

inspection in the office of the Building Official. A reasonable supply of the Electrical Code shall be available in the office of the City Clerk for public purchase.

### **Article 16-49 – Green Building Standards Code**

#### **16-49.010 Adoption of the 2022 California Green Building Standards Code.**

(a) The 2022 California Green Building Standards Code, Title 24, Part 11, hereinafter referred to as the "Green Building Standards Code," referred to and, except as to additions, deletions and amendments hereinafter described, such code is hereby adopted and made a part hereof, the same as if fully set forth in this Article and shall be the Green Building Standards Code of the City. In accordance with California Health and Safety Code Section 17958.7, express findings that modifications to the Building Code are reasonably necessary because of local climatic, geological, or topographical conditions are either already on file with the California Building Standards Commission or will be filed prior to the effective date of the ordinance codified in this Article.

(b) At least one true copy of the Green Building Standards Code has been on file with the City Clerk for fifteen days prior to enactment of the ordinance codified in this Article. While the ordinance codified in this Article is in force, a true copy of the Green Building Standards Code shall be kept for public inspection in the office of the Building Official. A reasonable supply of the Green Building Standards Code shall be available in the office of the City Clerk for public purchase.

(c) The additions, deletions and amendments set forth in this Article are made to the Green Building Standards Code, as adopted by reference in Section 16-49.010(a).

#### **16-49.020 - Amendments to Chapter 2 of Green Building Standards Code; Definitions**

Chapter 2 of the 2022 California Green Building Standards Code is adopted with the following amendments:

##### **Section 202 Definitions**

Amend Section 202 to include the following definitions to read as follows (where Section 202 includes one of the following terms, this amendment replaces that term with the term included here):

**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.

**MOSTLY ELECTRIC BUILDING.** A building that contains no combustion equipment or plumbing for combustion equipment serving space heating (including fireplaces), water heating, and clothes drying, within the building, and instead uses electric heating appliances for service. Gas

power appliances shall be allowed for cooking appliances and exterior appliances (barbeques, firepits and pool heaters).

**Exceptions:**

1. Public agency-owned and operated emergency centers are not required to be built as Electrically Heated Buildings. To take advantage of this exception, an applicant shall provide third party verification that All-Electric space- and water-heating is not cost effective and feasible.

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

**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 READINESS.** If a natural gas-powered cooking appliance, is used in a Mostly Electric Building, the location of such natural gas appliance shall include the following:

**1. Cooktop or range**

A dedicated 240-volt, 30-amp or greater electrical receptacle that is connected to the electric panel with conductors of adequate capacity, within 3 feet of the appliance and accessible with no obstructions;

Both ends of the unused conductor shall be labeled with the words “For Future Electric Range” and be electrically isolated;

A reserved double-pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit and labeled with the words “For Future Electric Range;” and

Other electrical components, including conductors, receptacles, or blank covers, related to this section shall be installed in accordance with the California Electrical Code.

Exception to 100.0(e)(2)(F)(2): if gas or propane plumbing is not installed for a cooktop or range, these requirements do not apply.

**2. Stand Alone Cooking Oven**

A dedicated 240-volt, 30 amp or greater receptacle that is connected to the electric panel with conductors of adequate capacity, within 3 feet of the appliance and accessible with no obstructions;

Both ends of the conductor shall be labeled with the word “For Future Electric Oven” and be electrically isolated; and

A double-pole circuit breaker in the electrical panel labeled with the words “For Future Electric Oven”.

Exception to 100.0(e)(2)(F)(3): if gas or propane plumbing is not installed for a stand-alone cooking oven, these requirements do not apply.

**EVCS:** a parking space that includes the installation of electrical vehicle supply equipment (what is typically considered an EV charger).

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

**Level 1 EV Ready:** minimum of 20-amp (110/120v) plug labeled “Electric Vehicle Outlet”.

**Level 2 EV Ready:** minimum of 40-amp (208/240v) plug labeled “Electric Vehicle Outlet”.

**Low Power Level 2 EV Ready:** minimum 20-amp (208/240v) plug labeled “Electric Vehicle Outlet”.

**NEWLY CONSTRUCTED (or NEW CONSTRUCTION).** A newly constructed building or new construction) does not include additions, alterations or repairs unless deemed a new building as defined in **15-06.195 - Demolition**.

#### **16-49.030 - Amendments to Chapter 4 of Green Building Standards Code; Residential Mandatory Measures**

Chapter 4 of the 2022 California Green Building Standards Code is adopted with the following amendments:

#### **Chapter 4 RESIDENTIAL MANDATORY MEASURES**

##### **Section 4.106 Site Development**

Add Section 4.106.5 to read as follows:

**4.106.5 Mostly 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 for heating, water heating, clothes drying and meet electric readiness requirements for any interior gas cooking appliance

Add Section 4.106.5.1 to read as follows:

**4.106.5.1. New construction and qualifying alteration projects.** All newly constructed building shall be mostly electric buildings. Alterations that consist of:

- a) Removal or covering of more than fifty percent of the exterior walls of an existing structure so the walls no longer function as exterior walls and removal of more than fifty percent of the existing roof structure and exterior roof sheathing; or
- b) Removal or covering of more than fifty percent of the exterior walls of an existing structure so the walls no longer function as exterior walls and removal of more than fifty percent of interior walls.

shall be mostly 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 mostly 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.

