

## CITY OF MILPITAS

Office of Building Safety  
455 E. Calaveras Blvd.  
Milpitas, CA 95035  
408-586-3240  
[www.milpitas.gov](http://www.milpitas.gov)



# CONSOLIDATED REQUIREMENTS FOR 2023 MMC II-19 AND 2022 CALGREEN JUL SUPPLEMENTS

**Below are the consolidated code requirements incorporating the most restrictive requirements of 2023 Milpitas Municipal Code Section II-19 and 2022 California Green Building Standards Code:**

### II-19-2.01

Amend Section 202 of the Green Building Standards Code by adding the following definitions to read as follows:

**Addition.** An extension or increase in floor area of an existing building or structure.

**Affordable Housing.** Residential buildings that consist entirely of below market rate units and whose rents or sales prices are governed by local agencies to be affordable based on area median income.

**All-Electric Building.** A building that contains no combustion equipment or plumbing for combustion equipment serving space heating (including fireplaces), water heating (including pools and spas), cooking appliances and clothes drying, within the building or building property lines, and instead uses electric heating appliances for service.

**Alteration or Alter.** Any construction or renovation to an existing structure other than repair for the purpose of maintenance or addition.

**Automatic Load Management System (ALMS).** A control system designed to manage load across one or more electric vehicle supply equipment (EVSE), circuits, panels and to share electrical capacity and/or automatically manage power at each connection point. ALMS systems shall be designed to deliver no less than 3.3 kVA (208/240 volt, 16-ampere) to each EV Capable, EV Ready or EVCS space served by the ALMS, and meet the requirements of California Electrical Code Article 625. The connected amperage to the building site for the EV charging infrastructure shall not be lower than the required connected amperage per California Green Building Standards Code, Title 24 Part 11.

**Combustion Equipment.** Any equipment or appliance used for space heating, water heating, cooking, clothes drying and/or lighting that uses fuel gas.

**Commercial Food Heat-Processing Equipment.** Equipment used in a food establishment for heat-processing food or utensils and that produces grease vapors, steam, fumes, smoke, or odors that are required to be removed through a local exhaust ventilation system, as defined in the California Mechanical Code.

**Direct Current Fast Charging (DCFC).** A vehicle space provided with electrical infrastructure that meets the following conditions:

- i. A minimum of 48 kVA (480 volt, 100-ampere) capacity wiring.

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- ii. Electric vehicle supply equipment (EVSE) located within three (3) feet of the vehicle space providing a minimum capacity of 80-ampere.

**Electric Heating Appliance.** A device that produces heat energy to create a warm environment by the application of electric power to resistance elements, refrigerant compressors, or dissimilar material junctions, as defined in the California Mechanical Code.

**Electric Vehicle Charging Station (EVCS).** An EV Ready vehicle space that includes the installation of electric vehicle supply equipment (EVSE). An EVCS space may be used to satisfy EV Ready space requirements. EVSE shall be installed in accordance with the California Electrical Code, Article 625.

**Electric Vehicle Supply Equipment (EVSE).** The electric vehicle charging connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.

**Fuel Gas.** A gas that is natural, manufactured, liquefied petroleum, or a mixture of these.

**Level 2 EV Capable.** A vehicle space provided with electrical infrastructure that meets the following requirements:

- i. Conduit that connects a listed electrical panel of sufficient capacity to a junction box with or without a receptacle located within three (3) feet of the vehicle space.
- ii. The conduit shall accommodate at least 8.3 kVA (208/240 volt, 40-ampere) per vehicle space. Conduit shall have a minimum nominal trade size of 1 inch inside diameter and may be sized for multiple circuits as allowed by the California Electrical Code. Conduit shall be installed in spaces that will be inaccessible after construction, either trenched underground or where penetrations to walls, floors, or other partitions would otherwise be required for future installation of branch circuits, and such additional elements deemed necessary by the Building Official. Construction documents shall note future installation of conduit from the panel to the vehicle space, via the installed inaccessible conduit.
- iii. The electrical panel shall reserve a space for a 40-ampere overcurrent protective device(s) for EV charging, labeled in the panel directory as "EV CAPABLE."
- iv. The EV vehicle space shall have signage with at least a 12" font adjacent to the parking space indicating the space is EV Capable.
- v. Electrical load calculations shall demonstrate 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 a minimum of 40 amperes.

**Level 1 EV Ready.** A vehicle space that is served by a complete electric circuit with the following requirements:

- i. A minimum of 2.2 kVA (110/120 volt, 20-ampere) capacity wiring.



