

Electric Vehicle Charging Infrastructure Requirements

November 30, 2022 | Bulletin No. 22-06 | Revised:

Purpose

The purpose of this bulletin is to inform stakeholders that residential building permits applied for on or after January 1, 2023, must comply with the electric vehicle (EV) charging infrastructure requirements, as adopted by the City of Kamloops. This document summarizes the vehicle parking and EV charging infrastructure requirements in Kamloops Zoning Bylaw No. 55 (Division 4, Off-Street Parking, Sections 4.22 and 4.23), which is available online at Kamloops.ca/ZoningBylaw.

Part 9 (Standard) Residential Use Development

To ensure new homes are built with ready access to a power supply capable of providing Level 2 EV charging, the following requirements must be met:

- An electrical wire rated for a 60 amp circuit shall be installed at time of construction, originating from the electrical panel (not required to be energized) and terminating at a junction box near the parking space(s) to ensure that a minimum of one parking space per dwelling unit (or the total number of residential vehicle parking spaces required, whichever is less) is capable of supplying power to a Level 2 EV charger when it is installed by a future owner and/or occupant(s).
- Parking space required for a residential suite is exempt from this requirement.

Part 3 (Complex) Residential Use Development

To ensure new residential buildings are designed and constructed with sufficient electrical capacity, physical space, and other infrastructure needed to enable access to a power supply capable of providing Level 2 EV charging, the following requirements must be met:

- An EV-capable plan, completed by a registered professional electrical engineer, shall be submitted at time of building permit application specifying the electrical design, BC Hydro service capacity, and other infrastructure needed to ensure that a minimum of one parking space per dwelling unit (or the total number of residential vehicle parking spaces required, whichever is less) is capable of supplying power to a Level 2 EV charger when it is installed by a future owner and/or occupant(s).
- Parking space designated for visitor parking is exempt from this requirement.
- Electrical conduit or raceway, as specified in the EV-capable plan, shall be designed and installed at time of construction (as applicable) such that any future wiring needed to supply power to the EV charger(s) will not require substantial disruption of building finishes, concrete, or landscaping.

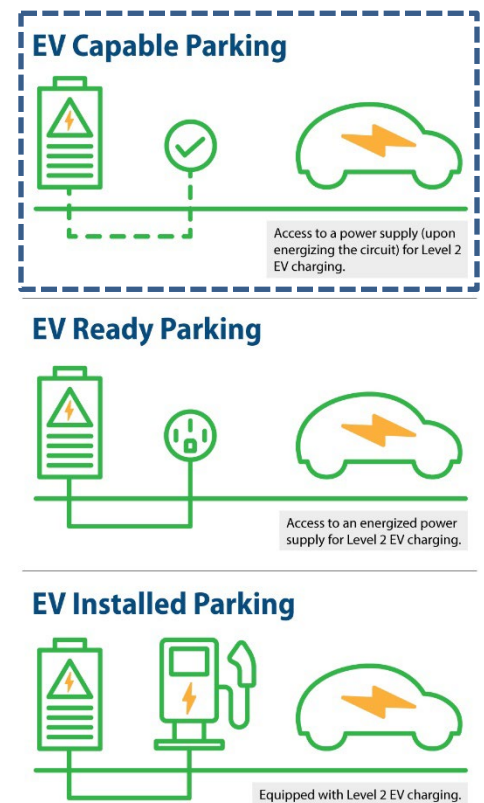


Figure 1: Levels of "EV readiness". New residential development in Kamloops must support one "EV-Capable" parking stall per dwelling unit effective January 1, 2023.

- Compliance with the EV-capable plan must be demonstrated prior to final inspection, including, but not limited to, electrical service capacity and allocation of physical space for all electrical and EV charging infrastructure as specified in the EV-capable plan.

Note:

Sections 4.22 and 4.23 of Zoning Bylaw No. 55 do not apply to parking spaces required for units included in a development for which, on or before January 1, 2023:

- a development permit has been authorized
- a building permit application has been accepted for the development in accordance with the City's Building Bylaw No. 11-80

EV-Capable Plan Requirements (Part 3 Residential Development)

An EV-capable plan outlines a strategy for satisfying the EV charging infrastructure requirements for Part 3 residential use development and identifies the electrical service capacity and infrastructure required at time of construction. The EV-capable plan must be prepared by a registered professional electrical engineer and documentation of the plan shall be provided to the strata corporation/property owner by the developer.

Details on the scope, methodology, and deliverables of an acceptable EV-capable plan are outlined in the *EV Charging Infrastructure Guidelines for Residential Development* document available at [Kamloops.ca/EVReady](https://kamloops.ca/EVReady).

Background

Supporting access to EV charging at home is a priority action in the City's [EV and E-Bike Strategy](#) and [Community Climate Action Plan](#). The primary objective is to future-proof new residential development for the transition to electric transportation, which is being driven by provincial and federal sales target regulations that require all new passenger vehicles to be zero emissions by 2035.

The availability of EV charging infrastructure at home (and on the go) is a key factor in the decision to purchase an EV. New homes can be equipped with EV charging infrastructure at a relatively modest cost when compared to retrofitting. The use of technology, such as EV energy management systems, which allow multiple charging points to safely use a single circuit simultaneously, also make it more feasible to install EV charging, particularly in multi-family residential buildings.

More Information

- EV Charging Infrastructure Guidelines for Residential Development: [Kamloops.ca/EVReady](https://kamloops.ca/EVReady)
- Zoning Bylaw: [Kamloops.ca/ZoningBylaw](https://kamloops.ca/ZoningBylaw)
- Building Permits: [Kamloops.ca/Business-Development/Building-Permits](https://kamloops.ca/Business-Development/Building-Permits)
- External Resources
 - [Plug In BC](#)
 - [2021 BOMA Canada EV Infrastructure Guide](#)
 - [Installing Electric Vehicle Charging in Your Building - Strata Guide](#)
 - [Residential Electric Vehicle Charging: A Guide for Local Governments](#)

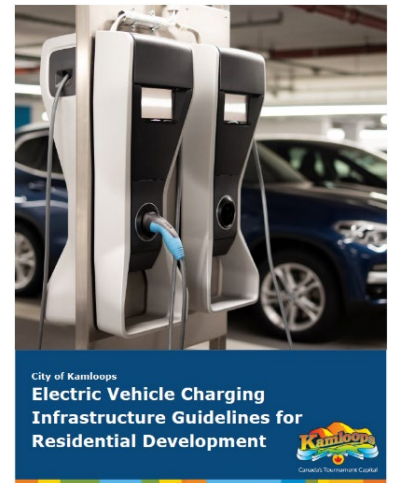


Figure 2: Cover page of *EV Charging Infrastructure Guidelines for Residential Development*.

Have questions? We're here to help. Please contact the Climate and Sustainability Division at 250-828-3857 or sustainable@kamloops.ca for more information.