



Chesterfield County , Virginia Department of Building Inspection

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Building Official

Requirements for Electrical Plans

The following checklist contains the minimum information and details required on electrical plans prior to submission for plan review. This is a basic pre-submittal checklist that is intended to expedite the plan review process by minimizing the number of required revisions. Please contact the commercial plan review staff at (804) 748-1057 with any questions regarding this checklist or any other commercial permit questions.

General Requirements:

- Construction documents prepared and sealed by a registered design professional (RDP) for:
 - The following occupancy classifications: Institutional (I), Educational (E), High Hazard (H), and per departmental policy all Assembly (A) occupancies that have an occupant load over 100
 - All buildings over 3-stories in height
 - Any electrical installation exceeding 600 volts or 800 amps
- Construction documents for electrical systems that are not required to be prepared by an RDP, prepared by a licensed master electrician, or a licensed Class A electrical contractor
- Name, occupation, address and telephone number of the person who prepared the plans
- RDP seal and signature or master card number and signature are on the plans
All pages of the plan set neat, legible and of the same size. If different discipline designers use different page sizes, re-print the smaller pages on sheets the size of the largest in the set.
- Electrical plans on the same size sheets as the other plans in the building permit package
- Electrical code edition used for design. The current code edition is the 2014 NEC. New work vs. old work clearly distinguished
- The use of all spaces and rooms
- Each sheet clearly identified with distinct sheet numbers (i.e. E1, E2)
- Drawings at least 1/8" = 1'-0" scale or larger
- Locations of all wet and hazardous locations

Electrical Service:

- Location of meter and CT cabinet on floor plans
- Location of service equipment
- Sizes of service conductors, raceways, specify raceway type
- AIC rating of service equipment and all panel boards
- All fuse and breaker sizes
- Amperage, voltage and phase of service equipment

Grounding Details for Service:

- Grounding electrode system and details
- Sizes of all grounding conductors

Panelboards:

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Electrical Checklist (Continued)

- Panel board schedule with connected loads and breaker sizes
- Whether panel boards are main lug or main breaker type
- AIC rating
- Panel boards, voltage, phase, rating in amps and name of panel
- NEMA ratings of panelboards

Feeders:

- Wire size and type
- Conduit size and type
- Feeder loads
- Size of equipment grounding conductor

Branch Circuit Details:

- All branch circuits serving power, lighting and equipment
- All wiring sizes, conduit sizes and number of conductors

Transformers:

- Size in KVA.
- Primary and secondary voltages
- Overcurrent protection
- Location of transformer on drawing
- Size of grounding electrode conductor

Disconnects and Starters:

- Location of all disconnects and starters
- Size and type (fused or non-fused)
- Fuse size
- Location of all electrical equipment
- Loads of equipment on panel schedules

Egress and Exit Lighting:

- Location of all exit and egress lights
- Lighting circuit from which they are supplied
- Breaker lock on panel schedule if using the exception in Article 700

Demand Load Summary:

- Connected loads of new and existing electrical system
- NEC demand loads per Article 220
- Whether demand loads are being calculated from the standard or optional methods

