



Town of Smyrna Residential Electrical Inspection Checklist

Building Codes 615-355-5704 or permits@townofsmyrna.org

Here is a list of electrical items to be completed for each phase of a project. This list is not all inclusive, if you have any questions, please speak with your inspector.

All inspection requests should be made **no later than 3:30 the day prior to *potentially* qualify for the next day inspection (if time allows) but will be completed no later than three business days after the request.**

All inspections are completed according to the inspector's schedule as time allows. Any inspection requests received after this cut off time will be scheduled for the second business day. If you would like to make special arrangements with your inspector, please leave a name and number at the time of scheduling so that the inspector can contact you.

Electrical work order requests can only be called in by the electrical permit holder. Inspections are made on a first come first serve basis and according to the inspector's schedule as time allows. Priority will be given to final inspections and open ditch when possible.

Temp Pole

The pole should be installed and stable (should not be moveable with 50 lbs of pressure applied). Address shall be clearly marked (lot number is acceptable). Grounding should be installed per MTE requirements.

Electrical Foundation

If footing - grounding electrode system shall be installed: #4 copper securely tied to at least 20' of metal rebar ufer shall be installed prior to any concrete pour. If it is in place during the building inspection, the building inspector can confirm placement for the electrical inspector. If it is not in place during the building inspection, then the electrical contractor will be required to make the installation and contact the electrical inspector prior to the concrete pour. If you miss this step the electrical installer will be required to dig a 20' trench no less than 18" deep, install a 20' #4 copper or 20' rebar ground embedded in concrete and have it inspected. The responsibility for the grounding is the electricians - not the footer installer (per TOS Municipal amendment).

If a slab - the above grounding electrode system will need to be installed. If it is in place during the building inspection (either plumbing in slab or slab inspections), then the building inspector can confirm placement for the electrical inspector. If it is not there, then the electrical contractor will be required to make the installation and contact the electrical inspector prior to the pour of the slab.

Electrical Conduit Inspections

If conduit is installed in the slab, it will need to be installed and visible for inspection by the electrical inspector. The only exception is the conduit typically installed between the kitchen island and the nearest wall. That conduit can be confirmed by the building inspector if it is installed during their inspections (plumbing in slab or slab). If it is not installed, the electrician will need to call in an inspection for the electrical inspection. This conduit shall be installed at least 4" under the final elevation of the concrete slab (embedded in the gravel), with the ends protruding above the level of poured concrete and open ends secured against any potential intrusion (taped securely shut).

Electrical Framing/ Rough In Inspections (r/i) (including HVAC)

All framing, fire blocking, bracing, and roof installations must be complete. The house must be in “dry in” condition. All electrical wiring and connections shall be properly made, raceways must be visible, junction boxes shall have covers removed, and the inspection shall take place prior to the installation of wall or ceiling membrane. This inspection must be completely approved before the building framing can be requested.

Electrical Above Ceiling

Commercial ceilings with hard ceiling or drop/suspended ceilings require an above ceiling inspection.

Electrical Ditch Inspections

To be called in after trenches or ditches are excavated and conduit is installed and before any backfill or concrete is put in place. The ditch should be excavated according to article 300.5 of the NEC, and no closer than a 45 degree angle from the footer/slab installation. If the footer/slab is over exposed by the ditch then an engineer will be required to sign off on the installation of the foundation.

Electrical/ HVAC Final Inspection

All HVAC and final electrical inspections must be requested before a final inspection will be scheduled. As usual, only the permit holders can call in these inspections. The building shall be complete, electrical is supplied to the building, all electrical fixtures are in place and properly connected, and the structure is ready for occupancy.

Commercial Electrical Signs

Electrical signs will require at least a rough in and final inspections.

Common items to be inspected:

- Electrical Panel: correct circuit breaker sizes, proper grounding/bonding, damage, corrosion, and proper labeling, general workmanship and common installation practices.
- Wiring & Circuits: Inspection of wires for damage or improper size, ensuring NM cables are properly secured, and checking for appropriate wire gauges, general workmanship and common installation practices.
- GFCI and AFCI Protection: Verification that Ground Fault Circuit Interrupters (GFCIs) are in kitchens, bathrooms, garages, and exterior areas. Arc Fault Circuit Interrupters (AFCIs) must be in required locations.
- Outlets & Switches: Proper installation of junction boxes, securely mounted outlets/switches, and adequate, working smoke and carbon monoxide detectors, general workmanship and common installation practices (see NEC 210.12, 210.5, IRC 310, 311)
- Grounding Electrode System: Proper connection to the earth ground. All grounds to be mechanically connected at rough in.