Appendix CG: Electric Vehicle Charging Infrastructure

Option C

PROPOSED AMENDMENTS

Appendix CG Electric Vehicle Charging Infrastructure

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance. **Appendix CG is adopted as mandatory.**

Section CG101 Electric Vehicle Power Transfer

CG101.1 Definitions. No changes

CG101.2 Electric vehicle power transfer infrastructure.

CG101.2.1 Quantity.

The number of required electric vehicle (EV) spaces, *EV capable spaces* and *EV ready spaces* shall be determined in accordance with this section and Table CG101.2.1 based on the total number of *automobile parking spaces* and shall be rounded up to the nearest whole number. For Group R-2 buildings, the Table CG101.2.1 requirements shall be based on the total number of *dwelling units* or the total number of *automobile parking spaces*, whichever is less.

1. Where more than one parking facility is provided on a *building site*, the number of required *automobile parking spaces* required to have EV power transfer infrastructure shall be calculated separately for each parking facility.
2. Where one shared parking facility serves multiple building occupancies, the required number of spaces shall be determined proportionally based on the floor area of each building occupancy.
3. Installed electric vehicle supply equipment installed spaces (*EVSE spaces*) that exceed the minimum requirements of this section may be used to meet the minimum requirements for *EV ready spaces* and *EV capable spaces* on a one-to-one ratio.
4. Installed *EV ready spaces* that exceed the minimum requirements of this section may be used to meet the minimum requirements for *EV capable spaces* on a one-to-one ratio.
5. Where the number of *EV ready spaces* allocated for R-2 occupancies is equal to the number of *dwelling units* or to the number of *automobile parking spaces* allocated to R-2 occupancies, whichever is less, requirements for *EVSE spaces* for R-2 occupancies shall not apply.
6. Requirements for a Group S-2 parking garage shall be determined by the occupancies served by that parking garage. Where new automobile spaces do not serve specific occupancies, the values for Group S-2 parking garage in Table CG101.2.1 shall be used.

Exception: Parking facilities serving occupancies other than R2 with fewer than 10 *automobile parking spaces*.

TABLE CG101.2.1 REQUIRED EV POWER TRANSFER INFRASTRUCTURE

OCCUPANCY	EVSE SPACES	EV READY SPACES	EV CAPABLE SPACES
Group A	**10%**	**0%**	**10%**
Group B	**15%**	**0%**	**30%**
Group E	**15%**	**0%**	**30%**
Group F	**2%**	**0%**	**5%**
Group H	**1%**	**0%**	**0%**
Group I	**15%**	**0%**	**30%**
Group M	**15%**	**0%**	**30%**
Group R-1	**20%**	**5%**	**75%**
Group R-2	**20%**	**5%**	**75%**
Groups	**2%**	**0%**	**5%**
Group S exclusive of parking garages	**1%**	**0%**	**0%**
Group S-2 parking garages	**15%**	**0%**	**30%**

CG101.2.2 EV capable spaces.

Each *EV capable space* used to meet the requirements of Section CG101.2.1 shall comply with all of the following:

1. A continuous raceway or cable assembly shall be installed between an enclosure or outlet located within 3 feet (914 mm) of the *EV capable space* and electrical distribution equipment.
2. Installed raceway or cable assembly shall be sized and rated to supply a minimum circuit capacity in accordance with Section CG101.2.5.
3. The electrical distribution equipment to which the raceway or cable assembly connects shall have dedicated overcurrent protection device space and electrical capacity to supply a calculated load in accordance with Section CG101.2.5.
4. The enclosure or outlet and the electrical distribution equipment directory shall be marked: “For electric vehicle supply equipment (EVSE).”

CG101.2.3 EV ready spaces. No changes

CG101.2.4 EVSE spaces.

An installed EVSE with multiple output connections shall be permitted to serve multiple *EVSE spaces*. Each EVSE installed to meet the requirements of Section CG101.2.1, serving either a single *EVSE space* or multiple *EVSE spaces*, shall comply with all of the following:

1. Have a minimum system and circuit capacity in accordance with Section CG101.2.5.
2. Have a nameplate rating not less than ~~6.2~~ 8.3 kW.
3. Be located within 3 feet (914 mm) of each *EVSE space* it serves.
4. Be installed in accordance with Section CG101.2.6.

CG101.2.5 System and circuit capacity. No changes

CG101.2.5.1 System capacity. No changes

CG101.2.5.2 Circuit capacity. No changes

CG101.2.5.3 System and circuit capacity management. No changes

CG101.2.5.3.1 System capacity management. No changes

CG101.2.5.3.2 Circuit capacity management. No changes

CG101.2.6 EVSE installation. No changes

RE101.2.7 Construction documents

Construction documents shall designate all *EVSE spaces, EV ready spaces,* and *EV capable spaces,* and indicate the locations of raceway and/or conduit and termination points serving them. The circuits or spaces reserved for *EVSE spaces, EV ready spaces,* and *EV capable spaces* shall be clearly identified in the panel or subpanel directory. The raceway and/or conduit for *EV ready spaces and EV capable spaces* shall be clearly identified at both the panel or subpanel and the termination point at the parking space.

Section CG102 Referenced Standards No changes

CG102.1 General. No changes

AMENDMENT JUSTIFICATION

- This set of amendments proposes to adopt this appendix for EV charging requirements with minimal changes to the original appendix text.