Electric vehicle supply equipment (EVSE) permit checklist

Definitions

Electric vehicle supply equipment (EVSE)—EVSE is a broad term that refers to the hardware and infrastructure used for charging electric vehicles (EVs). This typically consists of charging stations, connectors/cables, power management, payment systems, and grid integration.

Incentives and rebates—financial incentives are provided by governments or organizations to encourage the purchase and adoption of EVs. These incentives can include tax credits, rebates, grants, or reduced registration fees, making EVs more affordable for consumers.

Charging infrastructure—a network of physical equipment and systems designed to supply electric energy to recharge EVs or plug-in hybrids.

Charging information per type of EV charger

Charger type	Voltage	Power	Miles gained per charging hour	Use
Level 1	120 V AC	1.2–1.4 kW AC	3–4 miles	Slow charging at home or workplace
Level 2	208 V-240 V AC	3.3–19.2 kW AC	10–80 miles	Home, workplace, or public charging
DC fast	400 V-1,000 V DC	50 kW or more	150–1,000 miles	Public fast charging

AC—alternating current; DC—direct current; kW—kilowatt; V—volt

Cost savings for EV chargers

- Federal tax credit: If you install qualified vehicle refueling and recharging property in your home or business, you may qualify for the alternative fuel refueling property tax credit. Learn more about the tax credit on the Internal Revenue Service website.
- Utility-managed EV chargers: Consider installing an EV charger that is networked and managed by Xcel Energy. This saves money on electricity and installation costs. Learn about Xcel Energy's EV Accelerate at Home program here: https://ev.xcelenergy.com/ev-accelerate-at-home-mn
- Utility rebates and incentives: Contact Xcel Energy to find out if there are any EV charging programs, rates, or financial incentives that your installation qualifies for.
 Current incentives and programs are available here: https://ev.xcelenergy.com/ev-charging-programs
- Center for Energy & Environment (CEE) Loan Programs: CEE offers home improvement loans to <u>Roseville residents</u> and Minnesota homeowners: https://www.mncee.org/home-improvement

Minnesota state building code

The State of Minnesota is updating the Minnesota State Building Code to include guidance for commercial EVSE. We will update this document accordingly.

406.2.7 Electric vehicle charging stations.

Where provided, electric vehicle charging stations shall be installed in accordance with NFPA 70. Electric vehicle charging system equipment shall be listed and labeled in accordance with UL 2202. Electric vehicle supply equipment shall be listed and labeled in accordance with UL 2594. Accessibility to electric vehicle charging stations shall be provided in accordance with Chapter 11.

To learn more, read the 2020 Minnesota Building Code.

Roseville's EV charging ordinance

On March 20, 2023, the Roseville City Council passed a City ordinance with new requirements for Electric Vehicle Charging Stations in conjunction with work in Commercial parking areas. These requirements apply to multi-family residential buildings with 5+ dwelling units and non-residential parking lots and structures with 30+ parking spaces. Read the full update to Ordinance 1629 online, starting on page 25.

Accessible charging infrastructure

This entire section is excerpted from the US Access Board's <u>Design Recommendations for Accessible Electric Vehicle Charging Stations</u> (2023).

"Types of EV charging stations that must be accessible

Entities subject to the <u>ADA</u> or <u>ABA</u> must provide EV charging stations that are accessible to and usable by people with disabilities.

Some examples of EV charging stations that may be covered under the ADA or ABA include those installed at:

- State or local government offices
- Public parks
- Municipal building parking lots
- Street parking and the public right-of-way
- Residential housing facilities provided by a state or local government
- Public EV charging stations provided by a private entity
- Fleet charging stations used by the federal government
- Commercial fleet charging stations available to corporate clients
- Rest stops along the Interstate Highway System

"Accessible Mobility Features

EV chargers designed to serve people who use mobility devices must be located on an accessible route and should provide:

- a vehicle charging space at least 11 feet wide and 20 feet long
- adjoining access aisle at least 5 feet wide
- clear floor or ground space at the same level as the vehicle charging space and positioned for an unobstructed side reach
- accessible operable parts, including on the charger and connector

These mobility features allow sufficient space for a person who uses a mobility device to exit and maneuver around the vehicle, retrieve the EV connector, and plug the connector into the electric vehicle charging inlet. Since EVs do not have a uniform vehicle charging inlet location, a larger vehicle charging space is needed to maneuver around all sides of the electric vehicle."

"Accessible communication features

Accessible communication features enable people who are deaf or hard of hearing, people with vision impairments (but who drive), little people, and other people with disabilities who might not need accessible mobility features (like access aisles) to use an EV charger.

All EV chargers should have accessible communication features and operable parts. All EV chargers that are procured or maintained by a federal agency must comply with the <u>Section 508 Standards</u> because they are Information Communication Technology (ICT). See <u>36 C.F.R.</u> §1194.1, App. A & C."

Contact information

Provide contact information for permits, inspections, and related departments below.

Community Development Department 2660 Civic Center Drive 651-792-7080 permits@cityofroseville.comwww.cityofroseville.com/epermits

Electrical Inspections are provided by Tokle Inspections
Apply for electrical permits at: www.cityofroseville.com/epermits
Contact Tokle Inspections at 763-754-2983
https://www.tokleinspections.com/

Electric vehicle supply equipment (EVSE) permitting checklist

Commercial Projects, including significant alterations to and expansions of parking lots, may trigger EV parking space requirements. Please contact Thomas Paschke for more information.

Permits and inspections				
Complete?	Checklist item	Web links		
	Contact Xcel Energy to discuss charger placement and voltage requirements.	https://ev.xcelenergy.com/ev -charging-programs		
	Schedule a pre-application meeting with Thomas Paschke, City Planner	612-792-7074		
	Provide Minnesota contractor license number.	MN State Contractor Look Up		
	Submit an electrical permit and required plans prior to work.	www.cityofroseville.com/eper mits		
	Submit a plot plan prior to work: show location, proposed work, and identify station brand and type (station should be UL listed.)			
	Submit an engineer design of multiple system prior to work including: manufacturer data sheet, third party listing, number of units to be installed, and load calculation with details back to the power source.			
	After permit approval, schedule an electrical inspection.	Call 763-754-2983 to schedule		