



Electrical Bulletin 25-04

Date: September 4th, 2025

Re: Electric Vehicle Supply Equipment

Do I need to submit a load calculation with my permit application?

Yes, when adding load to an existing electrical system a load calculation must always be completed and included with your permit application form.

If you do not wish to complete a load calculation or have determined there is not sufficient capacity on the electrical system to accommodate the Electric Vehicle Supply Equipment (*EVSE), an Electric Vehicle Energy Management System (*EVEMS) can be used.

When applying for a permit to install an EVSE that includes an EVEMS, please specify whether it will monitor the service conductors or a branch circuit, and if so, which branch circuit will be monitored.

Do EVSE and mounting pedestals require protection from mechanical damage as per Rule 2-200?

Yes. EVSE and mounting pedestals are typically subject to mechanical damage and protection is required.

Protection of EVSE can be achieved by locating the EVSE a minimum of 1 meter away from vehicles, by elevation, or behind a physical barrier (mechanical protection) meeting the below requirements:

- **Protected by curb** such that:
 - EVSE is installed on a raised curb or sidewalk and is installed at least 1 meter back from the front of the curb. However, special consideration shall be given when charging stations are to be used for larger vehicles (e.g. delivery trucks) other than passenger vehicles and 1 meter might not be sufficient.
 - This applies to all parking spots including parallel parking.

- **Protected by elevation** such that:
 - The EVSE and electrical wiring is a minimum of 1 meter above grade.

- Again, special consideration shall be given when charging stations are for larger vehicles (e.g. delivery trucks) other than passenger vehicles and 1 meter might not be sufficient.
 - This applies to all parking spots including parallel parking.
 - Mechanical protection also applies to the structure supporting an elevated EVSE.
- **Protected by physical barriers** such as:
 - Steel bollard installed at least 1.5m below grade.
 - Manufactured bollards installed at least 1.5m below grade.
 - 6"x6" pressure treated wood installed to a minimum 1.5m below grade.
 - Posts bolted to a concrete sonotube installed at a minimum 1.5m below grade. Min ½" bolts, the types used for light standards
 - Posts secured to a concrete slab with minimum ½" lag bolts or similar type fastener. Asphalt only, would not be acceptable.
 - Concrete jersey barriers, guard rails or acceptable equivalent.

Note: Where multiple bollards or equivalent physical barrier is used, they shall not be spaced more than 1.5m (centre to centre) apart.

What temperature rating of EVSE is suitable for installation in the Yukon?

EVSE with an ambient temperature rating of -40° Celsius or colder are suitable for outdoor installations in the Yukon.

The use of EVSE not rated to -40° Celsius will be limited to heated indoor locations.

Is it permitted to determine the rating of EVSE based on the adjustable field settings that are part of the equipment, for the purposes of maximum circuit loading?

Yes, adjustable amperage settings which include commissioning apps, software, dip switches, rotary dials, etc., are permitted on fixed-in-place* equipment only, provided the manufacturer's instructions are followed, and the following conditions are met:

- A permanent legible marking in accordance with Rule 2-100 is posted on or adjacent to the EVSE when set below the nameplate maximum rating with the minimum information shown in the example below, and
- Access to the adjusting means is restricted.

Restricted access shall prevent the user from gaining access to the adjusting means and shall be accomplished by at least one of the following:

- A cover or door that requires the use of a tool to access the adjustments,
- Unique password protected commissioning apps,

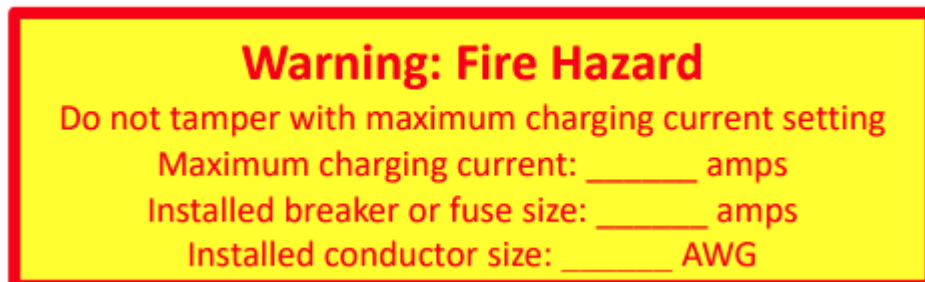
- Software that has a unique password for that site to the adjusting means, or
- The manufacturer can prove restricted access

Note *

Definitions from CSA C22.2 No. 280

- **Fixed-in-place** - is a mounting means for EVSE that requires a tool to remove the EVSE from its mounted position.
- **Fastened-in-place** - is a mounting means for EVSE for relocation, interchangeability, maintenance or repair without the use of a tool.

Example of EVSE label when set below nameplate maximum setting:



Can a 50 A receptacle for an EVSE be used with a breaker rated for a smaller amperage?

No, CE Code requires that the overcurrent device has the same ampere rating as the EVSE receptacle.

For example, cord connected EVSE that include the use of a 50 A receptacle configuration of either 14-50R or 6-50R are required to be protected with a 50 A rated overcurrent device in accordance with Rule 26-700.

Rule 86-306 also requires that the receptacle be labelled in a conspicuous and permanent manner identifying it as an electric vehicle supply equipment receptacle.

Thank you,

Logan Collins

Chief Electrical Inspector

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