

ORDINANCE NUMBER_____ (CCS)

(City Council Series)

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SANTA MONICA
AMENDING ARTICLE VIII OF THE SANTA MONICA MUNICIPAL CODE
TO ADOPT LOCAL AMENDMENTS TO THE 2019 CALIFORNIA GREEN BUILDING
STANDARDS CODE RELATING TO ELECTRIC VEHICLE PARKING
REQUIREMENTS FOR NEWLY CONSTRUCTED BUILDINGS

WHEREAS, the California State Building Standards Commission approved and published the 2019 edition of the California Building Standards Code on July 1, 2019, and such code became effective 180 days thereafter, on January 1, 2020; and

WHEREAS, the 2019 California Building Standards Code includes the 2019 California Green Building Standards Code; and

WHEREAS, California Health and Safety Code Sections 17958.7 and 18941.5 provide that the City may make changes or modifications to the building standards contained in the California Building Standards Code based upon express findings that such changes or modifications are reasonably necessary because of local climatic, geological, or topographical conditions; and

WHEREAS, Section 101.7.1 of the 2019 California Green Building Standards Code provides that for the purposes of local amendments to the 2019 California Green Building Standards Code, local climatic, topographical, or geological conditions include local environmental conditions as established by the City; and

WHEREAS, at its September 10, 2019 meeting, the Council adopted a resolution making findings regarding local climatic, geological, topographical, and environmental conditions to support certain local amendments to the 2019 California Green Building Standards Code; and

WHEREAS, at its September 24, 2019 meeting, the Council enacted an ordinance adopting and making certain local amendments to the 2019 California Green Building Standards Code; and

WHEREAS, the Council has adopted a resolution making express findings, in accordance with Health and Safety Code Sections 17958.5, 17958.7, and 18941.5, that the local amendments to the 2019 California Green Building Standards Code implemented by this ordinance are reasonably necessary because of local climatic, geological, and environmental conditions; and

WHEREAS, consistent with the City's May 2019 Climate Action & Adaptation Plan, the local amendments to the 2019 California Green Building Standards Code implemented by this ordinance will increase the use of renewable energy and reduce greenhouse gas emissions; and

WHEREAS, local amendments to the 2019 California Green Building Standards Code relating to building electrification and electric vehicle readiness were the subject of three public stakeholder workshops conducted on April 24, May 16, and June 11, 2019, and a fourth workshop hosted in partnership with the Los Angeles Chapter of the United States Green Building Council on January 23, 2020, at which attendees included architects, energy modelers, designers, builders, developers, other local stakeholders, and residents; and

WHEREAS, local amendments to the 2019 California Green Building Standards Code relating to building electrification and electric vehicle readiness were reviewed with the Task Force on the Environment and its Electric Vehicle Subcommittee at multiple meetings in 2019; and

WHEREAS, at its December 16, 2019 meeting, the Task Force on the Environment determined to recommend that the City Council adopt the local amendments to the 2019 California Green Building Standards Code implemented by this ordinance; and

WHEREAS, on January 22, 2020, the City's Building and Fire Life Safety Commission met and unanimously determined to recommend that the City Council adopt the local amendments to the 2019 California Green Building Standards Code implemented by this ordinance; and

WHEREAS, once adopted by the City Council, the local amendments to the 2019 California Green Building Standards Code will, in accordance with Health and Safety Code Section 17958.7, be submitted to the California Building Standards Commission for filing, and shall become effective 30 days after this submission.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SANTA MONICA DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. Purpose

It is the purpose and intent of this Ordinance to adopt local modifications and changes to the 2019 California Green Building Standards Code (Title 24, Part 11) that provide local standards for new residential, non-residential, and hotel and motel buildings that exceed the minimum standards of the 2019 California Green Building Standards Code to increase the use of renewable energy and reduce greenhouse gas emissions.

SECTION 2. Section 8.106.110 of the Santa Monica Municipal Code is hereby added to read as follows:

8.106.110 Electric Vehicle Charging

Section 4.106.4 of the 2019 California Green Building Code and its subsections are amended to read as follows:

4.106.4 Electric vehicle (EV) charging for new construction.

New construction shall comply with Section 4.106.4.1, 4.106.4.2, or 4.106.4.3, to facilitate current and future electric vehicle charging. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code*, Article 625.

Exceptions:

1. On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:
 - 1.1 Where there is no commercial power supply.
 - 1.2 Where there is evidence substantiating that meeting the requirements will alter the local utility infrastructure design requirements on the utility side of the meter so as to increase the utility side cost by more than \$400 per dwelling unit.
2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.

4.106.4.1 New one- and two-family dwellings and town houses with attached private garages all types of parking facilities.

