

## Chapter 20.26 GREEN BUILDING CODE

### Sections:

- 20.26.010 California Green Building Standards (CALGreen) Code adopted.
- 20.26.020 Section 101.3 amended – Scope.
- 20.26.030 Section 107 added – Local Enforcing Agency.
- 20.26.040 Chapter 2 Definitions - amended
- 20.26.050 Chapter 2 Definitions - added
- 20.26.060 Section 301.1.1 amended – Additions and alterations.
- 20.26.070 Section 4.106.1 amended – Site Development.
- 20.26.080 Section 4.106.4 amended – Electric Vehicle (EV Charging) for new construction.
- 20.26.090 Section 4.106.4.1 amended – New one- and two-family dwellings and townhouses with attached private garages.
- 20.26.100 Section 4.106.4.1.1 amended - Identification.
- 20.26.110 Section 4.106.4.1.2 added - Existing Building.
- 20.26.120 Section 4.106.4.2 amended – New Multifamily dwellings, hotels and motels and new residential parking facilities.
- 20.26.130 Section 4.106.4.2.1 amended – Multifamily development projects with less than 20 dwelling units; and hotels and motels with less than 20 sleeping units or guest rooms.
- 20.26.140 Section 4.106.4.2.2 amended – Multifamily development projects with 20 or more dwelling units; hotels and motels with 20 or more sleeping units or guest rooms.
- 20.26.150 Section 4.106.4.2.2.1 amended – Electric vehicle charging stations (EVCS)
- 20.26.160 Section 4.106.4.2.2.1.1 amended – Location.
- 20.26.170 Section 4.106.4.2.2.1.2 amended – Electric vehicle charging stations (EVCS) dimensions.
- 20.26.180 Section 4.106.4.2.2.1.3 amended – Accessible EV spaces.
- 20.26.190 Section 4.106.4.2.3 amended - EV space requirements.
- 20.26.200 Section 4.106.4.2.4 amended – Identification.
- 20.26.210 Section 4.106.4.2.5 amended – Electric vehicle ready space signage.
- 20.26.220 Section 4.106.4.3 amended – Electric vehicle charging for additions and alterations of parking facilities serving existing multi-family buildings.
- 20.26.230 Section 4.106.4.4 added – Direct current fast charging stations.
- 20.26.240 Section 4.106.5 added – All-electric buildings.
- 20.26.250 Section 4.106.5.1 added - New construction qualifying alteration projects.
- 20.26.260 Section 4.106.5.2 added – Requirements for combustion equipment.
- 20.26.270 Section 4.408 amended – Construction Waste Reduction, Disposal and Recycling.
- 20.26.280 Section 5.106.1 amended – Stormwater pollution prevention for projects that disturb less than 1 acre of land.
- 20.26.290 Section 5.106.5.3 amended – Electric vehicle (EV) charging.
- 20.26.300 Section 5.106.5.3.1 amended – EV capable Spaces.
- 20.26.310 Section 5.106.5.3.2 amended- Electric vehicle charging stations (EVCS)
- 20.26.320 Section 5.106.5.3.3 amended – Use of Automatic Load Management Systems (ALMS).
- 20.26.330 Section 5.106.5.3.4 amended Accessible EVCS.
- 20.26.340 Section 5.106.5.4 amended Electric vehicle (EV) charging: medium-duty and heavy-duty.
- 20.26.350 Section 5.106.5.4.1 amended Electric vehicle charging readiness requirements for warehouses, grocery stores and retail stores with planned off-street loading spaces.
- 20.26.360 Table 5.106.4.1.1 added – Raceway and panel power requirements for medium- and heavy-duty EVSE.
- 20.26.370 Section 5.106.13 added – All-electric buildings.

