FINAL EXPRESS TERMS
FOR PROPOSED BUILDING STANDARDS OF THE CALIFORNIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT REGARDING THE 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11

(HCD 03/21)

The State agency shall draft the regulations in plain, straightforward language, avoiding technical terms as much as possible and using a coherent and easily readable style. The agency shall draft the regulation in plain English. A notation shall follow the express terms of each regulation listing the specific statutes authorizing the adoption and listing specific statutes being implemented, interpreted, or made specific (Government Code Section 11346.2(a)(1)).

If using assistive technology, please adjust your settings to recognize underline, strikeout and ellipsis.

LEGEND for EXPRESS TERMS

- Existing California amendments appear upright
- Amended or new California amendments appear underlined
- Repealed California language appears ~~upright and in strikeout~~
- Ellipsis (...) indicate existing text remains unchanged

FINAL EXPRESS TERMS

Item 1: HCD proposes to bring forward existing California amendments in Chapter 1, from the 2019 California Green Building Standards (CALGreen) Code for adoption into the 2022 CALGreen with modification.

CHAPTER 1
ADMINISTRATION

SECTION 104
DEPARTMENT OF HOUSING
AND COMMUNITY DEVELOPMENT

104.1 Scope. Specific scope of application … (No change to existing California amendment.)

1. **Housing construction.** (No change to existing California amendment.)
   Application – (No change to existing California amendment.)
   Enforcing agency – (No change to existing California amendment.)
   Authority cited – *Health and Safety Code* Sections 17040, 17920.9, 17921, 17921.5, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17922.14, 17922.15, 17926, 17927, 17928, 17958.12, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference – Business and Professions Code Division 5; *Health and Safety Code* Sections 17000 through ~~17060~~ 17062.5, 17910 through ~~17990~~ 17995.5, 18200 through 18700, 18860 through 18874, 18938.6, 18941, 19890, 19891, 19892~~,~~ and 19960 through 19997; Civil Code Sections 832, 1101.4, 1101.5, 1954.201, 1954.202, and 5551; Government Code Sections 8698.4, 12955.1, and 12955.1.1; and California Code of Regulations, Title 20, Sections 1605.1, 1605.3, and 1607.

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17921.5, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17922.14, 17922.15, 17926, 17927, 17928, 17958.12, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1 through 18873.5, 18938.3, 18944.11 and 19990; and Government Code Sections 12955.1 and 12855.1,1.

Reference(s): Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.6, 18941, 18941.5, 19890, 19891, 19892 and 19960 through 19997; Civil Code Sections 1101.4, 1101.5, 1954.201, 1954.202 and 5551; and Government Code Sections 8698.4, 12955.1, 12955.1.1 and 65852.2. California Code of Regulations, Title 20, Sections 1605.1, 1605.3 and 1607.

Item 2: HCD proposes to bring forward existing California amendments in Chapter 2, from the 2019 CALGreen, and adopt new California amendments for adoption into the 2022 CALGreen with modification.

CHAPTER 2
DEFINITIONS

SECTION 202
DEFINITIONS

AUTOMATIC LOAD MANAGEMENT SYSTEM (ALMS). A system designed to manage load across one or more electric vehicle supply equipment (EVSE) to share electrical capacity and/or automatically manage power at each connection point.

ELECTRIC VEHICLE (EV) CAPABLE SPACE. A vehicle space with electrical panel space and load capacity to support a branch circuit and necessary raceways, both underground and/or surface mounted, to support EV charging.

ELECTRIC VEHICLE (EV) READY SPACE. [HCD] A vehicle space which is provided with a branch circuit; any necessary raceways, both underground and/or surface mounted; to accommodate EV charging, terminating in a receptacle or a charger.

LEVEL 2 ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE). [HCD] The 208/240 Volt 40-ampere branch circuit, and 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 ELECTRIC VEHICLE (EV) CHARGING RECEPTACLE. [HCD] A 208/240 Volt 20- ampere minimum branch circuit and a receptacle for use by an EV driver to charge their electric vehicle or hybrid electric vehicle.

