

**PROPOSED EXPRESS TERMS
FOR
PROPOSED BUILDING STANDARDS
OF THE
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
REGARDING THE 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN)
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11

(HCD XXX)**

The Department of Housing and Community Development (HCD) proposes to make necessary changes to be included into the 2019 edition of the California Green Building Standards Code (CALGreen) as presented on the following pages, including any necessary amendments.

LEGEND FOR EXPRESS TERMS:

1. **Existing California text or language being modified:** All language is shown in normal Arial 9 point; modified language is underlined or shown in ~~strikeout~~.
 4. **Text not being modified:** All language not displayed in full is shown as "..." (i.e., ellipsis).
 5. **Repealed text:** All language shown in ~~strikeout~~.
 6. **Notation:** Authority and Reference citations are provided at the end of each section.
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1. HCD proposes to continue adoption of Chapter 1, Sections 101, 102 and 104, from the 2016 CALGreen into the 2019 CALGreen with modifications as follows:

**CHAPTER 1
ADMINISTRATION**

**SECTION 101
GENERAL**

101.8 Alternate materials, designs and methods of construction. The provisions of this code are not intended to prevent the use of any alternate material, appliance, installation, device, arrangement, method, design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternate shall be approved on a case-by-case basis where the enforcing agency finds that the proposed alternate is satisfactory and complies with the intent of the provisions of this code and is at least the equivalent of that prescribed in this code in planning and design, energy, water, material conservation and resource efficiency, environmental air quality, performance, safety and the protection of life and health. Consideration and compliance provisions for occupancies regulated by adopting state agencies are found in the sections listed below.

1. Section 1.2.2 in the *California Building Code* (CBC) for the California Building Standards Commission.
 2. Section 104.11 of Chapter 1, Division II for the Division of the State Architect.
 3. Section 1.8.7, Chapter 1, **Administration**, Division **4**, of the **2016 2019** *California Building Code*; and Section 1.2.6, Chapter 1, **Administration**, Division **4**, of the **2016 2019** *California Residential Code* for the Department of Housing and Community Development.
 4. Section 7-104, 2013 *California Administrative Code* for the Office of the Statewide Health Planning and Development.
- **Rationale:** HCD proposes to continue adoption of the above referenced section with new amendment. HCD proposes to modify the reference to the applicable codes, and editorial corrections to the text of Item 3 for consistency with other parts of Title 24.

The proposed amendment provides clarity and consistency to the code user. There is no intended change in regulatory effect.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17921, 17921.5, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1, and Water Code Section 14877.3, 13552.2, 13552.4, 13553.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

2. HCD proposes to continue adoption of Chapter 2 from the 2016 CALGreen into the 2019 CALGreen with new modifications as follows:

**CHAPTER 2
DEFINITIONS**

**SECTION 202
DEFINITIONS**

Note: Definitions amended by the Emergency Supplement are effective July 23, 2015.

- **Rationale:** HCD proposes to continue adoption of the above referenced section with new amendments. HCD proposes to repeal the note; it is no longer needed since the date has already passed. HCD also proposes to adopt five new definitions; the rationale for each definition is provided below.

ACCESSORY DWELLING UNIT. [HCD] An attached or a detached residential dwelling unit, which provides complete independent living facilities for one or more persons. It shall include permanent provisions for living, sleeping, eating, cooking, and sanitation on the same parcel as the primary single-family dwelling is situated. (See Government Code Section 65852.2.)

- **Rationale:** HCD proposes to adopt the above referenced definition to provide clarification of the application of Section 4.106.4. The term "Accessory Dwelling Unit" (ADU) is used in Exception 3, which HCD proposes to adopt. The newly proposed definition is consistent with the definition in the Government Code Section 65852.2, which provides sufficient information on what type of structures are considered to be ADUs.

ACCESSORY OCCUPANCIES. [HCD] Occupancies that are ancillary to the main occupancy of residential building(s) or portions thereof. Accessory occupancies shall include, but not limited to, Group U occupancies. (See Section 312 of the California Building Code.)

