



## RCC Electric Vehicle Charging Code V3

### **XX.XXX. Definitions.**

Electric Vehicle (EV): A vehicle registered for on-road use, primarily powered by an electric motor that draws current from a rechargeable storage source that is charged by being plugged into an electrical current source.

“Electric vehicle ready parking space” or “EV-ready space”. A parking space that is provided with a minimum 208/240-volt dedicated branch circuit for electric vehicle supply equipment that is terminated at a receptacle, junction box or electric vehicle supply equipment within the parking space in order to allow for future installation of electric vehicle supply equipment.

Electric Vehicle Supply Equipment: The conductors, including the ungrounded, grounded, and equipment grounding conductors, and the electric vehicle connectors, attachment plugs, personnel protection system, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and an electric vehicle.

“Electric Vehicle Supply Equipment Parking Space” or “EVSE Parking Space”. A parking space with electric vehicle supply equipment capable of supplying current at 208/240 volts.

Electric vehicle load management system. A system designed to optimize a property’s charging loads so that electricity is equitably distributed among multiple electric vehicle supply equipment simultaneously.

**XX.XXX. Electric vehicle charging infrastructure.** Off-street parking spaces shall be designed according to the standards of subsection XX.XXX.A.

**A. Electric vehicle (EV) charging infrastructure.** Electric vehicle charging infrastructure shall be provided for new and substantially improved buildings, and new paved surface parking lots and parking garages according to Section XX.XXX.A.

1. Electric vehicle charging infrastructure shall be provided according to Table A.1 and Table A.2. For developments that have mixed residential and nonresidential uses, parking associated with residential uses shall meet the requirements of Table A.1, and parking associated with nonresidential uses shall meet the requirements of Table A.2.

**Table A.1 Residential Electric vehicle (EV) charging infrastructure**

Use <sup>a</sup>	Number of EVSE Parking Spaces	Number of EV-Ready Parking Spaces
New Single Family, Duplex, Townhouse (R-3 occupancies)		1 per unit
New Multifamily (R1 and R-2, & I-2 occupancies)	10% of total parking spaces	30% of total parking spaces
Existing multifamily buildings undergoing substantial improvement <sup>b</sup> (R1, R-2, & I-2 occupancies)	10% of total parking spaces	20% of total parking spaces

a. Occupancies in the Use Column are as defined in the International Building Code and International Residential Code

b. "Substantial improvement" is as defined by KCC 21A.06.1270.

**Table A.2 Nonresidential Electric vehicle (EV) charging infrastructure**

Use <sup>a</sup>	Number of EVSE Parking Spaces	Number of EV-Ready Parking Spaces
New Nonresidential buildings	5% of total parking spaces	10% of total parking spaces
Existing nonresidential buildings undergoing substantial improvement <sup>b</sup>	5% of total parking spaces	10% of total parking spaces
New Paved Surface Parking Lots and Parking Garage Uses	5% of total parking spaces	10% of total parking spaces

a. Occupancies in the Use Column are as defined in the International Building Code and International Residential Code

b. "Substantial improvement" is as defined by KCC 21A.06.1270.

2. Rounding. When calculating the number of required EV-ready or EVSE parking spaces, any fraction or portion of an EV-ready or EVSE parking space required shall be rounded up to the nearest whole number.
3. An electric-vehicle-supply-equipment parking space does not count as an electric-vehicle-ready parking space for the purposes of meeting the requirements of this section.
4. When EVSE parking spaces are required, 5 percent, but no less than one of the EVSE parking spaces shall be accessible. The electric vehicle charging infrastructure may also serve adjacent parking spaces not designated as accessible parking.
5. Where EV-ready exterior on-grade surface parking spaces are located more than 4 feet from a building, raceways shall be extended to a pull box or stub in the vicinity of the designated space and shall be protected from vehicles by a curb or other device.
6. Where an electric vehicle load management system is installed to fulfill the requirements of Table A.1 and Table A.2, the maximum number of EVSE that may be connected to the same electrical circuit in the building is as shown in Table A.3.
7. Nothing in Section XX.XXX.A shall be construed to modify the minimum number of off-street motor vehicle parking spaces required for specific uses or the maximum number of parking spaces allowed, as set forth in Section BBBB or elsewhere in *[jurisdiction]* Title CC.
8. All EVSE parking spaces shall have designated signage and pavement markings per RCW 46.08.185.
9. All EV charging infrastructure shall be installed in accordance with the National Electrical Code (NFPA 70). For electric-vehicle-ready parking spaces, the branch circuit shall be identified as "Electric Vehicle Ready" in the service panel or subpanel directory, and the termination location shall be marked as "Electric Vehicle Ready";

**Table A.3 Maximum Number of EVSE Per Circuit Breaker Rating**

<b>Minimum Circuit Breaker Rating (AMPS)</b>	<b>Maximum Number of EVSE Per Circuit</b>
20	1
30	2
40	4
50	5
60	6
70	7
80	8
90	10
100	11
125	14
150	17