…

~~**URINAL, HYBRID**~~ **NONWATER URINAL WITH DRAIN CLEANSING ACTION.** A nonwater urinal that conveys waste into the drainage system without the use of water for flushing and automatically performs a drain-cleansing action after a predetermined amount of time.

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Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17921.5, 17921.10, 17922, 17922.12, 17922.14, 17928, 18938.3, 18941.10, 18944.11, and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Business and Professions Code Division 5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18938.3, and 19960 through 19997; Civil Code Sections 1101.3, 1101.4, 1101.5, 1954.201, and 1954.202; Government Code Sections 12955.1, 12955.1.1, and 65852.2; Water Code Sections 516 and 517; and California Code of Regulations, Title 20, Sections 1605.1, 1605.3, and 1607.

Item 3: HCD proposes to bring forward existing California amendments in Chapter 3, from the 2019 CALGreen, for adoption into the 2022 CALGreen with modification.

CHAPTER 3
GREEN BUILDING

SECTION 301
GENERAL

301.1 Scope. … (No change to existing California amendment.)

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. See Section 4.106.4.2.3 for application.

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.

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17921.5,

17921.10, 17922, 17922.12, 17922.14, 17928, 18938.3, 18941.10, 18944.11, and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Business and Professions Code Division 5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18938.3, and 19960 through 19997; Civil Code Sections 1101.3, 1101.4, 1101.5, 1954.201, and 1954.202; Government Code Sections 12955.1, 12955.1.1, and 65852.2; Water Code Sections 516 and 517; and California Code of Regulations, Title 20, Sections 1605.1, 1605.3, and 1607.

Item 4: HCD proposes to bring forward existing California amendments in Chapter 4, Division 4.1, from the 2019 CALGreen, for adoption into the 2022 CALGreen with modification.

CHAPTER 4
RESIDENTIAL MANDATORY MEASURES
DIVISION 4.1, PLANNING AND DESIGN

SECTION 4.106
SITE DEVELOPMENT

4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Section 4.106.4.1~~,~~ or 4.106.4.2~~, or 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.

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~~ local utility power supply or the local utility is unable to supply adequate power.
    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 to the homeowner or the developer by more than $400.00 per dwelling unit.~~ 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.

…

~~**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. Calculations for the required number of EV spaces 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.
3. A parking space served by electric vehicle supply equipment or designed as a future 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.

4.106.4.2.1 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 EV chargers 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 11B.

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 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:** A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the proposed location of the EV space, at the time of original construction in accordance with the *California Electrical Code*.~~

~~**4.106.4.2.4 Multiple EV spaces required.** 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 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:** A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the proposed location of the EV space, at the time of original construction in accordance with the *California Electrical Code*.~~

~~**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 New multifamily dwellings, hotels and motels and new residential parking facilities. When parking is provided, parking spaces for new multifamily dwellings, hotels and motels shall meet the requirements of Sections 4.106.4.2.1 and 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 a future 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.

4.106.4.2.1 Multifamily development projects with less than 20 dwelling units; and hotels and motels with less than 20 sleeping units or guest rooms. The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to this section.

1. **EV Capable.** 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 Level 2 EVSE. 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.

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*.

Exceptions:

1. When EV chargers (Level 2 EVSE) are installed in a number equal to or greater than the required number of EV capable spaces.
2. When EV chargers (Level 2 EVSE) are installed in a number less than the required number of EV capable spaces, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed.

Notes:

a. Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.

b. There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.

2. **EV Ready.** Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.

Exception: Areas of parking facilities served by parking lifts.

4.106.4.2.2 Multifamily development projects with 20 or more dwelling units, hotels and motels with 20 or more sleeping units or guest rooms. The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to this section.

1. **EV Capable**. 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 Level 2 EVSE. 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.

   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*.

   Exception: When EV chargers (Level 2 EVSE) are installed in a number greater than five (5) percent of parking spaces required by Section 4.106.4.2.2, Item 3, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed over the five (5) percent required.