- **Rationale:** HCD proposes to adopt the above referenced definition to provide clarification of the application of Section 302.1. The term "Accessory Occupancies" is used in Exception 1, which HCD proposes to adopt. The newly proposed definition is consistent with the language in Chapter 5, Section 508.2, of the California Building Code, which provides additional information on what type of structures are considered accessory occupancies.

ACCESSORY STRUCTURE. [HCD] A structure that is accessory to and incidental to that of the dwelling(s) and that is located on the same lot.

- **Rationale:** HCD proposes to adopt the above referenced definition to provide clarification of the application of Section 302.1. The term "Accessory Structure" is used in Exception 1, which HCD proposes to adopt. The newly proposed definition is consistent with the definition in the California Residential Code.

ALTERNATE WATER SOURCE. Nonpotable source of water that includes but is not limited to gray water, on-site treated non-potable gray water, rainwater, and reclaimed (recycled) water.

- **Rationale:** HCD proposes to adopt the above referenced definition to provide clarification of the application of Section A4.303.2. The term "Alternate Water Source" is used in this section, but it is not defined. The newly proposed definition is consistent with the definition in the California Plumbing Code.

JUNIOR ACCESSORY DWELLING UNIT. [HCD] A unit that is no more than 500 square feet in size and contained entirely within an existing single-family structure. A junior accessory dwelling unit may include separate sanitation facilities, or may share sanitation facilities with the existing structure. (See Government Code Section 65852.22)

- **Rationale:** HCD proposes to adopt the above referenced definition to provide clarification of the application of Section 4.106.4. The term "Junior Accessory Dwelling Unit" (JADU) is used in Exception 3, which HCD proposes to adopt. The newly proposed definition is consistent with the language in the Government Code Section 65852.22, which provides additional information on what type of structures are considered JADUs.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17921, 17921.5, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1, and Water Code Section 14877.3, 13552.2, 13552.4, 13553.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

3. HCD proposes to continue adoption of Chapter 3 from the 2016 CALGreen into the 2019 CALGreen with new modifications as follows:

**CHAPTER 3
GREEN BUILDING**

**SECTION 301
GENERAL**

301.1 Scope. Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.

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.

Note: ~~On and after January 1, 2014, residential buildings undergoing permitted alterations, additions or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. On or before January 1, 2019, all noncompliant plumbing fixtures in any residential real property shall be replaced with water-conserving plumbing fixtures.~~ Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy, or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.

- **Rationale:** HCD proposes to continue adoption of the above referenced section with new amendment. The proposed amendment clarifies and makes specific the existing note, and updates the effective dates of Senate Bill 7 (Chapter 587, Statutes of 2009).

SB 407, codified in the California Civil Code (section 1101.1, *et seq.*), requires replacement of noncompliant plumbing fixtures in all existing single-family residential real property by January 1, 2017, and in all existing multifamily residential real property (including residential hotels) and commercial real property (including hotels and motels) by January 1, 2019. The law also mandates replacement of noncompliant plumbing fixtures in single-family residential buildings (on and after January 1, 2014) for alterations, improvements or additions. The existing note, which was adopted in the 2013 CALGreen, provides a reference to the Civil Code, but addresses only residential buildings undergoing permitted alterations, additions or improvements. Due to the effective dates of the law, the information on this note is obsolete and no longer needed. The proposed modification clarifies the effective dates for compliance, and provides a reference to the specific requirements in the Civil Code.

The proposed amendment provides clarity and consistency to the code user. Since the note is not regulatory and only provides a reference to the existing statute, there is no intended change in regulatory effect.

SECTION 302 MIXED OCCUPANCY BUILDINGS

302.1 Mixed occupancy buildings. In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy.

Exceptions:

1. **[HCD]** Accessory structures and accessory occupancies serving residential buildings shall comply with Chapter 4 and Appendix A4.
2. **[HCD]** For the purposes of CALGreen, live/work units, complying with Section 419 of the California Building Code, shall not be considered mixed occupancies. Live/work units shall comply with Chapter 4 and Appendix A4.

