C405.14 Electric Vehicle Power Transfer Infrastructure. Parking facilities shall be provided with electric vehicle power transfer infrastructure in accordance with Sections C405.14.1 through C405.14.6.

C405.14.1 Quantity. The number of required EV spaces, EV capable spaces and EV ready spaces shall be determined in accordance with this Section and Table C405.14.1 based on the total number of automobile parking spaces and shall be rounded up to the nearest whole number. For R-2 buildings, the Table 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 EVSE spaces that exceed the minimum requirements of this section may be used to meet minimum requirements for EV ready spaces and EV capable spaces.
4. Installed EV ready spaces that exceed the minimum requirements of this section may be used to meet minimum requirements for EV capable spaces.
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 C405.14.1 shall be used.

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

TABLE C405.14.1
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%**
Group R-3 and R-4	**2%**	**0%**	**5%**
Group S exclusive of parking garages	**1%**	**0%**	**0%**
Group S-2 parking garages	**15%**	**0%**	**30%**

C405.14.2 EV Capable Spaces. Each EV capable space used to meet the requirements of Section C405.14.1 shall comply with 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 C405.14.5.

3. The electrical distribution equipment to which the raceway or cable assembly connects shall have dedicated overcurrent protection device space and spare electrical capacity to supply a calculated load in accordance with Section C405.14.5.
4. The enclosure or outlet and the electrical distribution equipment directory shall be marked: "For electric vehicle supply equipment (EVSE)."

C405.14.3 EV Ready Spaces. Each branch circuit serving EV ready spaces used to meet the requirements of Section C405.14.1 shall comply with the following:

1. Terminate at an outlet or enclosure, located within 3 feet (914 mm) of each EV ready space it serves.
2. Have a minimum system and circuit capacity in accordance with C405.14.5.
3. The electrical distribution equipment directory shall designate the branch circuit as "For electric vehicle supply equipment (EVSE)" and the outlet or enclosure shall be marked "For electric vehicle supply equipment (EVSE)."

C405.14.4 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 C405.14.1, serving either a single EVSE space or multiple EVSE spaces, shall comply with the following:

1. Have a minimum system and circuit capacity in accordance with Section C405.14.5.
2. Have a nameplate rating not less than 6.2kW.
3. Be located within 3 feet (914 mm) of each EVSE space it serves.
4. Be installed in accordance with Section C405.14.6.

C405.14.5 System and circuit capacity. The system and circuit capacity shall comply with C405.14.5.1 and C405.14.5.2.

C405.14.5.1 System capacity. The electrical distribution equipment supplying the branch circuit(s) serving each EV capable space, EV ready space, and EVSE space shall comply with one of the following:

1. Have a calculated load of 7.2 kVA or the nameplate rating of the equipment, whichever is larger, for each EV capable space, EV ready space, and EVSE space.
2. Meets the requirements of Section C405.14.5.3.1

C405.14.5.2 Circuit Capacity. The branch circuit serving each EV capable space, EV ready space, and EVSE space shall comply with one of the following:

1. Have a rated capacity not less than 50 amperes or the nameplate rating of the equipment, whichever is larger.
2. Meets the requirements of Section C405.14.5.3.2.

C405.14.5.3 System and circuit capacity management. Where system and circuit capacity management is selected in Section C405.14.5.1(2) or Section C405.14.5.2(2), the installation shall comply with Sections C405.14.5.3.1 and C405.14.5.3.2.

C405.14.5.3.1 System capacity management. The maximum equipment load on the electrical distribution equipment supplying the branch circuits(s) serving EV capable spaces, EV ready spaces, and EVSE spaces controlled by an energy management system shall be the maximum load permitted by the energy management system, but not less than 3.3 kVA per space.

C405.14.5.3.2 Circuit Capacity Management. Each branch circuit serving multiple EVSE spaces, EV ready spaces or EV capable spaces controlled by an energy management system, shall comply with one of the following:

1. Have a minimum capacity of 25 amperes per space.
2. Have a minimum capacity of 20 amperes per space for R-2 occupancies when all automobile parking spaces are EV ready spaces or EVSE spaces.

C405.14.6 EVSE Installation. EVSE shall be installed in accordance with NFPA 70 and shall be listed and labeled in accordance with UL 2202 or UL 2594. EVSE shall be accessible in accordance with International Building Code Section 1107.