mobile homes, manufactured homes, detached garages, and accessory structures.

Changes to the 2023 NEC (continued):

▶ **Emergency Disconnects:**

- New requirement for outside emergency disconnects for feeders supplying one- and two-family dwelling units.

▶ **Surge Protective Devices (SPDs):**

- Minimum nominal discharge current rating of 10kA now required for SPDs. SPDs help protect against power surges that can damage electronics and cause fires.

▶ **10-Ampere Branch Circuits:**

- New allowance for 10-amp branch circuits for specific lighting and exhaust fan loads, but prohibits use for receptacles, fixed appliances, garage door openers, and laundry equipment.

Benefits Of Adapting The New Code:

- ▶ **Enhanced Safety:** Significantly reduces the risk of electrical fires, shocks, and injuries due to updated safety requirements.
- ▶ **Future-Proofing:** Ensures Deer Park's electrical infrastructure is up to date with the latest technological advancements and safety standards.
- ▶ **Increased Property Value:** Homes and businesses wired to the latest code are often seen as safer and more desirable, potentially increasing property values.
- ▶ **Reduced Insurance Costs (Potential):** Some insurance providers may offer lower premiums for properties compliant with the latest electrical codes.
- ▶ **Support for Modern Technology:** Facilitates the safe installation of modern appliances, electric vehicle charging stations, and renewable energy systems.
- ▶ **Consistency with Texas Standards:** Aligns Deer Park with the state's minimum electrical safety requirements, ensuring uniformity and ease of compliance.

Addressing Potential Concerns

- ▶ While there may be initial costs associated with training and code updates, the long-term benefits of increased safety and reduced risks outweigh these costs.
- ▶ The 2023 NEC includes some changes that may have minimal cost impact, while others, like expanded GFCI/AFCI requirements, might slightly increase material costs in certain installations.
- ▶ The allowance of 10-amp circuits for specific applications could lead to potential cost savings in wiring.



Questions Can Be Directed To The Building Official
Greg Melching
gmelching@deerparktx.org
281-478-7235