- **Rationale:** HCD proposes to continue adoption of the above referenced section with new amendments. HCD proposes to add two exceptions, intended to clarify the language in Section 302.1. Exception 1 specifies that accessory structures and accessory occupancies serving residential buildings are not mixed use, and are required to comply with the measures for residential buildings in Chapter 4 and Appendix A.4. Accessory structures and occupancies include, but are not limited to, private garages, parking garages, carports, barns, greenhouses, art studios, sheds, fences, pool houses, accessory dwelling units, junior accessory dwelling units, agricultural buildings, and other buildings and occupancies available for use by residents and their guests only (including hotel/motel customers).

Exception 2 specifies that live/work unit, built in compliance with Section 419 of the California Building Code, are also not mixed use and are required to comply with Chapter 4 and Appendix A4. The California Residential Code Section 1.1.3, Exception 1, also provides for live/work units to be built as one- or two-family dwellings or townhouses.

The proposed amendment provides clarity and consistency to the code user. There is no intended change in regulatory effect.

(Definitions of “accessory structure” and “accessory occupancies” are proposed in Chapter 2.)

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17921, 17921.5, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1, and Water Code Section 14877.3, 13552.2, 13552.4, 13553.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

4. HCD proposes to continue adoption of Chapter 4 from the 2016 CALGreen into the 2019 CALGreen with new modifications as follows:

CHAPTER 4 RESIDENTIAL MANDATORY MEASURES

Division 4.1 – PLANNING AND DESIGN

SECTION 4.106 SITE DEVELOPMENT

4.106.2 Storm water drainage and retention during construction. Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site.

1. Retention basins of sufficient size shall be utilized to retain storm water on the site.
2. Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency.
3. Compliance with a lawfully enacted storm water management ordinance.

Note: Refer to the State Water Resources Control Board for projects, which disturb one acre or more of soil, or are part of a larger common plan of development which in total disturbs one acre or more.
(Website: http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml)

- **Rationale:** HCD proposes to continue adoption of the above referenced section with new amendment. The newly proposed "Note" provides a reference to the State Water Resources Control Board's website for projects disturbing one acre or more of soil, or projects part of a larger common plan of development, which in total disturbs one acre or more.

The proposed amendment provides clarity to the code user. There is no intended change in regulatory effect.

4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 4.106.4.1, 4.106.4.2, or 4.106.4.3, to facilitate future installation and use of EV chargers **or other charging equipment**. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code*, Article 625.

Exceptions: 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. Where there is no commercial power supply.
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.
3. **Newly constructed Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.**

- **Rationale:** HCD proposes to continue adoption of the above referenced section with new amendments. HCD proposes to add Exception 3, which will exempt ADUs and JADUs (new definitions proposed in Chapter 2) built without parking facilities from compliance with the requirements for EV spaces in section 4.106.4.

Exception 3 is intended to address conditions in which the planning of EV spaces and installation of EV charging equipment is not feasible. The ADU and JADU law recent changes (Government Code, Sections 65852.2 and 65852.22, respectively) do not allow local jurisdictions to require parking for newly constructed ADUs and JADUs if certain conditions are met. Therefore, there is no reason for a requirement for EV spaces to be enforced for new building/structures without associated facilities to park a vehicle.

In addition, HCD proposes to incorporate new language in the first paragraph, **clarifying that electric vehicle (EV) spaces shall be capable of facilitating future installation and use of EV chargers or other charging equipment.** Modification is necessary since the California Electrical Code allows electric vehicles to be charged by portable chargers (and receptacle outlets), and not fixed in place (hardwired) EV chargers only.

4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger **or other charging equipment**. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

- **Rationale:** HCD proposes to continue adoption of the above referenced section with new amendment. HCD proposes to incorporate new language, recognizing other charging equipment as an option for charging electric vehicles. Modification is necessary since the California Electrical Code allows electric vehicles to be charged by portable chargers using standard receptacle outlets, and not fixed in place EV chargers only.

The proposed amendment provides clarity and consistency with the definition of EV Charging Station (EVCS) in Chapter 2. There is no intended change in regulatory effect.

4.106.4.1.1 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".

4.106.4.2 New multifamily dwellings. ~~Where 17 or more multifamily dwelling units are constructed on a building site, Three (3) 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.