Notes:

a. Construction documents shall show locations of future EV spaces.

b. There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.

2. **EV Ready.** Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.

   Exception: Areas of parking facilities served by parking lifts.

3. **EV Chargers.** Five (5) percent of the total number of parking spaces shall be equipped with Level 2 EVSE. Where common use parking is provided, at least one EV charger shall be located in the common use parking area and shall be available for use by all residents or guests.

   When low power Level 2 EV charging receptacles or Level 2 EVSE 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 EVSE shall have a capacity of not less than 30 amperes. ALMS shall not be used to reduce the minimum required electrical capacity to the required EV capable spaces.

4.106.4.2.2.1 Electric vehicle charging stations (EVCS). Electric vehicle charging stations required by Section 4.106.4.2.2, Item 3, shall comply with Section 4.106.4.2.2.1.

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.

4.106.4.2.2.1.1 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 4.106.4.2.2.1.1 and Section 4.106.4.2.2.1.2, Item 3.

4.106.4.2.2.1.2 Electric vehicle charging stations (EVCS) 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.

4.106.4.2.2.1.3 Accessible EV spaces. In addition to the requirements in Sections 4.106.4.2.2.1.1 and 4.106.4.2.2.1.2, all EVSE, when installed, shall comply with the accessibility provisions for EV chargers in the *California Building Code*, Chapter 11B. EV ready spaces and EVCS in multifamily developments shall comply with *California Building Code*, Chapter 11A, Section 1109A.

4.106.4.2.3 EV space requirements.

1. **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 location or the proposed location of the EV space. Construction documents shall identify the raceway termination point, receptacle or charger location, as applicable. The service panel and/or subpanel shall have a 40-ampere minimum dedicated branch circuit, including branch circuit overcurrent protective device installed, or space(s) reserved to permit installation of a branch circuit overcurrent protective device.

    Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the location or the proposed location of the EV space, at the time of original construction in accordance with the *California Electrical Code*.

2. **Multiple EV spaces required.** Construction documents shall indicate the raceway termination point and the location of installed or future EV spaces, receptacles, or EV chargers. Construction documents shall also provide information on amperage of installed or future receptacles or EVSE, raceway method(s), wiring schematics and electrical load calculations. 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: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the location or the proposed location of the EV space at the time of original construction in accordance with the *California Electrical Code*.

4.106.4.2.4 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*.

4.106.4.2.5 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).

~~**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.~~
3. ~~A parking space served by electric vehicle supply equipment or designed as a future EV charging space shall count as at least one standard automobile parking space 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.~~

~~**4.106.4.3.1 Number of required EV spaces.** The number of required EV spaces shall be based on 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 shall be rounded up to the nearest whole number.~~

~~**TABLE 4.106.4.3.1**~~

~~**TOTAL NUMBER OF PARKING SPACES**~~	~~**NUMBER OF REQURIED 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 Electric vehicle charging for additions and alterations of parking facilities serving existing multifamily 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 (10) percent of the total number of parking spaces added or 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.

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17921.5, 17921.10, 17922, 17922.12, 17922.14, 17928, 18938.3, 18941.10, 18944.11, and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Business and Professions Code Division 5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18938.3, and 19960 through 19997; Civil Code Sections 1101.3, 1101.4, 1101.5, 1954.201, and 1954.202; Government Code Sections 12955.1, 12955.1.1, and 65852.2; Water Code Sections 516 and 517; and California Code of Regulations, Title 20, Sections 1605.1, 1605.3, and 1607.

Item 5: HCD proposes to bring forward existing California amendments in Chapter 4, Division 4.3, from the 2019 CALGreen, for adoption into the 2022 CALGreen without modification.

