

A photograph of an electric vehicle charging station mounted on a wall. The station is white with a digital display and a charging cable. A white car is partially visible in the background. The image is overlaid with a blue semi-transparent banner containing the title.

ELECTRIC VEHICLE (EV) CHARGERS PERMIT AND INSPECTION PROCESS

Reducing greenhouse gas emissions is one of the City's top priorities. We know that cars will continue to be a part of Edmonton's transportation system, but we need to think about how we can shift away from fossil fuels and towards electrification. The City's [Electric Vehicle \(EV\) Strategy](#) identifies how we can make it easier for people to own an electric vehicle, prepare the path for electrifying transportation of personal vehicles and ultimately help reduce greenhouse gas emissions.

One of the key considerations before purchasing an EV is to determine how you are going to charge it. EV charging station installation requires permits. It is recommended that installation be carried out by a professional electrician that is familiar with code requirements and can carefully review your current electrical service and needs.

Permit and Inspection Process

The process for installing a new EV charger is as follows:

1. Apply for an electrical permit.

- a. *Either the building owner or an electrical contractor can apply for the permit.*
- b. *Customers can apply online directly at edmonton.ca/ResidentialElectrical or edmonton.ca/CommercialElectrical, or download the electrical permit form and email it to ElectricalTechnicalAdvisors@edmonton.ca.*
- c. *A load calculation to show existing electrical service is sufficient to support the EV charger or plans for an Energy Management System must be submitted with the application. See the tips section for more information.*
- d. *EV charger projects with a construction value of over \$50,000 may require additional plans and specification documents to be provided with the application.*

2. Install the EV charger per the approved permit, load calculation and code requirements.

- a. *Don't start installation until you receive your approved permit. Starting work without an approved permit can result in stop work orders, fines and/or administrative penalties.*
- b. *It is recommended that installation be carried out by a professional electrician familiar with code requirements.*

3. Obtain an electrical inspection to verify that the EV charger installation meets the correct codes and is safe to use.

- a. *Inspections can be booked by calling 311 or through the inspections tab on the self serve application portal at selfserve.edmonton.ca if you applied online.*
- b. *For more information on inspections, visit edmonton.ca/SafetyCodeInspections.*

EV Charger Installation Tips

- + **Contact an electrician.** They can calculate the current electrical usage in your building, and determine if an upgrade is required to support an EV charger. If you don't have an electrician, the [Electrical Contractors Association of Alberta](http://ElectricalContractorsAssociationofAlberta) has a list of qualified electrical contractors (Members) in the Edmonton area.
- + **If your building cannot support the charger, ask your electrician if an Energy Management System could avoid the need for an upgrade.** These devices allow your EV charger to share an existing circuit, such as with your kitchen stove or clothes dryer.
- + EPCOR has additional information on preparing your home or building for an EV charger at epcor.com/evcharger



Edmonton

For More Information

WEB:

edmonton.ca/ElectricVehicles
edmonton.ca/CommercialElectrical
edmonton.ca/ResidentialElectrical
edmonton.ca/SafetyCodeInspections
epcor.com/evcharger

PHONE:

311 (or 780-442-5311 if calling outside Edmonton)

EMAIL:

electricaltechnicaladvisors@edmonton.ca