NONRESIDENTIAL EV CHARGING REQUIREMENTS

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Purpose

The following handout contains information regarding the EV Charging Space requirements for nonresidential developments, according to Ordinance 1049. The requirements listed below apply to building permit applications submitted after November 23, 2018.

Definition of Terms

The table below provides Code definitions and expanded explanations for the terms used in the Nonresidential EV Charging Requirements. Please refer to the definitions in Chapter 2 of the California Green Building Standards for additional information.

Term	Building Code Definition	Explanation						
Electric Vehicle (EV)	Off-board charging equipment	The EV Charger is the equipment that connects to the						
Charger	used to charge an electric	EV to provide electricity. In some cases, multiple						
	vehicle.	charging heads may stem from a unit.						
Electric Vehicle	The conductors, including the	The EVSE includes everything required to provide						
Supply Equipment	ungrounded, grounded, and	energy to the EV. Working backward from the vehicle,						
(EVSE)	equipment grounding	this means the charger is connected to an appropriate						
	conductors and the electric	outlet or directly wired within a "listed raceway" (i.e., a						
	vehicle connectors,	conduit) leading to a dedicated breaker within the						
	attachment plugs, and all	electrical panel that has sufficient electrical capacity to						
	other fittings, devices, power	supply the EV with energy when the charger head is						
	outlets, or apparatus installed	connected to the vehicle. For the purposes of						
	specifically for the purpose of	calculating the number of spaces with EVSE installed,						
	transferring energy between	staff will consider the total number of vehicles in						
	the premises wiring and the	designated spaces that can be served at the same						
Electric Vehicle	electric vehicle. A space intended for future	time.						
Charging Space (EV	installation of EV charging	An EV space is a parking space identified for the future installation of EVSE. The requirements for EV spaces						
Space)	equipment and charging of	vary between residential and nonresidential						
Space)	electric vehicles.	developments. At a minimum, EV spaces are required						
	electric vernicles.	to have a "listed raceway" (i.e., a conduit) leading to the						
		parking space, and designated room in the electrical						
		panel for the chargers to be installed in the future.						
		Room for the charger shall also be preserved outside of						
		the required space dimensions ¹ . In some cases, wiring						
		will be required within the conduit. Please review the						
		requirements in the next section for details regarding						
		when wiring will be required.						
Electric Vehicle	One or more electric vehicle	An EV space with the EVSE installed is considered an						
Charging Station	charging spaces served by	Electric Vehicle Charging Station (EVCS). Though						
(EVCS)	electric vehicle charger(s) or	regulated differently from a Building Code perspective,						
	other charging equipment	the City of Menlo Park will count EVCS towards the						
	allowing charging of electric	total number of parking spaces on a site.						
	vehicles. Electric vehicle							
	charging stations are not							
	considered parking spaces.							
Raceway	An enclosed conduit that	Conduit sufficiently large to fit wiring for the future						
	forms a physical pathway for	installation of EVSE. Per the requirements that follow,						
	electrical wiring.	please note that new construction projects are required						
		to install both a raceway and wiring, while addition/alteration projects need only provide the						
		raceway.						
1. Chargers mounted 48 inches above the slab may encroach into the required clear space dimensions.								

Nonresidential EV Charging Requirements

Requirements for nonresidential projects vary depending on whether the proposed project is new construction, or an addition and/or alteration. The table below reflects the thresholds of applicability as well as the requirements for compliance. In all cases, calculations for spaces shall be rounded up to the nearest whole number. Please review the California Green Building Standards Code amendments in Chapter 12.18 of the Municipal Code for additional information. Specifically Sections 5.106.5.3, 5.106.5.3.2, and Table 5.106.5.3.3 of Chapter 5 have been amended. Additional clarifications on zoning implementation can be found in the off-street parking chapter of the Zoning Ordinance, item (5) of Section 16.72.010.

	New Construction ¹			Additions and Alterations ¹					
	1 - 9,999 sq.ft.	10,000 - 25,000 sq.ft.	Greater than 25,000 sq.ft.	1 - 9,999 sq.ft.	10,000 - 25,000 sq.ft.		Greater than 25,000 sq.ft.		
EV Spaces ²	No	15% of the total required parking spaces		Voluntary	Until 11/22/19	1%	Until 11/22/19	2%	
	change. See <u>Table</u> 5.106.3.3				11/23/19 to 11/23/20	3%	11/23/19 to 11/23/20	5%	
					After 11/23/20	5%	After 11/23/20	10%	
Wiring Required?	Yes			No					
EVSE Installed	No change. See <u>Table</u> 5.106.3.3	10% of total parking sparminimum of EV space	aces,	Voluntary	Minimum one in an EV space		One plus 1% of total required parking spaces for the affected area in EV spaces ³		

- ¹ The EV space requirement is based on the required parking associated with the building where the work is being performed, inclusive of landscape reserve parking. For additions and alterations, percentages are based on the required parking for the affected area of the scope of work.
- ² For each EV space, a "listed raceway capable of accommodating a 208/240-volt dedicated branch circuit" is required. Requirements for wiring within the conduit vary between new construction and additions and alterations.
- ^{3.} The maximum number of required EV spaces and electric vehicle supply equipment (EVSE) shall not exceed the requirement for EV spaces for new construction of an equivalent development on a parcel or project site

Nonresidential EV Space Dimensions:

EV spaces in nonresidential developments are required to meet the City of Menlo Park's parking stall and driveway design guidelines. Typical perpendicular parking spaces are required to be eight feet, six inches by 16 feet, six inches; however, requirements vary based on parking space location and angle of entry. Please review the <u>parking</u> stall and driveway design guidelines for details.

Nonresidential Accessibility Requirements for EV Spaces

EV spaces for nonresidential developments are governed by the accessibility requirements listed in Section 11B-812 of the California Building Code. Accessible spaces for non-EVs are required to be replaced if EVSE is proposed to be installed in an accessible space. Please review the accessibility requirements in Table 11B-228.3.2.1 in detail to confirm the appropriate type and number of accessible stalls are provided.