

Installation Requirements for EV Chargers

Master Requirement ELE103

Building Department: 604-990-2480, building@dnv.org

Purpose

The purpose of this requirement is to specify the application requirements for installation of electric vehicle chargers in existing single family and multi-family buildings.

Background

The rapid increase in electric vehicle ownership in BC has placed an increased demand for private charging infrastructure, creating challenges with the limited electrical service capacity. Existing multi-family buildings are not designed for EV chargers and may not be able to support the increased load. Challenges include locations within the building, the layout of infrastructure, and metering/paying for electricity.

Installing EV chargers adds extra load onto existing main services and these are the Districts requirements to protect the main service.

Requirements

All documents will be reviewed by an inspector before issuance.

Homeowner: Single Family Dwelling with no secondary suite

1. Load calculation.
2. Service upgrade or energy management *may* be required.

Contractor: Single Family Dwelling with or without secondary suite

1. Load calculation.
2. Service upgrade or Energy management *may* be required.

Contractor: Non-Single Family Dwelling, Apartments/Condos

1. Energy management system.
2. Professional Engineer.
3. Load calculation on main service and EV ready plan.
4. Approval letter from Strata/property owner.

Contractor: Townhouses/Duplexes

1. Energy management system.
2. Load calculation.
3. Specs of which energy management device will be used.
4. Approval letter from Strata/property owner.

Related Requirements/Documents/Forms

Each application will be reviewed by the Electrical Department and additional information may be required prior to issuance. All forms required for electrical permits are available on dnv.org:

dnv.org/permits-licenses/electrical-permit

Additional information: pluginbc.ca