**20.26.380 Section 5.408 amended – Construction Waste Reduction, Disposal and Recycling.**

**20.26.010 California Green Building Standards (CALGreen) Code adopted.**

There is adopted by reference that certain code known as the California Green Building Standards (CALGreen) Code at Title 24 California Code of Regulations Part 11 (2022 edition), as more particularly described in this section, except such provisions that are amended, modified or deleted in this chapter, and the same is adopted and incorporated as fully as if set out in this chapter. A copy of said code is available for use by the public at the City of Pleasanton's Building Division.

**20.26.020 Section 101.3 Scope amended.**

Section 101.3 Scope is amended to read as follows:

**101.3 Scope.** The provisions of this code shall apply to the planning, design, operation, construction, use and occupancy of every newly constructed building or structure, unless otherwise indicated in this code, throughout the State of California. Any "Newly constructed building or structure" subject to CALGreen and this chapter does not include renovations, repairs or additions, to historic buildings, defined as any building listed or eligible for listing on a national, state or local register or listing of historic resources. It is not the intent that this code substitute or be identified as meeting the certification requirements of any green building program.

**20.26.030 Section 107 added – Local Enforcing Agency.**

Section 107 is added to read as follows:

**107.1 Local Enforcing Agency.** The Building Division of the City of Pleasanton shall enforce all the provisions of this law, this code and the other rules and regulations promulgated by the Building Standards Commission, the Department of Housing and Community Development or the Division of the State Architect, and Chapter 20.04, the Pleasanton Building Administrative Code.

**20.26.040 Chapter 2 Definitions – amended.**

Chapter 2 Definitions are amended to read as follows:

**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.

**ELECTRIC VEHICLE CHARGING STATION (EVCS).** A parking space that includes installation of electric vehicle supply equipment (EVSE) at an EV Ready space. 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.

**LOW POWER LEVEL 2 EV READY.** A parking 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 parking 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 parking space.

#### **20.26.050 Chapter 2 Definitions - added**

Chapter 2 Definitions are added to read as follows:

**AFFORDABLE HOUSING.** Residential buildings that entirely consist of units below market rate 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 (including barbeques), and clothes drying, within the building or building property lines, and instead uses electric heating appliances for service.

**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.** An 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 parking space provided with electrical infrastructure that meets the following conditions:

- i. A minimum of 48 kVa (480 volt, 100-ampere) capacity wiring.
- ii. Electric vehicle supply equipment (EVSE) located within three (3) feet of the parking 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.

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

**INDUSTRIAL PROCESS HEAT.** A process or manufacturing equipment for which sustained temperatures typically in excess of three hundred fifty degrees Fahrenheit are required and demonstrably not achievable with commercial electric equipment.

**LEVEL 2 EV CAPABLE.** A parking space provided with electrical infrastructure that meets the following requirements:

- i. Conduit that links a listed electrical panel with sufficient capacity to a junction box or receptacle located within three (3) feet of the parking space.
- ii. The conduit shall be designed to accommodate at least 8.3 kVa (208/240 volt, 40-ampere) per parking 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 at a minimum 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 indicate future completion of conduit from the panel to the parking space, via the installed inaccessible conduit.
- iii. The electrical panel shall reserve a space for a 40-ampere overcurrent protective device space(s) for EV charging, labeled in the panel directory as “EV CAPABLE.”
- iv. 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.
- v. The parking space shall contain signage with at least a 12” font adjacent to the parking space indicating the space is EV Capable.

**LEVEL 1 EV READY.** A parking 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.
- ii. A receptacle labeled “Electric Vehicle Outlet” or electric vehicle supply equipment located within three (3) feet of the parking 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 parking space.

**LEVEL 2 EV READY.** A parking 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 parking space. If EVSE is provided the minimum capacity of the EVSE shall be 30-ampere.

**LOW POWER LEVEL 2 EV READY.** A parking 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 parking 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 parking space.

**20.26.060 Section 301.1.1 amended – Additions and alterations.**

Section 301.1.1 is amended 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.

