# Electrical Plan Check Requirements

## **Electrical Plan Check Submittal Requirements**

A formal plan check is required for all new commercial buildings, and new multi-family dwellings, new single-family dwellings or any project that involves a service/panel board upgrade or install of a **400Amp or more** panel rating.

At a minimum the following is required for electrical plan check:

- A. Installations, additions, or modifications where the building service equipment is 400 Amperes or larger OR exceeds available fault current of 10,000 amps shall be prepared and stamped by a registered design professional or licensed electrical contractor.
- B. Submit a digital set of plans on the Building & Safety portal with the applicable items listed below:
  - 1. Address of installation (include suite number).
  - 2. Note type of use (office, retail, single-family residential, etc.)
  - 3. Scope of work
  - 4. Plans must correctly identify most current applicable codes.

## C. Single-Line Diagram Showing:

- 1. Service Maximum available fault current as published by the utility company at the point of attachment of each service-entrance section shall be indicated on the plans.
- 2. All services supplying a dwelling unit shall be provided with a surge-protection device (SPD). (CEC 230.67) Call out on single-line diagram that service has a surge-protection device.
- 3. Provide Ground Fault Protection for services exceeding 150Volts to ground and disconnect rated 1000Amps or more. (CEC 230.95)
- 4. All existing and proposed sub-panels and associated loads
- 5. Breaker and/or fuse sizes. Note size and type of each one.
- 6. Grounding and bonding conductors (Size, destination and type of wire) Show both for service and separately derived systems (transformers, generators).
- 7. Conduit and feeders. Note size and types for each.
- 8. Note new, relocated or re-fed apparatus on plans; note existing and unmodified as existing on plans.
- 9. Show service load calculations in amperes.
- 10. Show size and length of service conductors, branch circuits and all feeders including equipment grounds (Include voltage drop).
- 11. Provide the main bonding jumper size, water and gas bonding size
- 12. Single-line diagram shall be stamped by a registered design professional or licensed electrical contractor.

#### D. Site Plan

- 1. A complete site plan showing service location and all loads.
- 2. Service/panel board locations must be shown.
- 3. Note proper address of new meter (if applicable to project).
- 4. All plans shall be drawn to scale and shall include a legend of all symbols to be used.
- 5. Scope of work must be included on plans.

#### E. Electrical Load Calculation

- 1. Provide electrical panel schedules and load schedules for all panels impacted and part of proposed project.
- 2. On panel schedules, provide description and wattage of circuit loads. Identify all continuous loads.
- 3. Complete and copy the Electrical Equipment Schedule onto the plans.
- 4. Provide total Wattage and calculated loads on the panels and feeders.
- 5. Complete code load calculations for service equipment, switchboards and panelboards as in accordance with 2022 California Electrical Code.
- 6. Provide the voltage and ampere rating of all equipment.