Electrical Plan Review Record

2020 National Electrical Code (NEC)

Building Division/Building Plan Review Department
Fairfax County Land Development Services
12055 Government Center Parkway, Suite 307, Fairfax, VA 22035
Phone: 703-631-5101, TTY 711
www.fairfaxcounty.gov/landdevelopment

This plan review record shall be completed by the certified peer reviewer and submitted with the construction documents for Fairfax County Expedited Building Plan Review Program. This can also be used as a guide/ checklist by architects and engineers for construction-ready plans and for permit application.

Instructions. Complete the project-related information below. For each technical- or code-related item on the following pages, signify its compliance or applicability. The items listed in this plan review record are the most typical for most projects and do not constitute all design elements checked by peer reviewers or county staff.

Project Information

Project Name: _____

Street Address: _____

Parcel ID: _____ Permit Number: _____

Check all that apply:

☐ Tenant Layout/Tenant Improvement ☐ New Construction

☐ Other: _____

Designer Information

Name: _____

License No.: _____ Telephone: _____

Email: _____

Peer Reviewer Information (if applicable)

Name: _____

PR No.: _____ Telephone: _____

Email: _____

Code Information

Check all that apply:

☐ Virginia Construction Code (new commercial, multi-family and Group R-3 residential construction)

☐ New Building ☐ Addition

☐ Virginia Existing Building Code (existing commercial, multi-family and Group R-3 residential construction)

☐ Level 1 Alteration ☐ Repair ☐ Level 2 Alteration ☐ Change of Occupancy

☐ Moved Building ☐ Historic Building ☐ Addition

A. General Electrical Information

Complies N/A

- ☐ ☐ Lighting luminaire schedules including power ratings of each type are provided per NEC Article 410.
- ☐ ☐ The electrical system complies with the energy conservation requirements of (check one):
  - ☐ American Society of Heating, Refrigerating and Air-Conditioning Engineers Standard 90.1
  - ☐ Virginia Energy Conservation Code
- ☐ ☐ A complete/partial electrical riser diagram is provided per NEC Article 215.5.
- ☐ ☐ Conductor sizes to electrical panels and equipment are provided per NEC Article 240.4.
- ☐ ☐ Electrical panels and equipment locations comply with NEC Articles 230.72 and 110.26.
- ☐ ☐ Load calculations are provided on the construction documents per NEC Articles 220.
- ☐ ☐ Panel schedules are provided and denote loads per NEC Articles 215.5 and 220.
- ☐ ☐ Panel schedules contain all required ratings (volts, amps, number of phases, AIC, MCB/MLO) per NEC Article 408.30.
- ☐ ☐ Per Virginia Construction Code Section 109.3, the electrical drawings have the appropriate seal and/or signature of a Virginia-licensed (check one):
  - ☐ Registered design professional
  - ☐ Class A electrical contractor/master electrical tradesman
- ☐ ☐ The required electrical room doors are equipped with listed panic hardware and open in the direction of egress per NEC Article 110.26C (3).
- ☐ ☐ The service equipment available-fault current is provided per NEC Article 110.24.
- ☐ ☐ Wiring methods comply with the requirements of Article 300.

Branch Circuits (NEC Article 210)

- ☐ ☐ Required location(s) of GFCI comply with NEC Article 210.8.
- ☐ ☐ Number of branch circuits comply with NEC Article 210.11.
- ☐ ☐ Required location(s) of AFCI comply with NEC Article 210.12.
- ☐ ☐ Dwelling unit receptacle outlets comply with NEC Article 210.52.
- ☐ ☐ Required locations of lighting outlets comply with NEC Article 210.70.

Service (NEC Article 230)

- ☐ ☐ The required number of services complies with NEC Article 230.2.
- ☐ ☐ The service conductor rating in amps and voltage are in accordance with NEC Article 230.23.
- ☐ ☐ The service entrance conductor ratings are sized in compliance with NEC Article 230.23.
- ☐ ☐ The service disconnecting means, and its circuit breaker (CB)/fuse are properly sized in accordance with NEC Articles230.79 and 230.90A.
- ☐ ☐ The number of service disconnecting means is provided per NEC Article 230.71.
- ☐ ☐ The service disconnecting means are grouped in one location per NEC Article 230.72.
- ☐ ☐ GFPE protection is provided for service equipment per NEC Article 230.95.