**20.26.070 Section 4.106.1 amended – Site Development.**

Section 4.106.1 is amended to read as follows:

**4.106.1 General.** Preservation and use of available natural resources shall be accomplished through evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, management of storm water drainage and erosion controls shall be in conformance with Municipal Code Chapter 9.14 Stormwater Management and Discharge Control, or any other requirements in effect at the time of application.

**20.26.080 Section 4.106.4 amended – Electric Vehicle (EV Charging) for new construction.**

Section 4.106.4 is amended to read as follows:

**4.106.4 Electric vehicle (EV) charging.** New 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. For EVCS signs, refer to Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

**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.
  - 1.2. 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 4.106.4, may adversely impact the construction cost of the project.
2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities and without electrical panel upgrade or new panel installation. ADUs and JADUs without additional parking but with electrical panel upgrades or new panels must have reserved breakers and electrical capacity according to the requirements of 4.106.4.1.
3. Multifamily residential R-2 building projects that have approved entitlements before the code effective date.

**20.26.090 Section 4.106.4.1 amended – New one- and two-family dwellings and townhouses with attached private garages.**

Section 4.106.4.1 the title block is amended to read as follows:

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

**20.26.100 Section 4.106.4.1.1 amended - Identification.**

Section 4.106.4.1.1 is amended to read as follows:

**4.106.4.1.1 New Construction.** Two parking space(s), if provided, shall be *Level 2 EV Ready* spaces.

**20.26.110 Section 4.106.4.1.2 added - Existing Building.**

Section 4.106.4.1.2 is added to read as follows:

**4.106.4.1.2. Existing Building.** Electrical panel upgrades must have reserved breaker spaces and electrical capacity according to the requirements of 4.106.4.1.1.

**20.26.120 Section 4.106.4.2 amended – New Multifamily dwellings, hotels and motels and new residential parking facilities.**

Section 4.106.4.2 the title block is amended to read as follows:

**4.106.4.2 Multifamily dwellings with residential parking facilities**

**20.26.130 Section 4.106.4.2.1 amended – Multifamily development projects with less than 20 dwelling units; and hotels and motels with less than 20 sleeping units or guest rooms.**

Section 4.106.4.2.1 is amended to read as follows:

**4.106.4.2.1 New Construction.** Fifteen percent (15%) of dwelling units with parking spaces shall be EVCS with Level 2 EV Ready. ALMS shall be permitted to reduce load when multiple vehicles are charging. Eighty-five percent (85%) of dwelling units with parking spaces shall be provided with a Low Power Level 2 EV Ready space. 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.

**20.26.140 Section 4.106.4.2.2 amended – Multifamily development projects with 20 or more dwelling units; hotels and motels with 20 or more sleeping units or guest rooms.**

Section 4.106.4.2.2 is amended to read as follows:

**4.106.4.2.2 Existing Buildings**

1. When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten percent (10%) of the total number of parking spaces added or altered shall be EVCS. 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. Upgrades shall be required at currently designated vehicle parking spaces. Upgrades shall be required for remaining parking spaces after meeting the accessibility requirements of California Building Code Chapters 11A and 11B.
2. When new parking facilities are added and ALMS is installed, the ALMS system must be designed to deliver no less than 2.2 kVa (110/120 volt, 20-ampere).

**20.26.150 Section 4.106.4.2.2.1 amended – Electric vehicle charging stations (EVCS)**

Section 4.106.4.2.2.1 is amended to read as follows:

**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.

**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.

**20.26.160 Section 4.106.4.2.2.1.1 amended – Location.**

Section 4.106.4.2.2.1.1 is amended to read as follows:

**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.

**20.26.170 Section 4.106.4.2.2.1.2 amended – Electric vehicle charging stations (EVCS) dimensions.**

Section 4.106.4.2.2.1.2 is amended to read as follows:

**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. 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.

**Exception:** Where the City's 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 with which would be infeasible due to 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.

**20.26.180 Section 4.106.4.2.2.1.3 amended – Accessible EV spaces.**

Section 4.106.4.2.2.1.3 is deleted.

