

Commercial Electric Vehicle Charging Station (EVCS) Permit Requirements

EVCS (Electric Vehicle Charging Station) must be reviewed and approved for their location and installation.

To obtain a building permit:

- Planning approval of charging station and affected parking spaces.
- Listed Manufacturer Specifications for Charging Stations Specifications to indicate:
 - UL 2594-2013 and/or UL 2202-2009 Certified
 - Specifications to identify: 'Ventilation Not Required' or 'Ventilation required'
 - If Ventilation is required by the manufacturer provide plans showing how ventilation will be provided including supply and return air.
- Energy documentation for all new circuits and sub-panels (include voltage drop calculations).
- Electrical Power Distribution Certificate of Compliance (NRCC-ELC-01-E).
 - All pages completed, signed, and exemptions noted or checked.
- Plans to include:
 - Site plan including:
 - Show the location of the charging station.
 - Show the charging station location and adjacent parking layout.
 - Show the accessible path of travel from the accessible charging station to the associated building, accessible path of travel for the site, and to the public way.
 - Floor plan including:
 - Location of charging station.
 - Circuit's source panel location shown on floor plan.
 - If installed indoors (Garage or showroom) show that the height of the Electric Vehicle Coupling will be stored a minimum 18" above the floor level.
 - If installed outdoors (driveways, curbside, open parking structures, parking lots, and commercial charging facilities) the show that the Electric Vehicle Coupling will be stored between 24" and 48" above the charging station surface.
 - 1 line electrical diagram including:
 - Conduit, feeders, and overcurrent device type and size (feeders and overcurrent protection to be rated for 125% of the load).
 - Readily accessible lockable disconnect required for units operating at greater than 60 amperes or 150 Volts.
 - Panel schedule complete with load calculations.

- Accessibility items noted or detailed:
 - Minimum number of Accessible EVCS and spaces allowed & provided.
 - Accessible Charging Station and access aisle slope within 2.083% (1:48) in all direction (Detectable warnings not allowed within charging station or access aisle).
 - 98" minimum clearance above the accessible charging station.
 - Access aisle striping (8' minimum) for accessible charging station (1 minimum to be provided).
 - Vehicle space minimum 18' deep, minimum 12' wide for an accessible space, 9' wide for standard spaces, 10' wide for ambulatory spaces, 17' wide for drive up spaces, access aisles shall be a minimum of 5' wide (spaces measured from center line to centerline of striping).
 - EVCS vehicle spaces shall provide surface marking stating "EV CHARGING ONLY" in letters 12" high minimum. The centerline of the text shall be a maximum of 6" from the centerline of the vehicle space and its lower corner at, or lower side aligned with the end of the parking space length. See image below.
 - Note: Electric vehicle charging stations and access aisles shall be designed so that persons using them are not required to travel behind electric vehicle charging stations other than to pass behind the vehicle space in which their vehicle has been left to charge.
 - A curb, wheel stop, bollards or other device shall be provided if required to prevent encroachment of vehicles over the required clear width of adjacent accessible routes.
 - Accessible path of travel (Maximum 1:20 (5%) running slope and 1:48 (2.083%) cross slope; width 48").
 - Designed so accessible routes are not obstructed by cable or other elements.
 - Reach range to operable parts of charging station.
 - Show 30"x48" clear space on plans at EVCS.
 - Forward reach; 48" maximum (high) and 15" minimum above finish grade of clear space.
 - Side Reach:
 - 48" maximum (high) and 15" minimum above finish grade of clear space (10" deep maximum obstruction allowed outside reach range).
 - (obstructed); 48" maximum (high) for 10" deep 34" tall maximum obstruction or 46" maximum (high) for obstruction between 10"-24" deep maximum, 34" maximum high.
 - Controls: Operable with one hand, and not requiring grasping, pinching, or twisting of the wrist.
 - Card reader (if included) to meet accessibility requirements.
 - Accessible signage for accessible charging station (if 4 or less charging stations are provided on the site no accessible signage is required).
 - Where five to twenty-five total EVCS are provided, one van accessible EVCS shall be identified by an ISA. The required standard accessible EVCS shall not be required to be identified with an ISA.
 - Where twenty-six or more total EVCS are provided, all required van accessible and all required standard accessible EVCS shall be identified by an ISA.

- Signs shall be reflectorized with a minimum area of 70" square.
- When required; identification signs shall be visible from the EVCS it serves. Signs shall be permanently posted either immediately adjacent to the vehicle space or within the projected vehicle space width at the head end of the vehicle space. Signs identifying Van accessible vehicle spaces shall contain the designation "Van Accessible". Signs shall be 60" minimum above the finish grade measured to the bottom of the sign. Signs located with an accessible route shall be 80" minimum above the finish grade measured to the bottom of the sign. Signs may also be permanently posted on a wall at the interior end of the vehicle space.
- The International Symbol of Accessibility where required on signage shall consist of a white figure on a blue background. The color blue shall approximate FS 15090 in Federal Standard 595C.