**16-49.040 – Amendments to Chapter 5 of Green Building Standards Code; Nonresidential Mandatory Measures**

**16-49.020 Electric Vehicle Charging Requirements.**

Amend Section 4.106.4.1 to read as follows:

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

For each dwelling unit a wired National Electrical Manufacturers Association (NEMA) outlet supplied by a 40-ampere 208/240 volt minimum dedicated branch circuit shall be installed specifically for a Level 2 Electric Vehicle Charger.

A second Level 1 EV dedicated branch circuit (minimum 20-amp 110 v) shall be provided.

One of the required circuits or raceways must be installed inside the garage and the second circuit or raceway must be installed outside of the garage.

Amend Section 4.106.4.2 to read as follows:

**4.106.4.2 Multifamily dwellings with residential parking.**

Requirements apply to parking spaces that are assigned or leased to individual dwelling units as well as unassigned residential parking. Visitor or common area parking is not included.

Amend Section 4.106.4.2.1 to read as follows:

**4.106.4.2.1 New construction.**

Forty percent (40%) of dwelling units with parking spaces shall be EVCS with Level 2 Ready, ALMS shall be permitted to reduce load when multiple vehicles are charging. Sixty percent (60%) of dwelling units with parking spaces shall be provided with at minimum Level 1 Ready space. EV ready spaces and EVCS in multifamily developments shall comply with California building Code, Chapter 11A, Section 1109A. EVCS shall comply with accessibility provisions for EV chargers in the California building Code chapter 11B.

Amend section 4.106.4.2.2

**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.

Exception: Repairs or replacement of existing lighting

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).

Add Section 4.303.5 to read as follows:

**4.303.50 Indoor Water Use.** One- and two-family dwellings shall be equipped with a demand hot water recirculation system

Add Section 4.305.1 to read as follows:

**4.305.1 Graywater.** Piping is installed to permit future use of a graywater system served by the clothes washer and other greywater fixtures

### **16-49.040 - Amendments to Chapter 5 of Green Building Standards Code; Nonresidential Mandatory Measures**

Chapter 5 of the 2022 California Green Building Standards Code is adopted with the following amendments:

## **Chapter 5 – NONRESIDENTIAL MANDATORY MEASURES**

### **Section 5.106- SITE DEVELOPMENT**

Add Section 5.106.13 to read as follows:

**5.106.13 Mostly 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 for heating, water heating, clothes drying and meet electric readiness requirements for any interior gas cooking appliance

Exceptions:

1. Public agency-owned and operated emergency centers are not required to be built as Electrically Heated Buildings. To take advantage of this exception, an applicant shall provide third party verification that All-Electric space- and water-heating is not cost effective and feasible.

Add Section 5.106.13.1 to read as follows:

**5.106.13.1. New construction and qualifying alteration projects.** All newly constructed building shall be mostly electric buildings. Alterations that consist of:

- (a) Removal or covering of more than fifty percent of the exterior walls of an existing structure so the walls no longer function as exterior walls and removal of more than fifty percent of the existing roof structure and exterior roof sheathing; or
- (b) Removal or covering of more than fifty percent of the exterior walls of an existing structure so the walls no longer function as exterior walls and removal of more than fifty percent of interior walls.

shall be mostly 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 mostly 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.

### **Article 16-51 – Energy Code**

#### **16-51.010 Adoption of the 2022 California Energy Code.**

(a) The 2022 California Energy Code, Title 24, Part 6, hereinafter referred to as “the Energy Code,” is referred to and, except as to additions, deletions and amendments hereinafter described, such code is hereby adopted and made a part hereof, the same as if fully set forth in this Article, and shall be the Energy Code of the City. Notwithstanding the foregoing, the additions, deletions, and amendments hereinafter described shall not take effect until the California Energy Commission approval process is completed.

(i) In accordance with California Health and Safety Code Section 17958.7, express findings that modifications to the Energy Code are reasonably necessary because of local climatic, geological, or topographical conditions are either already on file with the California Building Standards Commission or will be filed prior to the effective date of the ordinance codified in this Article.

(ii) Pursuant to California Public Resources Code Section 25402.1(h)(2), the City Council’s findings that modifications to the Energy Code are cost-effective and will require the diminution of energy consumption levels permitted by the Energy Code are either already on file with the California Energy Commission or will be filed prior to the effective date of the ordinance codified in this Article.

(b) At least one true copy of the Energy Code has been on file with the City Clerk for fifteen days prior to enactment of the ordinance codified in this Article. While the ordinance codified in this Article is in force, a true copy of the Energy Code shall be kept for public inspection in the office of the Building Official. A reasonable supply of the Energy Code shall be available in the office of the City Clerk for public purchase.

### **Article 16-55 – Referenced Standards Code**

#### **16-55.010 Adoption of the 2022 California Referenced Standards Code**