**20.26.190 Section 4.106.4.2.3 amended - EV space requirements.**

Section 4.106.4.2.3 is deleted.

**20.26.200 Section 4.106.4.2.4 amended – Identification.**

Section 4.106.4.2.4 is deleted.

**20.26.210 Section 4.106.4.2.5 amended – Electric vehicle ready space signage.**

Section 4.106.4.2.5 is deleted.

**20.26.220 Section 4.106.4.3 amended – Electric vehicle charging for additions and alterations of parking facilities serving existing multi-family buildings.**

Section 4.106.4.3 is deleted.

**20.26.230 Section 4.106.4.4 added – Direct current fast charging stations.**

Section 4.106.4.4 is added 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.

**20.26.240 Section 4.106.5 added – All-electric buildings.**

Section 4.106.5 is added to read as follows:

**4.106.5 All-electric buildings.** New construction buildings and qualifying alteration projects shall comply with Section 4.106.5.1 or 4.106.5.2 so that they do not use *combustion equipment* or are ready to accommodate installation of *electric heating appliances*.

**20.26.250 Section 4.106.5.1 added - New construction qualifying alteration projects.**

Section 4.106.5.1 is added to read as follows:

**4.106.5.1. New construction and qualifying alteration projects.** All newly constructed buildings shall be *all-electric buildings*. Alterations that include replacement of over 50 percent of the existing foundation for purposes other than a repair or reinforcement as defined in California Existing Building Code Section 202; or where over 50 percent of the existing framing above the sill plate is removed or replaced for purposes other than repair, shall be *all-electric buildings*. If either of these criteria are met within a three-year period, measured from the date of the most recent previously obtained permit final date, the project shall be subject to the *all-electric buildings* requirements.

The final determination whether a project meets the definition of substantial reconstruction/alteration shall be made by the local enforcing agency.

**Exceptions:**

1. Multifamily residential building projects that have approved entitlements before the effective date of this ordinance may install fuel gas for water heating systems serving multiple dwelling units. The applicant shall comply with Section 4.106.5.2.
2. If the applicant establishes that there is not an all-electric prescriptive compliance pathway for the building under the California Building Energy Efficiency Standards, and that the building is not able to achieve the performance compliance standard applicable to the building under the Energy Efficiency Standards using commercially available technology and



an approved calculation method, then the local enforcing agency may grant a modification. The applicant shall comply with Section 4.106.5.2.

Inactive *Fuel Gas Infrastructure* may be extended to spaces that are anticipated to qualify for the exceptions contained in this chapter. The inactive *Fuel Gas Infrastructure* shall not be activated, have a meter installed, or otherwise used unless the exemptions specified in this chapter have been confirmed as part of the issuance of a building permit. If the *Fuel Gas Infrastructure* is no longer serving one of the exceptions contained in this chapter, it shall either be capped, otherwise terminated, or removed by the entity previously entitled to the exemption, in a manner pursuant to all applicable Codes.

Pleasanton shall have the authority to approve alternative materials, design and methods of construction or equipment per California Building Code Section 104.

**20.26.260 Section 4.106.5.2 added – Requirements for combustion equipment.**

Section 4.106.5.2 is added to read as follows:

**4.106.5.2 Requirements for *combustion equipment*.**

Where *combustion equipment* is allowed per Exceptions under 4.106.5.1, the construction drawings shall indicate electrical infrastructure and physical space accommodating the future installation of an *electrical heating appliance* in the following ways, as certified by a registered design professional or licensed electrical contractor:

1. Branch circuit wiring, electrically isolated and designed to serve all electrical heating appliances in accordance with manufacturer requirements and the California Electrical Code, including the appropriate voltage, phase, minimum amperage, and an electrical receptacle or junction box within five feet of the appliance that is accessible with no obstructions. Appropriately sized conduit may be installed in lieu of conductors; and
2. Labeling of both ends of the unused conductors or conduit shall be with "For Future Electrical Appliance"; and
3. Reserved circuit breakers in the electrical panel for each branch circuit, appropriately labeled (i.e., "Reserved for Future Electric Range"), and positioned on the opposite end of the panel supply conductor connection; and
4. Connected subpanels, panelboards, switchboards, busbars, and transformers shall be sized to serve the future electrical heating appliances. The electrical capacity requirements shall be adjusted for demand factors in accordance with the California Electric Code; and
5. Physical space for future electrical heating appliances, including equipment footprint, and if needed a pathway reserved for routing of ductwork to heat pump evaporator(s), shall be depicted on the construction drawings. The footprint necessary for future electrical heating appliances may overlap with non-structural partitions and with the location of currently designed combustion equipment.

**20.26.270 Section 4.408 amended – Construction Waste Reduction, Disposal and Recycling.**

Section 4.408 is amended to read as follows:

**4.408.1 Construction waste management.** As provided in Municipal Code Chapter 9.21, "regulated projects" as defined therein shall comply with Municipal Code Chapter 9.21. Projects that are not regulated by Municipal Code Chapter 9.21 shall comply with CALGreen Section 4.408, as applicable.

**20.26.280 Section 5.106.1 amended – Stormwater pollution prevention for projects that disturb less than 1 acre of land.**

Section 5.106.1, is amended to read as follows:

**5.106.1 Stormwater water pollution prevention.** Newly constructed projects and additions which disturb less than one acre of land and are not part of a larger common plan of development shall prevent the pollution of stormwater runoff from construction activities and shall be in conformance with Municipal Code Chapter 9.14 Stormwater Management and Discharge Control, or any other requirements in effect at the time of application.

**20.26.290 Section 5.106.5.3 amended – Electric vehicle (EV) charging.**

Section 5.106.5.3 is amended to read as follows:

**5.106.5.3 Electric vehicle (EV) charging.** Construction to provide electric vehicle infrastructure and facilitate electric vehicle charging shall comply with Section 5.106.5.3 and shall be provided in accordance with regulations in the *California Building Code* and the *California Electrical Code*. 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).

**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.
2. Parking spaces accessible only by automated mechanical car parking systems are not required to comply with this code section.

**20.26.300 Section 5.106.5.3.1 amended – EV capable Spaces.**

Section 5.106.5.3.1 is amended to read as follows:

**5.106.5.3.1 Nonresidential Occupancy Class B Offices – Shared Parking Space.**

**5.106.5.3.1.1 New Construction.** Twenty percent (20%) of parking spaces shall be EVCS with Level 2 EV Ready. ALMS shall be permitted to reduce load when multiple vehicles are charging. Thirty percent (30%) of parking spaces provided shall be Level 2 EV Capable.

**5.106.5.3.1.2 Existing Buildings.** When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten percent (10%) of the total number of parking spaces added or altered shall be EVCS with Level 2 EV 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. Upgrades shall be required at currently designated vehicle parking spaces. Upgrades shall be required for remaining parking spaces after meeting the accessibility requirements of California Building Code Chapters 11A and 11B.

**20.26.310 Section 5.106.5.3.2 amended- Electric vehicle charging stations (EVCS)**

Section 5.106.5.3.2 is amended to read as follows:

**5.106.5.3.2 Hotel and Motel Occupancies – Shared Parking Facilities.**

**5.106.5.3.2.1 New Construction.** Five percent (5%) of parking spaces provided shall be EVCS with Level 2 EV Ready. ALMS shall be permitted to reduce load when multiple vehicles are charging. Twenty-five percent (25%) of parking spaces provided shall be Low Power Level 2 EV Ready space. Ten percent (10%) of parking spaces provided shall be Level 2 EV Capable.

**5.106.5.3.2.2 Existing Buildings.** When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten percent (10%) of the total number of parking spaces added or altered shall be EVCS with Level 2 EV 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. Upgrades shall be required at currently designated vehicle parking spaces. Upgrades shall be required for remaining parking spaces after meeting the accessibility requirements of California Building Code Chapters 11A and 11B.