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

- **Rationale:** HCD proposes to continue adoption of the above referenced section with new amendment. HCD proposes to change the application of Section 4.106.4.2 by modifying the first sentence. Currently Section 106.4.2 clarifies application to only projects with 17 or more multifamily dwelling units. HCD adopted this clarification responding to a stakeholder's concern about potential vandalism and maintenance issues for EV chargers installed in common and public use areas. CCR, Title 25, Section 42, requires an owner or other responsible person to reside in the premises if there are more than 16 apartments on the site. HCD's assumption was that the caretaker would assume responsibility for charging equipment, if installed.

However, data collected by the California Air Resources Board (CARB) demonstrates that most of the EV charging equipment installed in common and public use areas is secured and maintained by the owner/lessee of the equipment, not the owner/manager of the residential property. Therefore, there is no reason for this condition (for 17 or more multifamily dwelling units on the site) to remain in this section.

The **proposed amendment would apply the EV charging infrastructure requirements to all multifamily projects regardless of number of dwelling units** unless the project is subject to exceptions in Section 4.106.4. This amendment would further the goal of reaching the Governor's 2012 Executive Order B-16-12 goals for 1.5 million Zero Emission Vehicles in California by 2025. It is not known how many additional parking spaces may need EV charging capability due to the proposed amendment.

4.106.4.2.1 Electric vehicle charging space (EV space) locations. Construction documents shall indicate the location of proposed EV spaces. At least one EV space shall be located in common use areas and available for use by all residents.

OPTION 1:

Exception: Developments without common use areas do not require EV space(s) available for use by all residents, as determined by the enforcing agency.

OPTION 2:

Exception: Developments without common use areas do not require EV space(s) available for use by all residents, where approved by the enforcing agency.

OPTION 3:

Exception: When approved by the enforcing agency, developments without common use areas do not require EV space(s) available for use by all residents.

- **Rationale:** HCD proposes to continue adoption of the above referenced section with new amendment. HCD proposes to adopt a new exception, which clarifies that residential developments without common use areas (for parking) may be exempt from the general requirement and do not require EV spaces available for use by all residents. However, the text also specifies that the exception may be applied, only if allowed by the enforcing agency.

The text requiring at least one EV space to be allowed for use by all residents was adopted during the 2013 Intervening Code Adoption Cycle, and became effective on July 1, 2015. At that time, HCD's intent was to address typical developments providing common use parking facilities. However, currently there are many residential developments (transit oriented developments) with limited assigned parking spaces and no common use parking facilities. These buildings/facilities provide access to public transportation and off-street parking (including EV chargers) and do not need additional chargers on the site. Due to the limited space, many of these developments cannot accommodate additional parking/charging spaces.

4.106.4.2.1.1 Electric vehicle charging stations (EVCS). When EV ~~chargers are~~ charger(s) or other charging equipment 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 or other charging equipment 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 4.106.2.2, Item 3.

- **Rationale:** HCD proposes to continue adoption of the above referenced section with new amendment. HCD proposes to separate the existing text (currently in Section 4.106.4.2.1) into a new section with a title in order to clarify that it pertains to EV charging stations, and not to EV spaces with no charging equipment installed. HCD also proposes to incorporate new language, recognizing other charging equipment as an option for charging electric vehicles. Modification is necessary since the California Electrical Code allows electric vehicles to be charged by portable chargers using standard receptacle outlets, and not fixed in place EV chargers only.

In addition, HCD proposes to adopt a new exception, referring to Chapter 11B as an option for compliance with the California accessibility requirements, when EV charging equipment is installed. Currently Section 4.106.4.2.1 mandates the location of EV spaces (1 in 25) when EV charging equipment is installed; however, the installed charging equipment is also required to comply with the applicable sections in Chapter 11A in order to provide access for persons with disabilities. The Division of State Architect (DSA) developed comprehensive standards for EVCS when EV charging equipment is installed. These standards, located in Chapter 11B, apply to public buildings and public accommodations. Nevertheless, the newly proposed exception allows designers, developers, and owners to design and construct EVCS following the requirements in Chapter 11B, instead CALGreen and Chapter 11A.

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~~ **an EV charger or other charging equipment**. 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.

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 **or other charging equipment**. 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.