If residential parking is available, for each dwelling unit for which a parking space is available, for all types of parking facilities, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

Exception: Detached private parking spaces without power supply within 10 feet of the parking space.

4.106.4.1.1 Identification.

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as “EV CAPABLE”.

The raceway termination location shall be permanently and visibly marked as “EV CAPABLE”.

4.106.4.2 New multifamily dwellings. If residential parking is available, ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future EVSE equipped with EV chargers. Calculations for the required

number of EV spaces equipped with EV chargers shall be rounded up to the nearest whole number.

Notes:

1. Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.
2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

4.106.4.2.1 Electric vehicle charging space (EV space) locations.

Construction documents shall indicate the location of proposed EV spaces.

Where common use parking is provided at least one EV space shall be located in the common use parking area and shall be available for use by all residents.

4.106.4.2.1.1 Electric vehicle charging stations (EVCS).

When EVCS are installed, EV spaces required by Section 4.106.4.2.2, Item 3, shall comply with at least one of the following options:

1. The EV space shall be located adjacent to an accessible parking space meeting the requirements of the *California Building Code*, Chapter 11A, to allow use of the EV charger from the accessible parking space.
2. The EV space shall be located on an accessible route, as defined in the *California Building Code*, Chapter 2, to the building.

Exception: Electric vehicle charging stations designed and constructed in compliance with the *California Building Code*, Chapter 11B, are not required to comply with Section 4.106.4.2.1.1 and Section 4.106.4.2.2, Item 3.

Note: Electric vehicle charging stations serving public housing are required to comply with the *California Building Code*, Chapter 11 B.

4.106.4.2.2 Electric vehicle charging space (EV space) dimensions.

The EV spaces shall be designed to comply with the following:

1. The minimum length of each EV space shall be 18 feet (5486 mm).
2. The minimum width of each EV space shall be 9 feet (2743 mm).
3. One in every 25 EV spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet (3658 mm).
 - a. Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.

4.106.4.2.3 Single EV space required.

Install a listed raceway capable of accommodating a 208/240-volt dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the proposed location of the EV space. Construction documents shall identify the raceway termination point. The service panel and/or subpanel shall be provided with capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

4.106.4.2.4 Multiple EV spaces required.

Install listed raceways and all associated conductors capable of accommodating 208/240-volt dedicated branch circuits. The raceways shall originate at the main service or subpanel and shall terminate into listed cabinets, boxes or other enclosures in close proximity to the proposed locations of EV spaces. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. Construction documents shall indicate the raceway termination point and proposed location of future EV spaces and EV chargers. Construction documents shall also provide information on amperage of dedicated branch circuits, future EVSE, raceway method(s), wiring schematics and electrical load calculations to verify that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at the full rated amperage of the EVSE. Plan design shall be based upon a 40-ampere minimum branch circuit. Required raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.

EXCEPTION: Raceways and associated conductors installed for Direct Current Fast Charging stations must be capable of accommodating 480-volt dedicated branch circuits.

4.106.4.2.5 Identification.

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the *California Electrical Code*.

4.106.4.2.6 Additional EV Charging Requirements for Multifamily Buildings

In addition to the requirements of 4.106.4.2, an additional 10 percent of the parking spaces (rounded up to the nearest whole number) shall be equipped with EVSE capable of supporting future EV chargers, including a branch circuit overcurrent protective device. All parking spaces not equipped with EVSE shall be provided with conduit, raceway, or a combination of both, providing future access to EVSE. Plans should clearly show the location of the conduit or raceway. No additional electrical panel capacity is required at time of construction for spaces where only conduit or raceway are required. Parking spaces required under this section do not have to comply with Section 4.106.4.2.2 (dimensions).

Notes:

1. Where feasible, conduit/raceways and receptables may be installed between adjacent EV spaces to serve multiple spaces with a shared raceway and receptacle, but in no event should the EVSE and panel or subpanel capacity serve less than the required number of EV spaces according to Sections 4.106.4.2.4 and 4.106.4.2.6. For the remaining spaces that are required to be served by conduit or raceway only, plans should clearly show the location of the conduit or raceway.

2. An Energy Management System (EMS) as defined in California Electrical Code may be installed to reduce service loads and increase the number of EV spaces that can be served beyond the minimum requirements in this code. The option does not allow for installing less electrical panel capacity than would be required without EMS.
3. The Building Official may consider a reduction of minimum parking spaces equipped with conduit if meeting the requirements is deemed infeasible.

4.106.4.3 New hotels and motels.

All newly constructed hotels and motels shall provide EV spaces capable of supporting future installation of EVSE. The construction documents shall identify the location of the EV spaces.