**20.26.320 Section 5.106.5.3.3 amended – Use of Automatic Load Management Systems (ALMS).**

Section 5.106.5.3.3 is amended to read as follows:

**5.106.5.3.3 All Other Nonresidential Occupancies – Shared Parking Facilities.**

**5.106.5.3.3.1 New Construction.** Ten percent (10%) of parking spaces provided shall be EVCS with Level 2 EV Ready. ALMS shall be permitted to reduce load when multiple vehicles are charging. Ten percent (10%) of parking spaces provided shall be Level 2 EV Capable.

**5.106.5.3.3.2 Existing Buildings.** When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten percent (10%) of the total number of parking spaces added or altered shall be EVCS with Level 2 EV 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. Upgrades shall be required at currently designated vehicle parking spaces. Upgrades shall be required for remaining parking spaces after meeting the accessibility requirements of California Building Code Chapters 11A and 11B.

**20.26.330 Section 5.106.5.3.4 amended Accessible EVCS.**

Section 5.106.5.3.4 is amended to read as follows:

**5.106.5.3.4 Direct current fast charging stations.** One DCFC may be substituted for up to five (5) EVCS to meet the requirements of 5.106.5.3.1, 5.106.5.3.2, and 5.106.5.3.3. Where ALMS serve DCFC stations, the power demand from the DCFC shall be prioritized above Level 1 and Level 2 spaces.

**20.26.340 Section 5.106.5.4 amended Electric vehicle (EV) charging: medium-duty and heavy-duty.**

Section 5.106.5.4 is amended to read as follows:

**5.106.5.4 Electric vehicle charging readiness.** Construction shall comply with Section 5.106.5.4.1 to facilitate future installation of electric vehicle supply equipment (EVSE). Construction for warehouses,

grocery stores and retail stores with planned off-street loading spaces shall also comply with Section 5.106.5.4.1 for future installation of medium- and heavy-duty EVSE. 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).

**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 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.

**20.26.350 Section 5.106.5.4.1 amended Electric vehicle charging readiness requirements for warehouses, grocery stores and retail stores with planned off-street loading spaces.**

Section 5.106.5.4.1 is amended to read as follows:

**5.106.5.4.1 Warehouses, grocery stores and retail stores with planned off-street loading spaces.** 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 5.106.5.4.1.1 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 5.106.5.4.1.1.
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 EVs as shown in Table 5.106.5.4.1.1.

**20.26.360 Table 5.106.4.1.1 added – Raceway and panel power requirements for medium- and heavy-duty EVSE.**

Tables 5.106.4.1.1 is added to read as follows:

**TABLE 5.106.5.4.1.1, Raceway Conduit and Panel power Requirements for Medium-and-Heavy-Duty EVSE**

Building type	Building Size (sq. ft.)	Number of Off-street loading spaces	Additional capacity Required (kVa) for Raceway & Busway and Transformer & Panel
Grocery	10,000 to 90,000	1 or 2	200
		3 or Greater	400
	Greater than 90,000	1 or Greater	400
Retail	10,000 to 135,000	1 or 2	200
		3 or Greater	400
	Greater than 135,000	1 or Greater	400
Warehouse	20,000 to 256,000	1 or 2	200
		3 or Greater	400
	Greater than 256,000	1 or Greater	400

**20.26.370 Section 5.106.13 added – All-electric buildings.**

Section 5.106.13 is added to read as follows:

**5.106.13 All-electric buildings.** New construction buildings and qualifying alteration projects shall comply with Section 5.106.13.1 or 5.106.13.2 so that they do not use *combustion equipment* or are ready to facilitate future electrification.