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- ii A receptacle labeled "Electric Vehicle Outlet" or electric vehicle supply equipment located within three (3) feet of the vehicle space. If EVSE is provided, the minimum capacity of the EVSE shall be 16-ampere.
- iii Conduit oversized to accommodate future Level 2 EV Ready (208/240 volt, 40-ampere) at each vehicle space.

**Level 2 EV Ready.** A vehicle space that is served by a complete electric circuit with the following requirements:

- i A minimum of 8.3 kVA (208/240 volt, 40-ampere) capacity wiring.
- ii A receptacle labeled "Electric Vehicle Outlet" or electric vehicle supply equipment located within three (3) feet of the vehicle space. If EVSE is provided, the minimum capacity of the EVSE shall be 30-ampere.

**Low Power Level 2 EV Ready.** A vehicle space that is served by a complete electric circuit with the following requirements:

- i A minimum of 4.1 kVA (208/240 Volt, 20-ampere) capacity wiring.
- ii A receptacle labeled "Electric Vehicle Outlet" or electric vehicle supply equipment located within three (3) feet of the vehicle space. If EVSE is provided, the minimum capacity of the EVSE shall be 16-ampere.
- iii Conduit oversized to accommodate future Level 2 EV Ready (208/240 volt, 40-ampere) circuit at each vehicle space.

## II-19-2.02

Amend Section 301.1.1 of the Green Building Standards Code to read as follows:

**301.1.1 Additions and alterations.** [HCD] The mandatory provisions of Chapter 4 shall be applied to additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the specific area of the addition or alteration. (No change to existing California amendment.)

~~The mandatory provisions of Section 4.106.4.2 may apply to additions or alterations of existing parking facilities or the addition of new parking facilities serving existing multifamily buildings.~~

~~The mandatory provisions of Section 5.106.5.3 may apply to additions or alterations of existing parking facilities or the addition of new parking facilities serving existing nonresidential buildings.~~

NOTE: Repairs including, but not limited to, resurfacing, restriping, and repairing or maintaining existing lighting fixtures are not considered alterations for the purpose of this section.



**II-19-2.03**

Amend Section 4.106.4 through Section 4.106.4.3 of the Green Building Standards Code to read as follows:

**4.106.4 Electric vehicle (EV) charging.** Residential construction shall comply with Section 4.106.4.1 or 4.106.4.2, and 4.106.4.3, to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the California Electrical Code, Article 625. Calculation for spaces shall be rounded up to the nearest whole number.

**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 local utility power supply, or the local utility is unable to supply adequate power.
2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.
3. Multifamily residential R-2 building projects that have City Council approved entitlements before the code effective date.

**4.106.4.1 One-and two-family dwellings and town-houses with attached private garages.**

**4.106.4.1.1 New Construction.** If one vehicle space is provided, it shall be a Level 2 EV Ready space. If a second vehicle space is provided, it shall be provided with a Level 1 EV Ready space.

**4.106.4.1.2. Existing Building.** Parking additions shall provide electrical capacity and EV infrastructure in accordance with the requirements of 4.106.4.1.1.

**4.106.4.2 Multifamily dwellings with residential parking facilities. (Note that no local amendments to EV Charging requirements for hotels and motels. Refer to 2022 California Green Building Standards Code for requirements below)**

**4.106.4.2.1 New Construction.** Twenty-five percent (25%) of vehicle spaces for dwelling units shall have access to EVCS with Level 2 EV Ready infrastructure. At least fifty (50%) percent of the required EV chargers shall be equipped with J1772 connectors. ALMS shall be permitted to reduce load when multiple vehicles are charging. Seventy-five percent (75%) of vehicle spaces for dwelling units shall be Low Power Level 2 EV Ready. EV ready spaces and EVCS in multifamily developments shall comply with California Building Code, Chapter 11A, Section 1109A. EVCS shall comply with the accessibility provisions for EV chargers in the California Building Code, Chapter 11B.

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**4.106.4.2.2 New Construction. Affordable Housing.** Twenty percent (20%) of vehicle spaces for dwelling units shall have access to EVCS with Level 2 EV Ready infrastructure. At least fifty (50%) percent of the required EV chargers shall be equipped with J1772 connectors. ALMS shall be permitted to reduce load when multiple vehicles are charging. Twenty percent (20%) of vehicle spaces for dwelling units shall be Low Power Level 2 EV Ready. Eighty-Sixty percent (80%) of vehicle spaces for dwelling units shall have access to Level 1 EV Ready infrastructure. EV ready spaces and EVCS in multifamily developments shall comply with California Building Code, Chapter 11A, Section 1109A. EVCS shall comply with the accessibility provisions for EV chargers in the California Building Code, Chapter 11B.