Notes:

1. Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.
2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

4.106.4.3.1 Number of required EV Spaces. The number of required EV spaces equipped with EV chargers shall be based on 10 percent of the total number of parking spaces provided for all types of parking facilities in accordance with Table 4.106.4.3.1. Calculations for the required number of EV spaces equipped with EV chargers shall be rounded up to the nearest whole number.

Table 4.106.4.3.1

TOTAL NUMBER OF PARKING SPACES	NUMBER OF REQUIRED EV SPACES
0-9	0
10-25	1
26-50	2
51-75	4
76-100	5
101-150	7
151-200	10
201 and over	6 percent of total

4.106.4.3.2 Electric vehicle charging space (EV space) dimensions.

The EV spaces shall be designed to comply with the following:

1. The minimum length of each EV space shall be 18 feet (5486 mm).
2. The minimum width of each EV space shall be 9 feet (2743 mm).

4.106.4.3.3 Single EV space required.

When a single EV space is required, the EV space shall be designed in accordance with Section 4.106.4.2.3.

4.106.4.3.4 Multiple EV spaces required.

When multiple EV spaces are required, the EV spaces shall be designed in accordance with Section 4.106.4.2.4.

4.106.4.3.5 Identification.

The service panels or subpanels shall be identified in accordance with Section 4.106.4.2.5.

4.106.4.3.6 Accessible EV spaces.

In addition to the requirements in Section 4.106.4.3, EV spaces for hotels/motels and all EVSE, when installed, shall comply with the accessibility provisions for EV charging stations in the *California Building Code*, Chapter 11B.

4.106.4.3.7 Additional EV Charging Requirements for new hotels and motels.

An additional thirty (30) percent (rounded up to the nearest whole number) of the total number of parking spaces provided shall be provided with conduit, raceway, or a combination of both, providing future access to EVSE. No additional electrical panel capacity is required at time of construction for spaces where only conduit or raceway are required. Parking spaces required under this section do not have to comply with Section 4.106.4.2.2 (dimensions).

Notes:

1. Where feasible, conduit/raceways and receptables may be installed between adjacent EV spaces to serve multiple spaces with a shared raceway and receptacle, but in no event should the EVSE and panel or subpanel capacity serve less than the required number of EV spaces according to Sections 4.106.4.3.1 and 4.106.4.3.7 For the remaining spaces that are required to be served by conduit or raceways only, plans should clearly show the location of the conduit or raceway.
2. An Energy Management System (EMS) may be installed to reduce service loads and increase the number of EV spaces that can be served beyond the minimum requirements in this code. The option does not allow for installing less electrical panel capacity than would be required without EMS.
3. The Building Official may consider a reduction of minimum parking spaces equipped with conduit if meeting the requirements is deemed infeasible.

4. Installation of a Direct Current Fast Charger with the capacity to provide at least 50 kW of output may substitute for 5 EV Spaces at a new hotel or motel as designed in accordance with California Electrical Code.

SECTION 3. Section 8.106.120 of the Santa Monica Municipal Code is hereby added to read as follows:

8.106.120 EV Charging Non-Residential Mandatory Measures

Section 5.106.5.3 of the 2019 California Green Building Code and its subsections are amended to read as follows:

5.106.5.3 Electric vehicle (EV) charging.

Construction shall comply with Section 5.106.5.3.1 or Section 5.106.5.3.2 to facilitate installation and future installation of electric vehicle supply equipment (EVSE). When EVSE(s) is/are installed, it shall be in accordance with the *California Building Code*, the *California Electrical Code* and as follows:

5.106.5.3.1 Single charging space requirements.

When only a single charging space is required per Table Section 5.106.5.3.3 , a raceway is required to be installed at the time of construction and shall be installed in accordance with the California Electrical Code. Construction plans and specifications shall include, but are not limited to, the following:

1. The type and location of the EVSE.
2. A listed raceway capable of accommodating a 208/240-volt dedicated branch circuit.

3. The raceway shall not be less than trade size 1.”
4. The raceway shall originate at a service panel or a subpanel serving the area, and shall terminate in close proximity to the proposed location of the charging equipment and into a listed suitable cabinet, box, enclosure or equivalent.
5. The service panel or subpanel shall have sufficient capacity to accommodate a minimum 40-ampere dedicated branch circuit for the future installation of the EVSE.

5.106.5.3.2 Multiple charging space requirements.

When multiple charging spaces are required per Table Section 5.106.5.3.3, raceway(s) is/are required to be installed at the time of construction and shall be installed in accordance with the California Electrical Code. Construction plans and specifications shall include, but are not limited to, the following:

1. The type and location of the EVSE.
2. The raceway(s) shall originate at a service panel or a subpanel(s) serving the area, and shall terminate in close proximity to the proposed location of the charging equipment and into listed suitable cabinet(s), box(es), enclosure(s) or equivalent.
3. Plan design shall be based upon 40-ampere minimum branch circuits for level 2 EVSE (208/240-volt circuit) and 63-ampere minimum branch circuits for DC fast charging equipment (480-volt circuit).
4. Electrical calculations shall substantiate the design of the electrical system, to include the rating of equipment and any on-site distribution transformers and

have sufficient capacity to simultaneously charge all required EVs at its full rated amperage.