**5.106.13.1. New construction and qualifying alteration projects.** All newly constructed buildings shall be *all-electric buildings*. Alterations that include replacement of over 50 percent of the existing foundation for purposes other than a repair or reinforcement as defined in California Existing Building Code Section 202; or where over 50 percent of the existing framing above the sill plate is removed or replaced for purposes other than repair, shall be *all-electric buildings*. If either of these criteria are met within a three-year period, measured from the date of the most recent previously obtained permit final date, the project shall be subject to the *all-electric buildings* requirements.

Tenant improvements shall not be considered new construction. The final determination whether a project meets the definition of substantial reconstruction/alteration shall be made by the local enforcing agency.

**Exceptions:**

1. Nonresidential buildings containing kitchens located in a place of public accommodation, as defined in the California Building Code Chapter 2, may apply to the local enforcing agency for a modification to install *commercial food heat-processing equipment* served by *fuel gas*. The local enforcing agency may grant the modification if they find:
  - a. A business-related need to cook with *combustion equipment*; and
  - b. The need cannot be achieved equivalently with an *electric heating appliance*; and
  - c. The applicant has installed energy efficient equipment based on Energy Star or California Energy Wise qualifications, as available.

- d. The applicant shall comply with Section 5.106.13.2.
2. Nonresidential buildings requiring industrial process heat, as defined in the California Building Code Chapter 2, may apply to the local enforcing agency for a modification to utilize *fuel gas infrastructure* for equipment requiring *industrial process heat*. The local enforcing agency may grant the modification if they find:
  - a. A business-related need to use industrial process heat; and
  - b. The need cannot be achieved equivalently with an *electric heating*.
  - c. The applicant shall comply with Section 5.106.13.2.
3. If the applicant establishes that there is not an all-electric prescriptive compliance pathway for the building under the California Building Energy Efficiency Standards, and that the building is not able to achieve the performance compliance standard applicable to the building under the Energy Efficiency Standards using commercially available technology and an approved calculation method, then the local enforcing agency may grant a modification. The applicant shall comply with Section 5.106.13.2

Inactive *Fuel Gas Infrastructure* may be extended to spaces that are anticipated to qualify for the exceptions contained in this chapter. The inactive *Fuel Gas Infrastructure* shall not be activated, have a meter installed, or otherwise used unless the exemptions specified in this chapter have been confirmed as part of the issuance of a building permit. If the *Fuel Gas Infrastructure* is no longer serving one of the exceptions contained in this chapter, it shall either be capped, otherwise terminated, or removed by the entity previously entitled to the exemption, in a manner pursuant to all applicable Codes.

Pleasanton shall have the authority to approve alternative materials, design and methods of construction or equipment per California Building Code Section 104.

**5.106.13.2. Requirements for *combustion equipment*.**

Where *combustion equipment* is allowed per exceptions under Section 5.106.13.1, the construction drawings shall indicate electrical infrastructure and physical space accommodating the future installation of an *electrical heating appliance* in the following ways, as certified by a registered design professional or licensed electrical contractor:

1. Branch circuit wiring, electrically isolated and designed to serve all electrical heating appliances in accordance with manufacturer requirements and the California Electrical Code, including the appropriate voltage, phase, minimum amperage, and an electrical receptacle or junction box within five feet of the appliance that is accessible with no obstructions. Appropriately sized conduit may be installed in lieu of conductors; and
2. Labeling of both ends of the unused conductors or conduit shall be with “For Future Electrical Appliance”; and
3. Reserved circuit breakers in the electrical panel for each branch circuit, appropriately labeled (i.e. “Reserved for Future Electric Range”), and positioned on the opposite end of the panel supply conductor connection; and
4. Connected subpanels, panelboards, switchboards, busbars, and transformers shall be sized to serve the future electrical heating appliances. The electrical capacity requirements shall be adjusted for demand factors in accordance with the California Electric Code; and
5. Physical space for future electrical heating appliances, including equipment footprint, and if needed a pathway reserved for routing of ductwork to heat pump evaporator(s), shall be depicted on the construction drawings. The footprint necessary for future electrical heating appliances may overlap with non-structural partitions and with the location of currently designed combustion equipment.