

As a current or future electric vehicle (EV) owner, you have the option of “fueling” your vehicle by plugging it in at home. Home charging requires the installation of specialized charging equipment where you park. This handout provides information about EV stations and about permitting and inspections. It will help you plan and install this equipment at your single-family residence. Multifamily-dwelling residents should discuss options with their property owner, condo association, or building management.

Things to consider to make your home EV-ready

As described below, the cost and complexity of installing your charging equipment at home will depend on where you park, its proximity to your electrical service panel, and the adequacy of your current electrical service.



blink wall-mounted home charging equipment.
Photo courtesy of Ecotality.

Location

Before purchasing an EV, you should consider where you intend to park your vehicle and the best location for your charging equipment.

- Will your vehicle have a charge port in the front, rear, or side? The charge port should be close to your charger.
- Can you charge inside a protected garage? This will keep your equipment safe from the elements and potential vandalism.
- How far is your electrical panel from where you will place your charger? It is likely to be more expensive the farther away it is.
- Can you find a location that is away from doors and walkways? It is safest to have a clear path to and from the car, one that does not require passing over the charging cord.

Some manufacturers may include the cost of installation in the overall cost of the vehicle, so check with your auto dealer for details.

Electrical Service

You will need to have an evaluation of the adequacy of the electrical service in your residence and your home’s electrical panel. Check with your auto dealer or charging station provider to see if this electrical calculation may be provided to you as a free or low-cost service.

A state-licensed electrical contractor can help you calculate your home’s electrical capacity and loads, which will be required for your permit. Once your home has been evaluated, you or your state-licensed electrician should also contact Puget Sound Energy at electricvehicle@pse.com to notify them of the added electricity demand, and to coordinate any additional actions that need to be taken, if any.

Charging Times

While there are no restrictions as to when you can charge at home, setting your vehicle to charge in “off-peak” hours will help improve the efficiency of our energy system and reduce the demand during peak hours.



The J1772 connector will be the standard charging plug for all new electric vehicles. Photo courtesy of Nissan.

Permit Requirements

For your safety, and as required by law, an electrical permit and an inspection are required to install a home charging station. You must receive final approval from the electrical inspector before energizing your EV charging system.

Who can apply?

Only property owners or their state-licensed electrical contractors can get an electrical permit and perform electrical work. It is the installer's responsibility to request inspections.

We recommend that you check the license status of your prospective contractor at Labor & Industry's website, <http://www.lni.wa.gov/TradesLicensing/Contractors/HireConefault.asp>.

How do I apply?

You can apply for a permit in person at Permit Processing in the Development Services Center at Bellevue City Hall, 450 110th Ave NE. Alternatively, you can apply for and pay for the electrical permit online; the permit is issued via e-mail and printed on your own printer. Electrical plan review is not required for single-family installations of 110v or 220v outlets. 440v outlets cannot be installed in homes.

To apply online:

Step One: Have the following information ready:

- An e-mail address to receive the receipt and permit;
- A VISA or MasterCard;
- Acceptance of an Acrobat Reader that allows permit viewing and printing;
- A printer to print the permit and any attachments; and
- If you are a contractor, you will need to be registered with MyBuildingPermit.com.

Step Two:

Go to <http://www.mybuildingpermit.com/Pages/Electrical-Permit-Packet.aspx> and follow the directions to apply for an electrical permit. Once you are issued a permit, installation can take place.

Step Three: Your permit will provide the contact information for arranging for a required inspection once your charge station is installed. Requests for inspections called in to the 24-hour inspection request line (425-452-6875) before 6 a.m. are normally inspected the same business day.

We recommend that you speak with the inspector the morning of the inspection to arrange for a morning or afternoon inspection and to arrange for the inspector's access to the installation. Inspectors are available from 7 a.m. to 8 a.m. and can be reached at 425-452-4570.

What will the permit cost?

For your convenience, the City of Bellevue has established a flat \$98 fee for the permitting and inspection required to install a single-family EV charging station.

For additional information

- See Bellevue's handout, *Electric Vehicle & Charge Station Information – City of Bellevue*.
- Visit or contact Permit Processing in the Development Services Center, 425-452-4898 or permitprocessing@bellevuewa.gov.
- Visit or contact the Building Desk in the Development Services Center, 425-452-4121 or buildingreview@bellevuewa.gov.
- See Puget Sound Energy's fact sheet, Electric Vehicles: <http://www.pse.com/solutions/foryourhome/Pages/ElectricVehicles.aspx>

This document is intended to provide guidance in applying certain regulations and is for informational use only. It cannot be used as a substitute for the Construction Codes or for other city codes. Assistance for the hearing impaired: dial 711.