- **Rationale for Sections 4.106.4.2.3 and 4.106.4.2.4:** HCD proposes to continue adoption of the above referenced sections with new amendments. HCD proposes to incorporate new language, recognizing other charging equipment as an option for charging electric vehicles. Modification is necessary since the California Electrical Code allows electric vehicles to be charged by portable chargers using standard receptacle outlets, and not fixed in place EV chargers only.

Proposed amendments provide clarity and consistency with other sections in CALGreen. There is no intended change in regulatory effect.

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*.

Notes:

1. The California Department of Transportation adopts and publishes the “California Manual on Uniform Traffic Control Devices (California MUTCD)” to provide uniform standards and specifications for all official traffic control devices in California. Zero Emission Vehicle Signs and Pavement Markings can be found in the New Policies & Directives Number 13-01. Website: <http://www.dot.ca.gov/trafficops/policy/13-01.pdf>

2. See Vehicle Code Section 22511 for EV charging space signage in off-street parking facilities and for use of EV charging spaces.

3. The Governor’s Office of Planning and Research (OPR) published a “Zero Emission Vehicle Community Readiness Guidebook” which provides helpful information for local governments, residents and businesses. Website: http://opr.ca.gov/docs/ZEV_Guidebook.pdf.

- **Rationale:** HCD proposes to continue adoption of the above referenced section with new amendment. HCD proposes to repeal the “Notes” and relocate the information to the CALGreen Guide, upon update to the 2019 version. The proposed repeal is necessary since the language in these notes is not regulatory and would be better placed in the Guide. The links provided as part of the notes are also difficult to maintain in an 18-month rulemaking process since HCD has no control over the websites of other state agencies. The proposed amendment facilitates easier maintenance and updating of the references. There is no intended change in regulatory effect.

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

Notes:

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

4.106.4.3.1 Number of required EV spaces. The number of required EV spaces 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 REQUIRED EV SPACES
0-9	0
10-25	1
26-50	2
51-75	4
76-100	5
101-150	7
151-200	10
201 and over	6 percent of total

4.106.4.3.2 Electric vehicle charging space (EV space) dimensions. The EV spaces shall be designed to comply with the following:

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

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

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

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

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

Notes:

1. The California Department of Transportation adopts and publishes the "California Manual on Uniform Traffic Control Devices (California MUTCD)" to provide uniform standards and specifications for all official traffic control devices in California. Zero Emission Vehicle Signs and Pavement Markings can be found in the New Policies & Directives Number 13-01. Website: <http://www.dot.ca.gov/trafficops/policy.html>
2. See Vehicle Code Section 22511 for EV charging space signage in off-street parking facilities and for use of EV charging spaces.
3. The Governor's Office of Planning and Research (OPR) published a "Zero Emission Vehicle Community Readiness Guidebook" which provides helpful information for local governments, residents and businesses. Website: <https://opr.ca.gov/docs/ZEV-Guidebook.pdf>.
4. The Governor's Interagency Working Group on Zero-emission Vehicles, 2016, "2016 ZEV Action Plan, An Updated Roadmap toward 1.5 Million Zero Emission Vehicles on California Roadways by 2025." https://www.gov.ca.gov/docs/2016_ZEV_Action_Plan.pdf

- **Rationale:** HCD proposes to continue adoption of the above referenced section with new amendments. HCD proposes to repeal the "Notes" and relocate the information to the Guide to the CALGreen Guide, upon update to the 2019 version. The proposed repeal is necessary since the language in these notes is not regulatory and would be better placed in the guide. The links provided as part of the notes are also difficult to maintain in an 18-month rulemaking process since HCD has no control over the websites of other state agencies.

The proposed amendment facilitates easier maintenance and updating of the references. There is no intended change in regulatory effect.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17921, 17921.5, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1, and Water Code Section 14877.3, 13552.2, 13552.4, 13553.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

Division 4.3 – WATER EFFICIENCY AND CONSERVATION

**SECTION 4.304
OUTDOOR WATER USE**

4.304.1 Outdoor potable water use in landscape areas. ~~After December 1, 2015, new~~ **New** residential developments with an aggregate landscape area equal to or greater than 500 square feet shall comply with one of the following options:

1. A local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent; or
2. Projects with aggregate landscape areas less than 2,500 square feet may comply with the MWELO's Appendix D Prescriptive Compliance Option.

