



CITY OF FOSTER CITY

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SUBMITTAL REQUIREMENTS FOR RESIDENTIAL PHOTOVOLTAIC PROJECTS

This submittal checklist outlines the minimum requirements for a complete permit submission. Each project is unique, and additional requirements may be required. All applications, plans, and supporting documents are to be submitted electronically via [eTRAKIT](#). For more information, please refer to [Building Plan Check Submittals](#).

LETTER FROM HOMEOWNERS ASSOCIATION (if applicable): For houses located within Planned Developments, a letter demonstrating the written action by the Homeowners Association (HOA) on the proposal shall be obtained prior to submitting plans to the City.

Following is a list of the general requirements based on the 2022 California Residential Code (CRC), California Electrical Code (CEC), California Plumbing Code (CPC), California Mechanical Code (CMC), California Energy Code (CEnC), California Green Building Standards Codes (CGBSC) and Foster City Municipal Code (FCMC)

BUILDING PERMIT - The homeowner or contractor shall apply for a Building Permit from the Building Division and shall submit [Building Permit Application](#), [Authorization to Act as an Agent](#), the approval letter from the HOA (if applicable), any required drawings and fees per FCMC 15.45.050. The Permittee shall include the following on the plans:

- 1) On the Cover Sheet, please provide the following information (CRC R106.1.1):
 - a) List the Applicable Codes (e.g. 2022 CRC, CFC, CPC, CMC, CEC, CGBSC, CA Energy Code, and Foster City Municipal Codes,
 - b) Provide the Project Data with the following information;
 - i) Occupancy Group (e.g. R-3/U for Single Family Dwelling w/attached garage),
 - ii) Type of Construction (e.g. Type V-B for wood framed construction),
 - iii) Number of Stories,
 - iv) Existing Fire Sprinklers: *Yes / No*,
 - c) Scope of Work: detail the proposed equipment – size / amperage on (N) Electrical Panels, (# of modules), electrical equipment e.g. Gateways / Sub- Panels, Combiner Boxes, Breakers, Disconnects, ESS / Battery Backup, Racks, Rails etc. for the applicable residential project,
 - d) The Responsible Designer shall provide their name and signature on the Plan Set per Business and Professions Code 5537 and 6737,
 - e) Add the following Notes on the Site Plan Sheet;
 - i) Exposed conduits shall be painted to match the background/adjacent surface colors per [FCMC](#).
 - ii) All surface mounted equipment, e.g. AC Disconnects, Combiner Boxes, Gateways, Invertors, etc. are required to be placed behind the gate / fence line per [FCMC](#).
- 2) Site and roof plans shall clearly show the location of the electrical supply panel, PV array, modules, (each string shall be identified), combiner box, inverter, ac and dc disconnects, conduit, junction boxes, battery banks, etc. (CRC R106.1.1)
- 3) Show property line setback distances to the proposed equipment when solar array is not attached to the structure.

- 4) Plans shall reflect the required clearances for all equipment, on the roof and at grade requiring servicing (CEC 110.26).
- 5) Provide an elevation view of the PV and ESS system components, showing distances to doors and windows, height above ground, and clearances between adjacent equipment.
- 6) Access pathways and fire setbacks shall be clearly shown on plans (CFC Section 1205.2/CRC R324.6.1).
- 7) Structural Attachment Details for the proposed rooftop equipment are required. (CRC R301.1) Provide a table that summarizes the following information;
 - a) Roof specifications (e.g., structural member sizes, span, spacing, and material),
 - b) Array specifications (e.g., number of modules, total number of modules, weight of modules and array, weight of racking system, and weight per attachment),
 - c) Advisory: PE Stamped Plans and Calculations required. (CRC R301.1)
- 8) On Site Map Placard, provide dimensions and color scheme for placard or Code Citation. (CEC 705.10 / CFC 1205.4.1)
- 9) Please provide an 8"x11" legible photo of the electrical panel showing the entire enclosure (include sub panel when used to back feed) with the dead front removed with the main breaker visible. Ensure the Manufacturer's Nameplate Rating is also visible with the Panel's Max Amperage reflected. Advisory: existing main electrical panels that are not solar ready/PV compatible (e.g. Federal Pacific, Zinsco, Sylvania), damaged, or degraded may be required to be replaced. (CRC R106.1.1)
- 10) Identify the size and location of the service for the dwelling unit(s).
 - a) The rating of the service disconnecting means shall be in accordance with CEC 220 Article 220.
 - b) For a single-family dwelling, the minimum service disconnecting means shall be a minimum rating of 100 AMP, 3-wire (CEC 230.79(C)).
 - c) Ensure the location of (E) Gas Service Equipment is reflected.
- 11) Provide an Isometric / three-line diagram showing the following all system components: wire sizes, conductor insulation type, method of protection (e.g. EMT, RMC, etc.), wire distances between each piece of equipment, grounding electrode system, equipment grounding system (conductor size) and disconnects. Clearly indicate the number of modules per string, strings per array and number of modules total.
- 12) Provide a Residential Load Calculation on existing loads for verification on equipment sizing (CEC Article 220 and Annex D). Please refer to link for [Residential Electrical Load Calculation worksheet](#).
- 13) For Line Side/Supply Side Tap, equipment shall be identified and listed for the application (CEC 690.4(D)).
- 14) Please provide a copy of the complete manufacturer's specification sheets for all proposed equipment: inverters, modules, combiner boxes, racking systems (including tilt up systems), flashing junction or transition boxes (e.g. Quick Mount), disconnects, battery, battery cabinet, etc. (CRC R106.1.2)
- 15) For Tile Hook installations on Clay Tile, Concrete Tile and Composite Tile Roofs, Flashing is required on the Tile Hook Penetrations at the Waterproofing Membrane per CRC R903.2 and manufacturer specifications.
- 16) For ESS Battery Back-Ups, please address the following;
 - a) Provide the location of the battery backup. Refer to CRC R328.4 for permitted locations.
 - b) Maintain 3 ft. separation from openings (e.g. doors and windows) into the dwelling unit. Dimension the ESS from openings on the plans.
 - c) Suspended (hung on the wall) doubled up Storage Batteries/components weighing over 400 lbs. require structural anchorage and calculations (ASCE 7-10 Sections 6.5.15.1/13.6).
 - d) Electrical equipment in the vehicular path will require protection, e.g. bollards (CFC 1207.4.5)

- 17) Electric Panel changeouts/upgrades will require an electrical permit with additional fees and review. Please refer to the PG&E Greenbook for Standards and Clearances. [Greenbook Manual Online](#)
- 18) ESS / Battery Backups will require an electrical permit with additional fees and review by the Fire Dept. Advisory: For ESS / Batteries installed in the Garage, an approved interconnected automatic smoke detection system or radiant energy-sensing fire detection system shall be installed per CFC 1207.5.4
- 19) An Electric Vehicle Charging Station will require an electrical permit with additional fees and review. Please refer to the link provided for EV Requirements [EV Charging Station | Foster City California](#)