



Electric Vehicle Supply Equipment Permit Guide

If you install Electric Vehicle Supply Equipment (EVSE), otherwise known as electric vehicle charging stations, you must first obtain a building permit. As a permit applicant, you will need to complete the forms listed below and pay the necessary plan check fees to the Finance Department. For rules describing who can obtain a permit, visit: <http://www.ci.national-city.ca.us/index.aspx?page=166>.

1. Forms to Complete

Building Permit Application:

At plan submittal time, you will need the job address (a unique address for the EVSE installation that is used for billing), parcel number, existing use, description of work, name, address, and contact information of the applicant and the owner.

- For both residential and non-residential permits:
You must submit a completed and signed "Building Permit Application" to a Building Services Technician in the Building Department

2. Plan Check and Permit Fees

The plan check fees must be paid at the time the plans are submitted. The payment can be submitted by cash, credit card, or check. Please make checks payable to the "City of National City". A description of the fees is below.

- The cost is \$118.00/hour of plan check
- One hour is due at the time of submittal
- There is a \$148.00 fee for the permit issuance and two inspections, due at the time the permit is issued. Additionally, if the plan review exceeds one hour, the additional fees will be due at this time
- An electrical service upgrade costs \$39.00/100 amps on the electric service panel

3. Required Information on the Plans

You must include the items listed below on the plans and provide the required supporting documentation. Submit four copies of plans and two copies of any supporting documentation at time of permit application. Include a work order from SDG&E if upgrading your electrical service panel.

- a) Site/ Plot Plan- This plan shows the general layout of the lot showing all parking spaces and proposed location of EVSE parking space(s), including EVSE parking space(s) that meet California's accessibility requirements with respect to existing buildings and structures. The site/plot plan must include the requirements found on the Building Permit Informational Guide, available online or at the Building Public Service Counter in City Hall. This section must address accessibility requirements for multifamily unit dwellings and non-residential EVSE found in the "Considerations" section below.

Additionally, the following must be included:

1. Location of existing electrical service(s) and panels
 2. Location of all EVSE
 3. Where the corresponding parking spot(s) is/are located with respect to the EVSE
- b) Service Load Calculation- Estimates if an existing electrical service will handle the extra load from EVSE and wiring methods based on the 2013 California Electrical Code.
- c) Cut Sheet- Include the EVSE manufacturer's installation instructions, charger specification, and listing. The EVSE must be Nationally Recognized Testing Laboratory (NRTL) tested.
- d) Single Line Drawing- Show the system, point of connection to the power supply and the EVSE, conduit wire size to the EVSE, the circuit at the power supply, the trench detail, and the circuit of the subpanel for the EVSE. The source of power must be clearly indicated.

4. Inspection

Once the permit is issued, you must call to set up an inspection the day before you want it to occur. The City is closed every Friday, therefore inspection requests made on Thursday will be scheduled for the following Monday. Call (619) 336-4363 to schedule the inspection. The day of the inspection, you may call the Building Department at (619) 336-4210 at 8:00am and they will give you a 3 hour window in which the inspector is likely to arrive. The first inspection is at 8:00am and typically, the last inspection can be scheduled up until 5:00pm.

5. Considerations

- a) For residential and non-residential permits: The 2013 California Building Code (CBC) and the Americans with Disabilities act of 1990 requires EVSE located in multifamily dwellings and non-residential facilities to be made accessible to persons with disabilities. Vehicular spaces provided for accessible EVSE shall allow for persons with disabilities to exit an electric vehicle, to access the charging unit and place the charging cable on the vehicle. Relevant code requirements are below:

For residential permits:

- 2013 CALGreen Title 24, Part 11 Section 4.106.4.2 has EVSE requirements for new multifamily unit dwellings
- 2013 California Building Code Section 1109A.8 has accessible parking requirements for multifamily unit dwellings
- 2013 California Building Code Section 1109A.7 has requirements for the location of accessible parking spaces in multifamily unit dwellings

For non-residential permits:

- The Americans with Disabilities act of 1990 prohibits discrimination and ensures equal opportunity to persons with disabilities in commercial facilities

- b) For non-residential EVSE permits: The following divisions review plans and their approval is required:
- Planning Division: You can reach the Planning Division (Zoning Information) at (619) 336-4310
 - Engineering Division: You can reach the Engineering Division at (619) 336-4380
 - Building Division: You can reach the Building Division at (619) 336-4210
- c) For residential and non-residential permits:
Fire and Building code review is performed by EsGil Corporation, which can be reached at (858) 560-1468. Plan reviews can take up to 30 days per review.
For clarification or additional information for a specific project, please call the Building Department at (619) 336-4210 or visit the Building Division Service Counter in City Hall at 1243 National City Boulevard. The counter is open Monday-Thursday from 7am-6pm. Walk-in appointments are welcome at these times.
- d) For residential and non-residential permits: Installing EVSE creates a high energy demand. If the existing service does not meet the demand, an electrical service upgrade is needed. A service order will need to be obtained from SDG&E in order to increase or request a new electric service, and/or to get approval to upgrade the panel.
- e) For residential permits: SDG&E offers various rates for residential EVSE. For more details, visit: <http://www.sdge.com/clean-energy/ev-rates>

6. Resources

- a) Plug in Electric Vehicle Handbook for Electrical Contractors- Has information on charging basics and installing and maintaining EVSE: <http://www.afdc.energy.gov/pdfs/51228.pdf>
- b) San Diego Regional PEV Readiness Plan- Has information on charging basics and Appendix B has many resources including, but not limited to a service load calculation guide and EVSE inspection checklists: http://energycenter.org/sites/default/files/docs/nav/programs/pev-planning/san-diego/San_Diego_PEV_Readiness_Planning_Guide-2013_low-resolution.pdf
- f) Center for Sustainable Energy: San Diego Regional Electric Vehicle Infrastructure Working Group PEV Resources- Has various resources for Electrical Contractors, Public Agencies, Businesses, etc. : <https://energycenter.org/programs/pev-planning/san-diego/resources>
- g) 2013 California Building Code, 2010 ADA Standards for Accessible Design, and Interim Disabled Access Guidelines for Electric Vehicle Charging Stations- Has information about residential and non-residential permitting requirements for making EVSE accessible to disabled persons:
<http://www.bsc.ca.gov/Home/Current2013Codes.aspx>,
<http://www.ada.gov/regs2010/2010ADAStandards/2010ADAStandards.pdf>,
http://opr.ca.gov/docs/PEV_Access_Guidelines.pdf
- Governor's Office of Research and Planning- Universal Charging Access Guidelines and Best Practices:
http://opr.ca.gov/docs/PEV_Access_Guidelines.pdf
- h) Plug-in Electric Vehicle Collaborative- Has many resources including guides for workplace and multi-unit charging: <http://www.pevcollaborative.org/policy-makers>