

EV Ready plan requirements

Ensure your plan meets the eligibility criteria for the rebate

[B.C.'s EV charger rebate program](#) includes a rebate for apartment/condo buildings to create an EV Ready plan. To be eligible for the rebate, your plan must meet the program requirements. The plan can be created by a licensed electrical contractor or a registered professional electrical engineer.

It must outline a strategy that provides a minimum of one EV Ready parking space per residential unit¹. An EV Ready parking space features a complete electrical circuit terminating in a junction box capable of providing level 2 EV charging.

YOUR EV READY PLAN MUST INCLUDE THE FOLLOWING ELEMENTS

Electrical capacity assessment

- Determination of available spare capacity of the building proposed for implementation of EV charging infrastructure

Minimum charging performance guidelines

- A charging performance assessment is the analysis of required charging power in order to achieve reasonable driving range, when all parking spaces are used by an EV
- Include an explanation of how the charging performance was determined
- See next page for the minimum charging performance guidelines

Charging options for parking spaces to be made EV Ready

- A minimum of one EV Ready parking space per residential unit is provided (plan must outline how many residential units are in the building, and how many parking spaces are being made EV Ready)
- Identify if electrical service upgrades are needed
- Were there existing EV chargers already installed in the building? If so, how many?

Compatible management systems, equipment and services

- Designation that when an EV energy management system (EMS)² is implemented, the EV supply equipment (EVSE, term used interchangeably with “charger” in this document) must be compatible with it
- For designs where integration with an existing EMS or establishment of a new EV EMS is intended, the electrical infrastructure should include all communications equipment, control systems installation, licensing, and permitting required to operate the system

Cost estimates sufficient for budgeting purposes

- Cost estimate to install electrical infrastructure and EVSE (if applicable) to implement the EV Ready plan

¹ This requirement is for residential units that have a parking space. If a unit doesn't have a parking space, it's exempt from the EV Ready requirement.

² An EV energy management system controls EV charger electrical loads and is comprised of monitor(s), communications equipment, controller(s), timer(s) and other applicable devices.

MINIMUM CHARGING PERFORMANCE GUIDELINES

Purpose of the guidelines

Performance guidelines ensure adequate power is delivered to residential parking spaces for the purposes of EV charging. Without such performance guidelines, electrical designs may include excessive load sharing, resulting in insufficient power to provide an adequate rate of charging.

The following table outlines minimum charging performance guidelines.

Annual distance travelled	9,125 km	12,775 km	16,425 km	21,900 km
Daily distance travelled	25 km	35 km	45 km	60 km
Minimum circuit breaker rating (amps)	Max number of EVSE per circuit	Max number of EVSE per circuit	Max number of EVSE per circuit	Max number of EVSE per circuit
20	3	1	0	0
30	7	4	2	0
40	10	6	4	2
50	14	8	5	3
60	17	11	7	4
70	21	13	9	5
80	24	15	10	6
90	28	17	12	7
100	31	20	13	8
125	35	26	18	11
150	45	32	22	14
200	62	40	31	20

Variables effecting charging performance

Ensure that your plan considers and accounts for the variables that affect charging performance, which include:

- Distance travelled by vehicles
- Climate (e.g. colder temperatures)
- Topography (e.g. hillier landscapes)
- Demographics of building residents (e.g. age, household sizes)
- Vehicle sizes