Note: The total number of EV spaces should be one-hundred percent (100%) of dwelling units or one-hundred percent (100%) of parking spaces, whichever is less.

### 4.106.4.2.3 Existing Buildings.

1. When new vehicle spaces are added and the work requires a building permit, ten percent (10%) of the total number of vehicle spaces added shall be EVCS Level 2 Ready. Any existing EV Capable spaces on the building property required by the locally adopted codes at the time of building permit shall be upgraded to a minimum of Level 1 EV Ready. Upgraded vehicle spaces shall meet the accessibility requirements of California Building Code Chapters 11A and 11B.
2. When new vehicle spaces are added and ALMS is installed, the ALMS must be designed to deliver no less than 2.2 kVa (110/120 volt, 20-ampere).
3. When electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces altered shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE.

#### 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.

**4.106.4.2.4 Electric Vehicle Ready Space Signage.** Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emissions Vehicle Signs and Pavement Markings) or its successor (s).

**4.106.4.3 Electric Vehicle Charging Stations (EVCS).** Electric vehicle charging stations required by Section 4.106.4.2 shall comply with Section 4.106.4.3.

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**Exception:** Electric vehicle charging stations serving public accommodations, public housing, motels, and hotels shall not be required to comply with this section. See California Building Code, Chapter 11B, for applicable requirements.

**4.106.4.3.1 Location.** EVCS shall comply with at least one of the following options:

1. The charging 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 charging 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 4.106.4.3.1 and Section 4.106.4.3.2.

**4.106.4.3.2 Dimensions.** The charging 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 charging 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. Slope for the EV space and the access aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.

**Exception:** Where the Milpitas Municipal or Zoning Code permits parking space dimensions that are less than the minimum requirements stated in this section 4.106.4.3.2, and the compliance would be infeasible due to particular circumstances of a project, an exception may be granted while remaining in compliance with California Building Code Section Table 11B-228.3.2.1 and 11B-812, as applicable.

Add Section 4.106.4.4 to the Green Building Standards Code to read as follows:

**4.106.4.4 Direct current fast charging stations.** One DCFC may be substituted for up to five (5) EVCS to meet the requirements of 4.106.4.1 and 4.106.4.2. Where ALMS serve DCFC stations, the power demand from the DCFC shall be prioritized above Level 1 and Level 2 spaces.

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**Below are the EV Charging requirements for hotels and motels per 2022 California Green Building Standards Code Section 4.106.4.2 through 4.106.4.2.5**

**4.106.4.2 Hotels and motels.** When parking is provided, parking spaces for new hotels and motels shall meet the requirements of Section 4.106.4.2.2. Calculations for spaces shall be rounded up to the nearest whole number. A parking space served by electric vehicle supply equipment or designed as an EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2 for further details.

### **4.106.4.2.2 Hotels and motels.**

#### **1. EV ready parking spaces with receptacles.**

- a. Hotels and motels.** Forty (40) percent of the total number of parking spaces shall be equipped with Low Power Level 2 EV charging receptacles.
- b. N/A**
- c. N/A**
- d. Receptacle configurations.** 208/240V EV charging receptacles shall comply with one of the following configurations:
  - 1. For 20-ampere receptacles, NEMA 6-20R**
  - 2. For 30-ampere receptacles, NEMA 14-30R**
  - 3. For 50-ampere receptacles, NEMA 14-50R**

#### **2. EV ready parking spaces with EV chargers.**

- a. Hotels and motels.** Ten (10) percent of the total number of parking spaces shall be equipped with Level 2 EV chargers. At least fifty (50) percent of the required EV chargers shall be equipped with J1772 connectors.

Where low power Level 2 EV charging receptacles or Level 2 EV chargers are installed beyond the minimum required, an automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS. The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EV chargers shall have a capacity of not less than 30 amperes.

**4.106.4.2.2.1 Electric vehicle charging stations (EVCS).** Electric vehicle charging stations required by Section 4.106.4.2.2, Item 2, with EV chargers installed shall comply with Section 4.106.4.2.2.1.1.



**Exceptions:** Areas of parking facilities served by parking lifts, including but not limited to automated mechanical-access open parking garages as defined in the California Building Code; or parking facilities otherwise incapable of supporting electric vehicle charging.