CHAPTER 4
RESIDENTIAL MANDATORY MEASURES
DIVISION 4.3, WATER EFFICIENCY AND CONSERVATION

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17921.5, 17921.10, 17922, 17922.12, 17922.14, 17928, 18938.3, 18941.10, 18944.11, and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Business and Professions Code Division 5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18938.3, and 19960 through 19997; Civil Code Sections 1101.3, 1101.4, 1101.5, 1954.201, and 1954.202;

Government Code Sections 12955.1, 12955.1.1, and 65852.2; Water Code Sections 516 and 517; and California Code of Regulations, Title 20, Sections 1605.1, 1605.3, and 1607.

Item 6: HCD proposes to bring forward existing California amendments in Chapter 4, Division 4.4, from the 2019 CALGreen, for adoption into the 2022 CALGreen with modification.

CHAPTER 4
RESIDENTIAL MANDATORY MEASURES
DIVISION 4.4, MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

SECTION 4.410
BUILDING MAINTENANCE AND OPERATION

4.410.1 Operation and maintenance manual. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building: (No change to existing California amendment.)

1. Directions to the owner… (No change to existing California amendment.)
2. Operation and maintenance instructions… (No change to existing California amendment.)

…

11. Information and/or drawings identifying the location of grab bar reinforcements.

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17921.5, 17921.10, 17922, 17922.12, 17922.14, 17928, 18938.3, 18941.10, 18944.11, and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Business and Professions Code Division 5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18938.3, and 19960 through 19997; Civil Code Sections 1101.3, 1101.4, 1101.5, 1954.201, and 1954.202; Government Code Sections 12955.1, 12955.1.1, and 65852.2; Water Code Sections 516 and 517; and California Code of Regulations, Title 20, Sections 1605.1, 1605.3, and 1607.

Item 7: HCD proposes to bring forward existing California amendments in Chapter 4, Division 4.5, from the 2019 CALGreen, for adoption into the 2022 CALGreen without modification.

CHAPTER 4
RESIDENTIAL MANDATORY MEASURES
DIVISION 4.5, ENVIRONMENTAL QUALITY

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17921.5,

17921.10, 17922, 17922.12, 17922.14, 17928, 18938.3, 18941.10, 18944.11, and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Business and Professions Code Division 5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18938.3, and 19960 through 19997; Civil Code Sections 1101.3, 1101.4, 1101.5, 1954.201, and 1954.202; Government Code Sections 12955.1, 12955.1.1, and 65852.2; Water Code Sections 516 and 517; and California Code of Regulations, Title 20, Sections 1605.1, 1605.3, and 1607.

Item 8: HCD proposes to bring forward existing California amendments in Chapter 6 from the 2019 CALGreen for adoption into the 2022 CALGreen without modification.

CHAPTER 6
REFERENCED ORGANIZATIONS AND STANDARDS

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17921.5, 17921.10, 17922, 17922.12, 17922.14, 17928, 18938.3, 18941.10, 18944.11, and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Business and Professions Code Division 5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18938.3, and 19960 through 19997; Civil Code Sections 1101.3, 1101.4, 1101.5, 1954.201, and 1954.202; Government Code Sections 12955.1, 12955.1.1, and 65852.2; Water Code Sections 516 and 517; and California Code of Regulations, Title 20, Sections 1605.1, 1605.3, and 1607.

Item 9: HCD proposes to bring forward existing California amendments in Chapter 7 from the 2019 CALGreen for adoption into the 2022 CALGreen without modification.

CHAPTER 7
INSTALLER AND SPECIAL INSPECTOR QUALIFICATIONS

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17921.5, 17921.10, 17922, 17922.12, 17922.14, 17928, 18938.3, 18941.10, 18944.11, and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Business and Professions Code Division 5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18938.3, and 19960 through 19997; Civil Code Sections 1101.3, 1101.4, 1101.5, 1954.201, and 1954.202; Government Code Sections 12955.1, 12955.1.1, and 65852.2; Water Code Sections 516 and 517; and California Code of Regulations, Title 20, Sections 1605.1, 1605.3, and 1607.

Item 10: HCD proposes to NOT adopt existing California amendments in Chapter 8 from the 2019 CALGreen for adoption into the 2022 CALGreen.