5. The service panel or subpanel(s) shall have sufficient capacity to accommodate the required number of dedicated branch circuit(s) for the future installation of the EVSE.

5.106.5.3.3 EV charging space calculation.

Table 5.106.5.3.3 shall be used to determine if single or multiple charging space requirements apply for the future installation of EVSE. The number of required EV charging spaces equipped with EV chargers shall be 10 percent of the total number of parking spaces provided. Calculations for the required number of EV charging spaces equipped with EV chargers shall be rounded up to the nearest whole number.

Exceptions: On a case-by-case basis where the local enforcing agency has determined EV charging and infrastructure is not feasible based upon one or more of the following conditions:

1. Where there is insufficient electrical supply.
2. Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may adversely impact the construction cost of the project.

Table 5.106.5.3.3

TOTAL NUMBER OF ACTUAL PARKING SPACES	NUMBER OF REQUIRED EV CHARGING SPACES
0-9	0
10-25	1
26-50	2
51-75	4
76-100	5
101-150	7
151-200	10
201 and over	6 percent of total

All calculations shall be based upon the total number of parking spaces, and rounded up to the nearest whole number.

5.106.5.3.4 Identification.

The service panel or subpanel(s) circuit directory shall identify the reserved overcurrent protective device space(s) for future EV charging as "EV CAPABLE".

The raceway termination location shall be permanently and visibly marked as "EV CAPABLE."

5.106.5.3.5 Future charging spaces.

Future charging spaces qualify as designated parking as described in Section 5.106.5.2 Designated parking for clean air vehicles.

5.106.5.3.6 Additional EV Charging Requirements for non-residential facilities.

In addition to the requirements of Section 5.106.5.3.3, at office parking facilities, an additional ten (10) percent (rounded up to the nearest whole number) of the parking spaces shall be equipped with EVSE capable of supporting future EV chargers, including a branch circuit overcurrent protective device. In addition to the requirements of Section 5.106.5.3.3 and the requirement above for office parking facilities, an additional thirty (30) percent (rounded up to the nearest whole number) of all non-residential parking spaces must be equipped with conduit, raceway, or a combination of both, providing future access to EVSE. Plans should clearly show the location of the conduit or raceway. No additional electrical panel capacity is required at time of construction for spaces where only conduit or raceway are required. Parking spaces required under this section do not have to comply with Section 4.106.4.2.2 (dimensions).

Notes:

1. Where feasible, raceways and receptacles may be installed between adjacent EV charging spaces to serve multiple spaces with a shared raceway and receptacle, but in no event should the EVSE and panel or subpanel capacity serve less than the required number of EV charging spaces according to Sections 5.106.5.3.3 and 5.106.5.3.6. For the remaining spaces that are required to be served by conduit or raceways only, plans should clearly show the location of the conduit or raceway.

2. An Energy Management System (EMS) may be installed to reduce service loads and increase the number of EV charging spaces that can be served beyond the minimum requirements in this code. The option does not allow for installing less electrical panel capacity than would be required without EMS.
3. The Building Official may consider a reduction of minimum parking spaces equipped with conduit or raceway if meeting the requirements is deemed infeasible.
4. Installation of a Direct Current Fast Charger (DCFC) with the capacity to provide at least 50 kW of output may substitute for 5 EV charging spaces.

SECTION 4. Any provision of the Santa Monica Municipal Code or appendices thereto inconsistent with the provisions of this Ordinance, to the extent of such inconsistencies and no further, is hereby repealed or modified to that extent necessary to effect the provisions of this Ordinance.

SECTION 5. If any section, subsection, sentence, clause or phrase of this Ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have passed this Ordinance and each and every section, subsection, sentence, clause, or phrase not declared invalid or unconstitutional without regard to whether any portion of the ordinance would be subsequently declared invalid or unconstitutional.

SECTION 6. The Mayor shall sign and the City Clerk shall attest to the passage of the Ordinance. The City Clerk shall cause the same to be published once in the official newspaper within 15 days after its adoption. Following its adoption, this Ordinance shall be submitted to the California Building Standards Commission for filing. This Ordinance shall become effective 30 days after submission to the California Building Standards Commission. Building permit applications submitted on or after the effective date of this Ordinance shall be required to comply with the requirements set forth herein.

APPROVED AS TO FORM:

LANE DILG
City Attorney