# CITY OF PORT COQUITLAM

# **Electric Vehicle Rough-in Guidelines**

Roughed-in electric vehicle (EV) charging infrastructure is required for all new buildings in Port Coquitlam that contain residential units for which building permits are applied on **July 23, 2018** or later.

This sheet provides guidelines for common installation issues related to rough-ins. For more details, frequently asked questions and staff contact information, visit **portcoquitlam.ca/ev**.



#### General

- Meters, panels, breakers, conduit and outlets exclusive to EV charging should be labelled 'EV only' or 'Electric Vehicle'.
- Acceptable raceway types include conduit, open cable trays, or cable. If conduit is used, pull strings for later wiring are recommended.
- The building and dwelling unit, as applicable, are to have the minimum electrical capacity for the required EV charging equipment if it was to be wired and energized, in addition to that required for all other building and/or dwelling unit electrical loads, according to the BC Electrical Code.
- Current requirements are based on code-compliant ampacity (e.g. equipment to deliver a minimum of 32 amps continuously may require 40-amp rated equipment).

#### Residential Buildings with **PRIVATE** Parking Areas

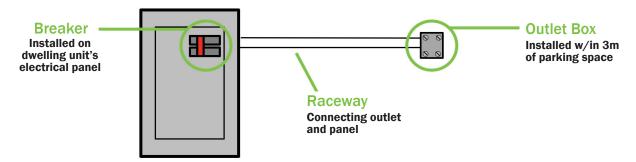
- A breaker for EV charging is to be located on the associated dwelling unit's electrical panel.
- Electrical equipment for EV charging is recommended to be sized to deliver a minimum of 32 amps continuously per parking space.
- Breakers for EV charging may be shared with other load(s), provided that control equipment is installed to prevent simultaneous operation of EV charging equipment and other load(s).

### Residential Buildings with COMMON Parking Areas

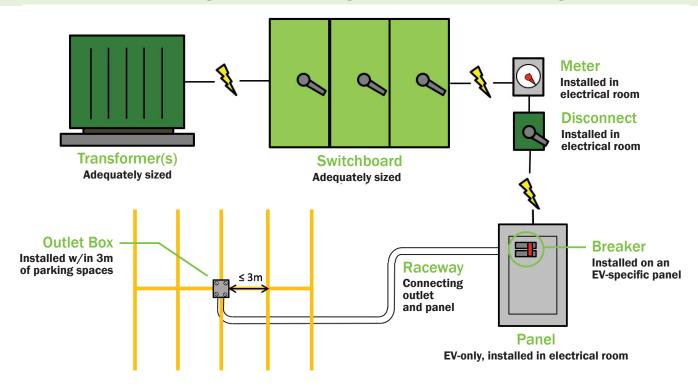
- Outlets for EV charging may be shared among multiple parking spaces, provided the distance from the outlet to the nearest point of each parking space does not exceed 3 metres.
- A breaker and associated raceway for EV charging may be shared among multiple outlets, provided that minimum current level requirements are achieved.
- Where a breaker and raceway is shared by a group of up to 4 parking spaces, equipment is to be sized to deliver a minimum of 32 amps continuously to the group.
- Where a breaker and raceway is shared by a group of 5 or more parking spaces, equipment is to be sized to deliver a minimum of 6 amps continuously per space within the group.

- Breakers for EV charging are to be located on electrical panel(s) exclusive to EV charging.
- The separate single utility electrical meter and disconnect are to be connected exclusively to electrical panel(s) containing breakers for EV charging.
- Main breaker on EV-specific panel(s) is sufficient to meet the requirement for disconnect.
- Developers of residential strata units are strongly encouraged to ensure the initial strata building bylaws include regulation of access to and payment for installation, warranty, maintenance, and consumption of power for EV charging.

# Sample Equipment Configuration: Buildings with PRIVATE Parking Areas



# Sample Equipment Configuration: Buildings with COMMON Parking Areas



# Sample Parking Configuration: Buildings with COMMON Parking Areas