**4.106.4.2.2.1.1 Electric vehicle charging stations (EVCS) spaces with EV chargers installed; dimensions and location.** EVCS spaces shall be designed to comply with the following:

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

**4.106.4.2.5 Electric vehicle ready space signage.** Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

#### II-19-2.05

Amend Section 5.106.5.3 through Section 5.106.5.3.3 of the Green Building Standards Code to read as follows:

**5.106.5.3 Electric Vehicle (EV) Charging.** Nonresidential construction shall comply with Section 5.106.5.3.1 or Section 5.106.5.3.2 to facilitate future installation and use of EV chargers. Accessible EVCS shall be provided in accordance with the California Building Code Chapter 11B Section 11B-228.3. For EVCS signs, refer to Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

**Exception:** Where there is no commercial power supply.

Notes:

1. Load balancing systems may be installed to increase the number of EV chargers or the amperage or voltage beyond the minimum requirements in this code. The option does not allow for installing less electrical panel capacity than would be required without load balancing.

**5.106.5.3.1 Office Buildings.** In nonresidential new construction buildings designated primarily for office use, when 10 or more parking spaces are constructed:

1. 5% of the available parking spaces on site shall be equipped with Level 2 EVCS;
2. An additional 10% shall be provided with at least Level 4-2 EV Ready circuits; and
3. An additional 20% shall be at least Level 2 EV Capable or EV Ready.

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Calculations for the required minimum number of spaces equipped with Level 2 EVCS, Level 2 EV Ready spaces and Level 2 EV Capable spaces shall all be rounded up to the nearest whole number.

Construction plans and specifications shall demonstrate that all raceways shall be a minimum of 1" and sufficient for installation of EVCS at all required Level 1-2 EV Ready and Level 2 EV Capable spaces; 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 EVs at all required EV spaces including Level 1-2 EV Ready and Level 2 EV Capable spaces; and 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.

**5.106.5.3.2 Other Nonresidential Buildings.** In nonresidential new construction buildings that are not designated primarily for office use, such as retail or institutional uses, when 10 or more parking spaces are constructed:

1. 5 % of the available parking spaces on site shall be equipped with Level 2 EVCS;
2. An additional 15% shall be at least Level 2 EV Capable.
3. Over 100 spaces: option for ~~one-four~~ 80 kW Fast Charger per 100 spaces.

**The number of EV Capable Spaces and number of EVCS provided in Items 1 and 2 above shall not be fewer than that shown in below table per 2022 CALGreen Table 5.106.5.3.1.**

<u>Total Number of Actual Parking Spaces</u>	<u>Number of Required EV Capable Spaces</u>	<u>Number of EVCS (EV Capable Spaces Provided with EVSE)<sup>2,3</sup></u>
<u>0-9</u>	<u>0</u>	<u>0</u>
<u>10-25</u>	<u>4</u>	<u>0</u>
<u>26-50</u>	<u>8</u>	<u>2</u>
<u>51-75</u>	<u>13</u>	<u>3</u>
<u>76-100</u>	<u>17</u>	<u>4</u>
<u>101-150</u>	<u>25</u>	<u>6</u>
<u>151-200</u>	<u>35</u>	<u>9</u>
<u>201 and over</u>	<u>20% of actual parking spaces<sup>1</sup></u>	<u>25% of EV capable spaces<sup>1</sup></u>

1. Calculation for spaces shall be rounded up to the nearest whole number.

2. The number of required EVCS (EV capable spaces provided with EVSE) in column 3 count toward the total number of required EV capable spaces shown in column 2.

3. At least one Level 2 EVSE shall be provided.



**Exception:** Installation of each Direct Current Fast Charger with the capacity to provide at least 80 kW output may substitute for ~~6-5~~ Level 2 EVCS and or 5 Level 2 EV Ready Capable spaces after a minimum of 6 Level 2 EVCS and 5 Level ~~4-2~~ EV Capable spaces are installed.

Note: Calculations for the required minimum number of spaces equipped with Level 2 EVCS and Level ~~4-2~~ EV Capable spaces shall be rounded up to the nearest whole number.

**5.106.5.3.3 Design Requirements.** For all projects subject to Title 24, Part 2, Chapter 11B, construction documents shall indicate how many accessible EVCS would be required under the California Code of Regulations Title 24, Chapter 11B, if applicable, in order to convert Level ~~4-2~~ EV Ready infrastructure to EVCS. Construction documents shall also demonstrate that the facility is designed such that compliance with accessibility standards, including Chapter 11B accessible routes, will be feasible for the required accessible EVCS at the time of EVCS installation. Surface slope for any area designated for accessible EVCS shall meet slope requirements in Chapter 11B and vertical clearance requirements in Chapter 11B at the time of original building construction.

