

INTERPRETATIONS & APPLICATIONS
OF BUILDING CODES & REGULATIONS 21-12



CODE SECTION: 2021 IECC Section C405.13.1

rev. 10/24/23

IECC EV CHARGING INFRASTRUCTURE

The purpose of this interpretation is to clarify electric vehicle (EV) charging infrastructure requirements contained in International Energy Conservation Code (IECC) Section C405.13.1.

The amended section reads as follows:

C405.13.1 Required EV installed spaces and EV capable spaces. Parking shall be provided with *EV installed spaces* and EV capable spaces in accordance with Table C405.13.1. 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 C405.13.1
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, condominiums)	4% of total required parking spaces	20% 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.

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 C405.13.1 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.