Electric Panel Replacement

This document contains a collection of handouts about replacing an electrical panel in the County of Humboldt. The following information assumes that the structure the panel is attached to is permitted. If it is not, it will need to be permitted. Included are links to resources which are used by the Humboldt County Building Division to assess requirements for a proposed electric panel replacement. Click the gold star to get a PDF version of the handout it is next to.

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Important GIS Layers | Electric Panel Replacement ★

The Humboldt County Geographical Information System (GIS) is used by the building division to determine the jurisdictions, hazards, natural resources, and other geologic features associated with the proposed building site. Because an electric panel replacement will have such a small effect on the environment, the jurisdictional and geologic features do not have a significant effect on what submittal documents you will need. To learn more about how to use the GIS, read the Web GIS Guide.

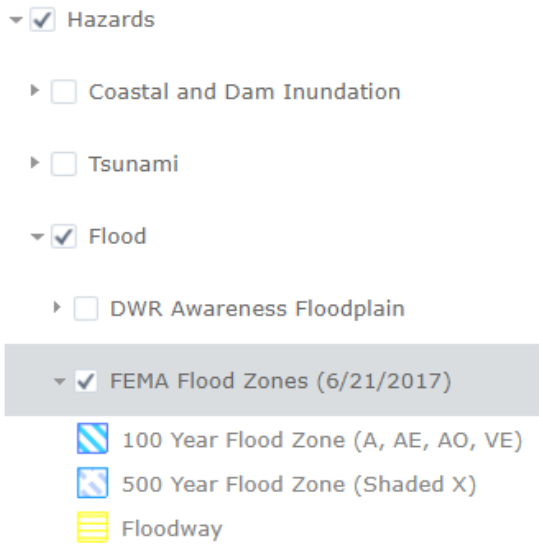
Hazards

FEMA Flood Zones

The FEMA Flood Zone layer shows the flood zone and floodway. An electric panel replacement in the flood zone will have to comply with the Flood Damage Prevention chapter of the county ordinance and Flood Resistant Construction of the Residential Building Code. An electric panel replacement in the flood zone will not have to be elevated to or above Base Flood Elevation provided the following conditions are met

1. The electrical panel shall be a pole mounted service.
2. The electrical panel cannot supply power to new or substantially improved structures.
3. The height to the top of the meter socket enclosure shall be 72 inches above grade.

To access the FEMA Flood Zone layer, check the following GIS layer list boxes to the right



Submittal Documents | Electric Panel Replacement ★

Submittal documents are construction drawings, engineered calculations, forms, installation manuals, and any other documents which will describe the construction of your proposed electric panel replacement. Below is a list of all the submittal documents you could be required to provide.

Required Submittals

- *Construction Plans*
    - Plot/Site Plan – The plot plan shows the entire parcel including all proposed structures, existing structures, setbacks from property lines, SRA areas, vegetation management area and more. Refer to the plot plan checklist to see what information a plot plan has.
- *Forms*
    - Building Application - A building application is used to gather personal information about the applicant and a project description. This must be filled out by the owner or agent.
    - Smoke/CO Certification Form – A smoke/CO certification form states that your smoke and carbon monoxide alarms are installed per their manufacturers instructions and current code.

Potentially Required

- *Engineering*
    - Flood Elevation Certificate – Required if the building site is in the flood zone and the electrical panel is not pole mounted, the electrical panel will supply power to new or substantially improved structures, or the top of the meter socket enclosure is not 72 inches above grade.
- *Forms*
    - Authorization of Agent – If you want to authorize a 3rd party to act on your behalf.
    - Owner Builder Notice to Property Owner Form – If you want to apply as an owner-builder.

Inspection Schedule | Electric Panel Replacement ★

An electrical panel replacement is inspected in 1 stage; final. At the inspection we will tag the inside of the panel with a sticker which will notify PG&E that it has been inspected and it is OK to energize. The inspection card, all county approved documents, and any relevant installation manuals must be provided on-site for each inspection. Refer to Important GIS Layers to determine if flood and fire hazard requirements apply.

1 Final

- *Electrical Final* – We will verify the grounding and bonding system is up to current code, the conductors are the correct size, the neutral is labeled with white tape on both ends, the service entrance conduit is secured, the panel circuits are labeled, and equipment is being used as listed. The building codes relevant to this inspection are the California Residential Code (CRC), the California Electric Code (CEC), the PG&E Greenbook Manual, and the Humboldt Code (HC).

  Important Chapters

  - General (CEC)
  - Wiring and Protection (CEC)

  Important Sections

  - Branch Circuits, Feeder, and Service (CEC)
  - Grounding and Bonding (CEC)
  - Overcurrent Protection (CEC)

- *Building Final* – We will verify the structure is permitted and we will ask for the Smoke/CO Certification form. The building codes relevant to this inspection are the California Residential Code (CRC) and the Humboldt Code (HC).

  Important Chapters

  - Building Planning (CRC)

  Important Sections

  - Smoke Alarms (CRC)
  - Carbon Monoxide Alarms (CRC)

FAQ's | Electric Panel Replacement

Who do I contact if I have more questions?

You can send an email to buildinginspections@co.humboldt.ca.us and we will try to get back to you ASAP.

Resources

- California Building Codes (UpCode)
- County Code
- GIS
- GIS Guide
- Brochures and Handouts
- Forms
- Resource Library
- FAQ's