**5.106.5.3.5 Electric vehicle charging station signage.** Electric vehicle charging stations shall be identified by signage or pavement markings in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

**5.106.5.4 Additions or alterations to existing buildings or parking facilities [A]. [BSC-CG]** Existing buildings or parking facilities being modified by one of the following shall comply with Section 5.106.5.4.1 or 5.106.5.4.2. When EVSE is installed, accessible EVCS shall be provided in accordance with the California Building Code, Chapter 11B, Section 11B-228.3.

1. When the scope of construction work includes an increase in power supply to an electric service panel as part of a parking facility addition or alteration.
2. When a new photovoltaic system is installed covering existing parking spaces.
3. When additions or alterations to existing buildings are triggered pursuant to code Section 301.3 and the scope of work includes an increase in power supply to an electric service panel.

**Exceptions:**

1. On a case-by-case basis where the local enforcing agency has determined compliance with this section is not feasible based upon one of the following conditions:
  - a. Where there is no local utility power supply.
  - b. Where the local utility is unable to supply adequate power.
  - c. Where there is evidence suitable to the local enforcement 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.

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- d. Where demonstrated as impracticable excluding local utility service or utility infrastructure issues.
2. Remote parking facilities that do not have access to the building service panel.
3. Parking area lighting upgrades where no trenching is part of the scope of work.
4. Emergency repairs, including but not limited to water line break in parking facilities, natural disaster repairs, etc.

**5.106.5.4.1 Existing buildings or parking areas without previously installed EV capable infrastructure [A].** When EV capable infrastructure does not exist at an existing parking facility or building, and the parking facility or building undergoes an addition or alteration listed in Section 5.106.5.4, construction shall include electric vehicle charging in compliance with either Section 5.106.5.3 and associated Table 5.106.5.3.1, or Section 5.106.5.3.6 and associated Table 5.106.5.3.6 for the total number of actual parking spaces being added or altered.

**5.106.5.4.2 Existing buildings or parking areas with previously installed EV capable infrastructure [A].** When EV capable infrastructure is available at an existing parking facility or building, and the parking facility or building is undergoing an addition or alteration listed in Section 5.106.5.4, construction shall include electric vehicle charging in compliance with either Section 5.106.5.3 and associated Table 5.106.5.3.1, or Section 5.106.5.3.6 and associated Table 5.106.5.3.6 utilizing the existing EV capable allocated power and infrastructure for the total number of actual parking spaces being added or altered. If the area being added or altered exceeds the existing EV capable capacity, allocated power and infrastructure, provide additional EV charging as needed to comply with this section.

**5.106.5.5 Electric vehicle (EV) charging: medium-duty and heavy-duty. [N] [BSG-CG]** Construction shall comply with Section 5.106.5.5.1 to facilitate future installation of electric vehicle supply equipment (EVSE). Construction for warehouses, grocery stores and retail stores, office buildings, and manufacturing facilities with planned off-street loading spaces shall also comply with Section 5.106.5.5.1 for future installation of medium- and heavy-duty EVSE.

## **Exceptions:**

1. On a case-by-case basis where the local enforcing agency has determined compliance with this section is not feasible based upon one of the following conditions:
  - a. Where there is no local utility power supply.
  - b. Where the local utility is unable to supply adequate power.
  - c. Where there is evidence suitable to the local enforcement 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.

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When EVSE(s) is/are installed, it shall be in accordance with the California Building Code, the California Electrical Code and as follows:

**5.106.5.5.1 Electric vehicle charging readiness requirements for warehouses, grocery stores, office buildings, and manufacturing facilities and retail stores with planned off-street loading spaces.**

**[N]** In order to avoid future demolition when adding EV supply and distribution equipment, spare raceway(s) or busway(s) and adequate capacity for transformer(s), service panel(s) or subpanel(s) shall be installed at the time of construction in accordance with the California Electrical Code. Construction plans and specifications shall include, but are not limited to, the following:

1. The transformer, main service equipment and subpanels shall meet the minimum power requirement in Table 5.106.5.5.1 to accommodate the dedicated branch circuits for the future installation of EVSE.
2. The construction documents shall indicate one or more location(s) convenient to the planned off-street loading space(s) reserved for medium- and heavy-duty ZEV charging cabinets and charging dispensers, and a pathway reserved for routing of conduit from the termination of the raceway(s) or busway(s) to the charging cabinet(s) and dispenser(s), as shown in Table 5.106.5.5.1.
3. Raceway(s) or busway(s) originating at a main service panel or a subpanel(s) serving the area where potential future medium- and heavy-duty EVSE will be located and shall terminate in close proximity to the potential future location of the charging equipment for medium- and heavy-duty vehicles.
4. The raceway(s) or busway(s) shall be of sufficient size to carry the minimum additional system load to the future location of the charging for medium- and heavy-duty ZEVs as shown in Table 5.106.5.5.1.