CHAPTER 8
COMPLIANCE FORMS, WORKSHEETS AND REFERENCE MATERIAL

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17921.5, 17921.10, 17922, 17922.12, 17922.14, 17928, 18938.3, 18941.10, 18944.11, and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Business and Professions Code Division 5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18938.3, and 19960 through 19997; Civil Code Sections 1101.3, 1101.4, 1101.5, 1954.201, and 1954.202; Government Code Sections 12955.1, 12955.1.1, and 65852.2; Water Code Sections 516 and 517; and California Code of Regulations, Title 20, Sections 1605.1, 1605.3, and 1607.

Item 11: HCD proposes to bring forward existing California amendments in Appendix A4, Division A4.1, from the 2019 CALGreen for adoption into the 2022 CALGreen with modification.

APPENDIX A4
RESIDENTIAL VOLUNTARY MEASURES
DIVISION A4.1, PLANNING AND DESIGN

SECTION A4.106
SITE DEVELOPMENT

A4.106.8.2 New multifamily ~~dwellings~~ development projects and hotels and motels. New multifamily development projects and hotels and motels shall meet the following requirements**.**

~~Tier 1. Fifteen (15) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, but in no case less than one, shall be electric vehicle charging spaces (EV spaces) capable of supporting future EVSE. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.~~

~~Tier 2. Twenty (20) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, but in no case less than one, shall be electric vehicle charging spaces (EV spaces) capable of supporting future EVSE. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.~~

A4.106.8.2.1 Multifamily development projects and hotels and motels.

Tier 1.

EV Ready. Thirty-five (35) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit

when more than one parking space is provided for use by a single dwelling unit.

Exception: Areas of parking facilities served by parking lifts.

EV Chargers for projects with 20 or more dwelling units, sleeping units or guest rooms. Ten (10) percent of the total number of parking spaces shall be equipped with Level 2 EVSE. Where common use parking is provided, at least one EV charger shall be located in the common use parking area and shall be available for use by all residents or guests.

Tier 2.

EV Ready. Forty (40) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.

Exception: Areas of parking facilities served by parking lifts.

EV Chargers for projects with 20 or more dwelling units, sleeping units or guest rooms. Fifteen (15) percent of the total number of parking spaces shall be equipped with Level 2 EVSE. Where common use parking is provided, at least one EV charger shall be located in the common use parking area and shall be available for use by all residents or guests.

A4.106.8.2.~~1.~~2 Technical requirements. The EV spaces required by Section A4.106.8.2 shall be designed and constructed in accordance with Sections ~~4.106.4.2 (Notes), 4.106.4.2.1, 4.106.4.2.2, 4.106.4.2.3, 4.106.4.2.4, and 4.106.4.2.5~~ 4.106.4.2, 4.106.4.2.1 (Notes), 4.106.4.2.2 (Notes), 4.106.4.2.2.1.1, 4.106.4.2.2.1.2, 4.106.4.2.2.1.3, 4.106.4.2.3, 4.106.4.2.4, and 4.106.4.2.5

~~**A4.106.8.3 New hotels and motels**~~

~~**Tier 1. Number of required EV spaces.** The number of required EV spaces shall be based on the total number of parking spaces provided for all types of parking facilities in accordance with Table A4.106.8.3.1. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.~~

~~**TABLE A4.106.8.3.1**~~

~~TOTAL NUMBER OF PARKING SPACES~~	~~TIER 1 NUMBER OF REQUIRED EV SPACES~~
~~0-9~~	~~0~~
~~10-25~~	~~2~~
~~26-50~~	~~3~~
~~51-75~~	~~5~~
~~76-100~~	~~7~~

~~TOTAL NUMBER OF PARKING SPACES~~	~~TIER 1 NUMBER OF REQUIRED EV SPACES~~
~~101-150~~	~~10~~
~~151-200~~	~~14~~
~~201 and over~~	~~8 percent of total~~

