

INTERPRETATIONS & APPLICATIONS
OF BUILDING CODES & REGULATIONS 21-13



CODE SECTION: 2021 IgCC Section 501.3.7.3

rev. 12/30/24

IgCC EV CHARGING INFRASTRUCTURE

The purpose of this interpretation is to clarify electric vehicle (EV) charging infrastructure requirements contained in International Green Construction Code (IgCC) Section 501.3.7.3. The amended section reads as follows:

501.3.7.3 Required EV installed spaces and EV capable spaces. *EV installed spaces* and *EV capable spaces* shall be provided in accordance with Table 501.3.7.3. The required number of EV installed spaces or EV capable spaces shall be rounded up to the next highest whole number. Where a branch circuit serves a single charging space, it shall have a capacity not less than of 8.3 kVA (40A, 208/240V). Where a branch circuit serves multiple charging spaces, an Automatic Load Management System (ALMS) may be used to reduce the total electrical capacity provided that all charging spaces are capable of simultaneously charging at a minimum rate of 4.1 kVA (20A, 208/240V).

For *EV capable spaces*, the electrical service panel shall have reserved circuit breaker space(s) labeled “Future EV Charging”. Raceway(s) shall be installed from the electrical service panel to outlet box(es) within the planned EV charging parking area(s). Outlet box(es) shall be labeled “Future EV charging”.

TABLE 501.3.7.3
ELECTRIC VEHICLE CHARGING INFRASTRUCTURE REQUIREMENTS

Occupancy Group	Minimum number of EV Installed Spaces^a	Minimum number of EV Capable Spaces^a
Group R-1 (hotels, motels) and Group R-2 (apartments, condos)	4% of total required parking spaces	20% of total required parking spaces
Group A, B, E, F, I, M, and S	4% of total required parking spaces or not less than 8% of designated employee only parking spaces	10% of total required parking spaces

^a Parking spaces designated for other than passenger vehicles may be excluded from the number of parking spaces used to calculate the minimum number of EV spaces.

Application: Table 501.3.7.3 is not intended to apply to 1) non-residential occupancies with less than 10 parking spaces, 2) parking for automobile-related services, 3) parking at self-storage facilities, and 4) parking designated for pick-up or drop-off. See IBC Section 1107.2 for accessible EV charging spaces (not less than 5% of EV charging spaces shall be accessible).

EV installed space is defined as a designated parking space with dedicated electric vehicle supply equipment. For the purposes of meeting the “Minimum number of *EV Installed Spaces*” in Table 501.3.7.3 above, the installation of NEMA 14-50 electrical outlets (208/240V) will satisfy this requirement for Level 2 charging.

EV capable space is defined as a designated parking space provided with electrical raceway and electrical service capacity to support future EV charging as required in this code.