D. Feeder (NEC Article 215)

Complies	N/A	
☐	☐	Feeder conductors are properly sized per NEC Article 215.2.
☐	☐	Feeder and transformer tap conductors meet tap rules of NEC Article 240.21, Items B and C.
☐	☐	Feeder conductors are protected with proper overcurrent devices per NEC Article 215.3.

E. Grounding (NEC Article 250)

Complies	N/A	
☐	☐	Main service grounding and its supplementary grounding electrodes are provided and sized in accordance with NEC Articles 250.24, 250.53A (2) and 250.66.
☐	☐	Main service grounding electrode/main bonding jumper conductors are provided and sized in accordance with NEC Tables 250.66 and 250.102(C)(1).
☐	☐	Equipment grounding conductors are provided and sized in accordance with NEC Table 250.122.
☐	☐	Isolated grounding conductors are properly connected in accordance with NEC Article 250.96B.
☐	☐	Intersystem grounding bus bar is provided on the plan in accordance with NEC Article 250.94.
☐	☐	Supply-side bonding jumper is provided in accordance with NEC Article 250.102C and Table 250.102(C)(1).

F. Overcurrent Protection (NEC Article 240)

Complies	N/A	
☐	☐	Conductors and equipment are protected by overcurrent devices in accordance with NEC Article 240.4.

G. Separately Derived Systems

Complies	N/A	
☐	☐	Transformers and generators are grounded in accordance with NEC Article 250.30.
☐	☐	Transformer overcurrent device ratings are sized in accordance with NEC Article 450.3.
☐	☐	Transformer primary and secondary overcurrent device ratings are in accordance with NEC Tables 450.3 (A) and 450.3 (B).
☐	☐	Transformer locations are provided in accordance with NEC Article 450.21

H. Special Occupancies

Complies	N/A	
☐	☐	Health care facilities are in accordance with NEC Article 517.
☐	☐	Commercial garage is in accordance with NEC Article 511.
☐	☐	Class I, II, and III hazardous locations are in accordance with NEC Article 500.
☐	☐	Place of assemblies are in accordance with NEC Article 518.
☐	☐	Medical/dental office wiring methods are in accordance with NEC Article 517.12.

I. Special Equipment

Complies	N/A	
☐	☐	Signs/outline lighting is in accordance with NEC Article 600.
☐	☐	Elevators are in accordance with NEC Article 620.
☐	☐	Information technology equipment is in accordance with NEC Article 645.
☐	☐	Swimming Pools, fountains, and similar installations are in accordance with NEC Article 680.
☐	☐	Fire-pumps are in accordance with NEC Article 695.

J. Emergency Systems

Complies	N/A	
☐	☐	Emergency power sources are in accordance with NEC Article 700.12.
☐	☐	Exit signs and means of egress lighting are in accordance with NEC Article 700-IV.
☐	☐	Emergency Equipment are in accordance with NEC Article 700.12B.
☐	☐	Storage batteries are capable of supplying power to the loads for a minimum period of 1.5 hours per NEC Article 700.12C.
☐	☐	Signs are provided at the service equipment indicating type and location of the onsite emergency power sources per NEC Article 700.7.
☐	☐	Only loads specified for emergency are connected to emergency system per NEC Article 700.15.

K. Legally Required Standby Systems and Ratings (Article 701)

Complies	N/A	
☐	☐	Legally required standby systems have adequate capacity and rating for the intended loads per NEC Article701.4.
☐	☐	Standby power sources are in accordance with NEC Article 700.12.

L. Miscellaneous Requirements

Complies	N/A	
☐	☐	Wiring in ducts, plenums, and other air handling spaces are in accordance with NEC Article 300.22.
☐	☐	Motors, appliances, and elevator disconnecting means are in accordance with NEC Articles 430, 422 and 620.51.
☐	☐	Electric metallic tubing and associated fittings installation are in accordance with NEC Article 358.

M. Residential

Complies	N/A	
☐	☐	Residential electrical designs and installations comply with the residential provisions of NEC.