~~**Tier 2. Number of required EV spaces.** The number of required EV spaces shall be based on the total number of parking spaces provided for all types of parking facilities in accordance with Table A4.106.8.3.2. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.~~

~~**TABLE A4.106.8.3.2**~~

~~TOTAL NUMBER OF PARKING SPACES~~	~~TIER 2 NUMBER OF REQUIRED EV SPACES~~
~~0-9~~	~~1~~
~~10-25~~	~~2~~
~~26-50~~	~~4~~
~~51-75~~	~~6~~
~~76-100~~	~~9~~
~~101-150~~	~~12~~
~~151-200~~	~~17~~
~~201 and over~~	~~10 percent of total~~

~~**A4.106.8.3.1 Technical requirements.** The EV spaces required by Section A4.106.8.3 shall be designed and constructed in accordance with Sections 4.106.4.3, 4.106.4.3.2, 4.106.4.3.3, 4.106.4.3.4, 4.106.4.3.5, and 4.106.4.3.6.~~

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17921.5, 17921.10, 17922, 17922.12, 17922.14, 17928, 18938.3, 18941.10, 18944.11, and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Business and Professions Code Division 5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18938.3, and 19960 through 19997; Civil Code Sections 1101.3, 1101.4, 1101.5, 1954.201, and 1954.202; Government Code Sections 12955.1, 12955.1.1, and 65852.2; Water Code Sections 516 and 517; and California Code of Regulations, Title 20, Sections 1605.1, 1605.3, and 1607.

Item 12: HCD proposes to bring forward existing California amendments in Appendix A4, Division A4.3, from the 2019 CALGreen for adoption into the 2022 CALGreen with modification.

APPENDIX A4
RESIDENTIAL VOLUNTARY MEASURES
DIVISION A4.3, WATER EFFICIENCY AND CONSERVATION

SECTION A4.303
INDOOR WATER USE

A4.303.4 Nonwater urinals and waterless toilets. Nonwater urinals or composting toilets are installed.

Where approved, ~~hybrid urinals~~ nonwater urinals with drain cleansing action (formerly hybrid urinals), as defined in Chapter 2, shall be considered nonwater urinals.

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17921.5, 17921.10, 17922, 17922.12, 17922.14, 17928, 18938.3, 18941.10, 18944.11, and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Business and Professions Code Division 5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18938.3, and 19960 through 19997; Civil Code Sections 1101.3, 1101.4, 1101.5, 1954.201, and 1954.202; Government Code Sections 12955.1, 12955.1.1, and 65852.2; Water Code Sections 516 and 517; and California Code of Regulations, Title 20, Sections 1605.1, 1605.3, and 1607.

Item 13: HCD proposes to bring forward existing California amendments in Appendix A4, Division A4.4 from the 2019 CALGreen for adoption into the 2022 CALGreen without modification.

APPENDIX A4
RESIDENTIAL VOLUNTARY MEASURES
DIVISION A4.4, MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17921.5, 17921.10, 17922, 17922.12, 17922.14, 17928, 18938.3, 18941.10, 18944.11, and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Business and Professions Code Division 5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18938.3, and 19960 through 19997; Civil Code Sections 1101.3, 1101.4, 1101.5, 1954.201, and 1954.202; Government Code Sections 12955.1, 12955.1.1, and 65852.2; Water Code Sections 516 and 517; and California Code of Regulations, Title 20, Sections 1605.1, 1605.3, and 1607.

Item 14: HCD proposes to bring forward existing California amendments in Appendix A4, Division A4.5, from the 2019 CALGreen for adoption into the 2022 CALGreen without modification.

APPENDIX A4
RESIDENTIAL VOLUNTARY MEASURES
DIVISION A4.5, ENVIRONMENTAL QUALITY

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17921.5, 17921.10, 17922, 17922.12, 17922.14, 17928, 18938.3, 18941.10, 18944.11, and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Business and Professions Code Division 5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18938.3, and 19960 through 19997; Civil Code Sections 1101.3, 1101.4, 1101.5, 1954.201, and 1954.202; Government Code Sections 12955.1, 12955.1.1, and 65852.2; Water Code Sections 516 and 517; and California Code of Regulations, Title 20, Sections 1605.1, 1605.3, and 1607.