**TABLE 5.106.5.5.1**

**RACEWAY CONDUIT AND PANEL POWER REQUIREMENTS FOR MEDIUM- AND HEAVY-DUTY EVSE [N]**

<u>BUILDING TYPE</u>	<u>BUILDING SIZE (SQ. FT.)</u>	<u>NUMBER OF OFF-STREET LOADING SPACES</u>	<u>ADDITIONAL CAPACITY REQUIRED (KVA) FOR RACEWAY &amp; BUSWAY AND TRANSFORMER &amp; PANEL</u>
<u>Grocery</u>	<u>10,000 to 90,000</u>	<u>1 or 2</u>	<u>200</u>
		<u>3 or Greater</u>	<u>400</u>
	<u>Greater than 90,000</u>	<u>1 or Greater</u>	<u>400</u>
<u>Manufacturing Facilities</u>	<u>10,000 to 50,000</u>	<u>1 or 2</u>	<u>200</u>
	<u>10,000 to 50,000</u>	<u>3 or Greater</u>	<u>400</u>
	<u>Greater than 50,000</u>	<u>1 or Greater</u>	<u>400</u>

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<u>Office Buildings</u>	<u>10,000 to 135,000</u>	<u>1 or 2</u>	<u>200</u>
	<u>10,000 to 135,000</u>	<u>3 or Greater</u>	<u>400</u>
	<u>Greater than 135,000</u>	<u>1 or Greater</u>	<u>400</u>
<u>Retail</u>	<u>10,000 to 135,000</u>	<u>1 or 2</u>	<u>200</u>
	<u>10,000 to 135,000</u>	<u>3 or Greater</u>	<u>400</u>
	<u>Greater than 135,000</u>	<u>1 or Greater</u>	<u>400</u>
<u>Warehouse</u>	<u>20,000 to 256,000</u>	<u>1 or 2</u>	<u>200</u>
	<u>20,000 to 256,000</u>	<u>3 or Greater</u>	<u>400</u>
	<u>Greater than 256,000</u>	<u>1 or Greater</u>	<u>400</u>

## II-19-2.06

Amend Section 5.106.5.3.5 of the Green Building Standards Code to read as follows:

~~5.106.5.3.5 Clean Air Vehicle Parking Designation.~~ EVCS qualify as designated parking as described in Section 5.106.5.2 Designated parking for clean air vehicles.

Notes:

1. ~~The California Department of Transportation adopts and publishes the California Manual on Uniform Traffic Control Devices (California MUTCD) to provide uniform standards and specifications for all official traffic control devices in California. Zero Emission Vehicle Signs and Pavement Markings can be found in the New Policies & Directives number 13-01. [www.dot.ca.gov/hq/traffops/policy/13-01.pdf](http://www.dot.ca.gov/hq/traffops/policy/13-01.pdf).~~
2. ~~See Vehicle Code Section 22511 for EV charging spaces signage in off street parking facilities and for use of EV charging spaces.~~
3. ~~The Governor's Office of Planning and Research published a Zero Emission Vehicle Community Readiness Guidebook which provides helpful information for local governments, residents and businesses. [www.opr.ca.gov/docs/ZEV\\_Guidebook.pdf](http://www.opr.ca.gov/docs/ZEV_Guidebook.pdf).~~
4. ~~Section 11B-812 of the 2022 California Building Code requires that a facility providing EVCS for public and common use also provide one or more accessible EVCS as specified in Table 11B-228.3.2.1. Chapter 11B applies to certain facilities including, but not limited to, public accommodations and publicly funded housing (see section 1.9 of Part 2 of the California Building Code). Section 11B-812 requires that "Parking spaces, access aisles and vehicular routes serving them shall provide a vertical clearance of 98 inches (2489 mm) minimum." It also requires that parking spaces and access aisles meet maximum slope requirements of 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction at the time of new building construction or renovation. Section 11B-812.5 contains accessible route requirements.~~