



CITY OF FOSTER CITY

Community Development Department

Building Division

610 Foster City Blvd, Foster City, CA 94404

Phone: 650-286-3227 | Email: building@fostercity.org

ELECTRICAL SERVICE PANEL UPGRADE – RESIDENTIAL

Advisory: Owner-Builder is not permitted to install the electrical work. A CA Licensed C10 - Electrical Contractor is required to perform the electrical work. Refer to the [CSLB website](#) for limitations.

To obtain permit, submit the following:

- Building Permit Application
- All new service upgrades are required to provide the PG&E Approved Plan.
- Provide [Residential Electrical Load Calculation Form](#).
- Provide [MSP Upgrade Worksheet](#)

Panel requirements:

- The panel is required to be Listed and Labeled as suitable for service equipment per **CEC230.66**. The new panel is required to be installed per the manufacturer's installation specifications as well as the CA Electrical Code.
- Minimum Working Clearances shall be 36" in depth x 30" in width, and 6 ft.-6 in. in height per **CEC110.26**. Refer to PG&E Greenbook for Approved Locations.
- Disconnects for switches and breakers shall be installed so that the grip of the center of the operating handle, at its highest position, is not more than 6' x 6" above the working platform; it shall be located in a readily accessible location per **CEC 230.70(A)(1), CEC404.8(A)(1)**.
- All enclosures shall be free of debris. The internal parts of the electrical equipment (including bus bars, wiring, terminals, and other surfaces) shall not be damaged or contaminated by foreign materials (such as paint, plaster, cleaners, abrasives, corrosives residues) per **CEC 110.12(B)**.
- Provide Grounding Electrodes and Grounding Electrode Conductors per **CEC Table 250.66, CEC Article 250.50, 250.52, 250.64, 250.70**. Advisory: For Foster City salty, highly corrosive, and low-resistive groundwater environment, the recommended ground rod options are stainless steel rods, solid copper rods, or specialized chemical ground rods designed for longevity. These options resist the rapid corrosion that destroys standard copper-clad or galvanized rods, ensuring long-term grounding effectiveness. Ground rods shall only be used in conjunction with Non-Corrosive Highly Conductive Fill Material per **FCMC 15.20.160**. Examples of high-conductivity, non-corrosive backfill like bentonite clay, graphite-based compounds, or cementitious materials.
- Torque is required on all new electrical equipment per **CEC 110.14(D)** at the main lugs, terminals, breakers, etc. The electrical contractor shall be on site with a torque wrench and torque screwdriver for the inspection. A calibrated torque tool shall be used.
- Label the service disconnecting means. All circuits shall be legibly identified for its specific purpose or use per **CEC 110.22(A), CEC 230.70(B), CEC 408(A)**.
- Arc Fault Circuit Interrupters / AFCI Receptacles are required at the following locations: Kitchens, Family Rooms, Dining Rooms, Living Rooms, Parlors, Libraries, Dens, Bedrooms, Sunrooms, Rec Rooms, Closets, Hallways, Laundry Rooms, or similar rooms / areas per **CEC 210.12(A)**.
- Ground Fault Circuit Interrupter / GFCI Receptacles are required at the following locations: Dwelling Kitchen Countertops, Bathrooms, Garages, Unfinished Basements, Crawl Spaces, within 6 feet of a sink, shower, or tub, and exterior receptacles per **CEC210.8(A)**.