Item 15: HCD proposes to bring forward existing California amendments in Chapter A4, Division A4.6, from the 2019 CALGreen for adoption into the 2022 CALGreen with modification.

APPENDIX A4
RESIDENTIAL VOLUNTARY MEASURES
DIVISION A4.6, TIER 1 AND TIER 2

Modifications to correspond to changes in prior Chapters and Appendices.

SECTION A4.602
RESIDENTIAL OCCUPANCIES APPLICATION CHECKLIST
Effective January 1, ~~2020~~ 2023

FEATURE OR MEASURE	LEVELS APPLICANT TO SELECT ELECTIVE MEASURES			VERIFICATIONS ENFORCING AGENCY TO SPECIFY VERIFICATION METHOD		
		Prerequisites and electives [1]		Enforcing Agency	Installer or Designer	Third party
	Mandatory	Tier 1	Tier 2	☐ All	☐ All	☐ All
PLANNING AND DESIGN						
Site Development						
4.106.3 … (No change to existing California amendment.)						
4.106.4.1 Provide capability for electric vehicle charging for one- and two-family dwellings; townhouses with attached private garages; ~~multifamily dwellings; and hotels/motels~~ in accordance with Section 4.106.4.1 ~~or, 4.106.4.2, or 4.106.4.3, as applicable~~.	☒	☐	☐	☐	☐	☐
4.106.4.2 Provide capability for electric vehicle charging for multifamily dwellings and hotels/motels in accordance with Sections 4.106.4.2.1 or 4.106.4.2.2, as applicable.	☒	☐	☐	☐	☐	☐
4.106.4.3 Provide capability for electric vehicle charging for existing parking lots or new parking lots for existing residential buildings in accordance with Section 4.106.4.3, as applicable.	☒	☐	☐	☐	☐	☐
4.106.1 Reserved. (No change to existing California amendment.)		☐	☐	☐	☐	☐
…						
A4.106.8.1 Tier 1 and Tier 2 for one- and two-family dwellings… (No change to existing California amendment.)						
A4.106.8.2 Provide capability for future electric vehicle charging in new multifamily dwellings and hotels and motels, as specified. **Tier 1.** ~~In 15 percent of total parking spaces.~~ 35 percent of the total number of parking spaces shall be electric vehicle (EV ready) with low power Level 2 EV charging receptacles. For projects with 20 or more dwelling units, sleeping units or guest rooms, 10 percent of the total number of parking spaces shall be equipped with Level 2 EVSE. **Tier 2.** ~~In 20 percent of total parking spaces.~~ 40 percent of the total number of parking spaces shall be electric vehicle (EV ready) with low power Level 2 EV charging receptacles. For projects with 20 or more dwelling units, sleeping units or guest rooms, 15 percent of the total number of parking spaces shall be equipped with Level 2 EVSE.		☒	☒	☐ ☐	☐ ☐	☐ ☐
~~**A4.106.8.3** Provide electric vehicle spaces for new hotels and motels.~~ ~~**Tier 1.** Install EV spaces per Table A4.106.8.3.1.~~ ~~**Tier 2.** Install EV spaces per Table A4.106.8.3.2.~~		☒	☒	☐ ☐	☐ ☐	☐ ☐
A4.106.9 (No change to existing California amendment.)						
…						

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17921.5, 17921.10, 17922, 17922.12, 17922.14, 17928, 18938.3, 18941.10, 18944.11, and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Business and Professions Code Division 5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18938.3, and 19960 through 19997; Civil Code Sections 1101.3, 1101.4, 1101.5, 1954.201, and 1954.202; Government Code Sections 12955.1, 12955.1.1, and 65852.2; Water Code Sections 516 and 517; and California Code of Regulations, Title 20, Sections 1605.1, 1605.3, and 1607.