

Residential EV charger installation checklist

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Installation checklist

The installation checklist provides information on things to consider when purchasing and installing a Level 2 electric vehicle charger (L2 EV charger). Because of the technical nature and risk of a do-it-yourself installation, **PGE recommends you hire a professional electrician to install your charging station**. Local building codes may require permits and inspection by a professional and making an error with an electrical installation can cause material damage to your home and electrical systems. Electric work can be a health hazard, and it is always safer to let an experienced professional handle electric work.

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Things to consider before purchasing an EV charger

1. Review the [Qualified Products List](#) and [pilot participation requirements](#).
2. The cost of a L2 EV charger installation will vary depending on installation requirements, the distance that wires and conduits need to run from the electric panel to the EV charger, and labor rates of the electrician.
3. Determine whether you would like your L2 EV charger to be installed inside or outside. *If you would like your EV charger installed outside, work with your electrician to check your local building codes for additional rules and requirements.*
4. Determine whether you would like your L2 EV charger to be hardwired or to use a plug and receptacles. *PGE recommends that a licensed electrician hardwire the charger.*
5. Confirm whether you are tying your EV charger into your solar panel or battery storage system. *Work with your solar panel or battery storage vendor or a licensed electrician to properly integrate the systems.*
6. Do you need permission from your Homeowners' Association (HOA)? *If your EV charger is being installed inside your garage, then you likely won't need approval; but if installed outside, you may need HOA approval.*
7. If you are a Tesla vehicle owner, you will need to use the adapter that comes with your vehicle for all participating L2 EV chargers.

Things to consider before deciding to self-install

1. Contact PGE and let us know that you are installing a L2 EV charger using the [Request for Single Family Residential Service Non-Design](#) form.
2. Review the manufacturer's installation guidelines. If you don't feel comfortable following the directions, speak to a professional electrician. *You are responsible for meeting all codes and standards.*

Manufacturer	Installation Guide
ChargePoint	ChargePoint Home Flex (CPH50) Installation Guide



3. Is your EV charger's cord long enough to connect your electric vehicle to the 240-volt outlet? *The cord length can be found on the manufacturer's specification sheet.* Remember: different car models have charging ports in different locations. For example, the cord may reach the rear left side of the car but not the right side or front.
4. Do you have enough free wall space to install the 240-volt outlet and the EV charger?
5. Determine whether you already have a 240-volt outlet of the appropriate amperage and configuration available for the EV charger. *If you are unsure of the requirements, please refer the EV charger's manufacturer's specification sheet. If you don't already have one, please work with a professional electrician to install a 240-volt outlet with the appropriate amperage for your EV charger.*
6. Is there enough physical space to add the EV charger circuit breaker to your electrical panel? *If you don't know or have already confirmed that the panel needs to be upgraded, please contact a licensed electrician.*
7. Is there enough electrical capacity to include your EV charger on your electric panel? *If you don't know how to calculate the electric panel's capacity, please contact a licensed electrician.*

Questions to ask before hiring an electrician

PGE recommends receiving multiple quotes from licensed electricians prior to hiring one. Remember to review all quotes for labor, materials, and permits. Here are a few questions to ask each electrician that you speak with:

1. Are you licensed, bonded, and insured? It is important to make sure the electrician is licensed in the state of Oregon and carries insurance in case of any incidents. Remember to request the electrician's license number. *You can validate the electrician's license with [oregon.gov](https://www.oregon.gov).*
2. Do you have experience installing Level 2 EV chargers? *Most electricians will be able to perform the panel upgrades and outlet installations, but it may be reassuring to know they have experience with Level 2 EV chargers.*
3. What types of permits will my project need? *Only a licensed electrician can confirm the required permits and other requirements for your particular home.*
4. Do you offer a warranty on the work you do? *Good electricians stand by the quality of their work and will offer a limited warranty on their parts and labor.*
5. Do you charge a service charge/truck fee/trip fee? *These all mean the same thing. Some electricians will charge a fee to come out to you, make sure you are aware of what it is and how it is calculated (miles, time, flat rate).*
6. What are the typical charges should you (as the customer) expect to be charged for? *Installation requirements will vary by home, however typical charges include: the hourly labor charge, material costs, service/truck charge, and applicable permits. Get a quote prior to starting work, and make sure you understand the estimated charges.*

PGE can help! If you have questions during the process or can provide feedback on your experience with the electrician you used, please connect with us at resevcharging@pgn.com.