Notes:

1. The Model Water Efficient Landscape Ordinance (MWELO) and supporting documents are available at: <http://www.water.ca.gov/wateruseefficiency/landscapeordinance/>
 2. A water budget calculator is available at: <http://www.water.ca.gov/wateruseefficiency/landscapeordinance/>
- **Rationale:** HCD proposes to continue adoption of the above referenced section with new amendment. HCD proposes to modify the language by repealing the date since this date has passed and it is no longer needed.

The proposed amendment provides clarity and consistency to the code user. There is no intended change in regulatory effect.

Note: The Department of Water Resources (DWR) is currently working on modifications to the last version of MWELO, which will be effective January 1, 2020. Section 4.304.1 may need to be further amended to incorporate the DWR changes, if any.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17921, 17921.5, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1, and Water Code Section 14877.3, 13552.2, 13552.4, 13553.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

Division 4.5 – ENVIRONMENTAL QUALITY

**SECTION 4.507
ENVIRONMENTAL COMFORT**

4.507.1 Reserved.

4.507.2 Heating and air-conditioning system design. Heating and air-conditioning systems shall be sized, designed and have their equipment selected using the following methods:

1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J—~~2014~~ **2016** (*Residential Load Calculation*), ASHRAE handbooks or other equivalent design software or methods.
2. Duct systems are sized according to ANSI/ACCA 1 Manual D—~~2014~~ **2016** (*Residential Duct Systems*), ASHRAE handbooks or other equivalent design software or methods.
3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S—2014 (*Residential Equipment Selection*) or other equivalent design software or methods.

Exception: Use of alternate design temperatures necessary to ensure the systems function are acceptable.

- **Rationale:** HCD proposes to continue adoption of the above referenced section with new amendments. HCD proposes to update the language to include the current version of the standards.

The proposed amendment provides clarity and consistency to the code user.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17921, 17921.5, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1, and Water Code Section 14877.3, 13552.2, 13552.4, 13553.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

5. HCD proposes to continue adoption of Chapter 6 from the 2016 CALGreen into the 2019 CALGreen without modification.

CHAPTER 6 REFERENCED ORGANIZATIONS AND STANDARDS

ORGANIZATION	STANDARD	REFERENCED SECTION
ACCA Air Conditioning Contractors of American		
2800 Shirlington Road, Suite 300 Arlington, VA 22206 www.acca.org	ANSI/ACCA 2 Manual J— 2014 2016 ANSI/ACCA 1 Manual D— 2014 2016 ANSI/ACCA 3 Manual S—2014	4.507.2 4.507.2 4.507.2
ANSI American National Standards Institute		
Operations Office 25 West 43rd Street, Fourth Floor New York, NY 10036 www.ansi.org	ANSI/AHAM DW-1-2010 NSF/ANSI 140-2014 ANSI/ACCA 2 Manual J— 2014 2016 ANSI/ACCA 1 Manual D— 2014 2016 ANSI/ACCA 3 Manual S—2014	202 4.504.3, 5.504.4.4 4.507.2 4.507.2 4.507.2
NSF International		
789 Dixboro Rd. Ann Arbor, MI 48113-0140 http://www.nsf.org/	NSF/ANSI 140— 2007 2014	4.504.3, 5.504.4.4

- **Rationale:** HCD proposes to continue adoption of the above referenced section with new amendment. HCD proposes to update the language to include the current version of the standards. The proposed amendment provides clarity and consistency to the code user.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17921, 17921.5, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1, and Water Code Section 14877.3, 13552.2, 13552.4, 13553.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

6. HCD proposes to continue adoption of Chapter 7 from the 2016 CALGreen into the 2019 CALGreen without modification.

**CHAPTER 7
INSTALLER AND SPECIAL INSPECTOR QUALIFICATIONS**

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17921, 17921.5, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1, and Water Code Section 14877.3, 13552.2, 13552.4, 13553.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

7. HCD proposes to continue to not adopt Chapter 8.

**CHAPTER 8
COMPLIANCE FORMS, WORKSHEETS AND REFERENCE MATERIALS**

[HCD 1] Sample forms located at www.hcd.ca.gov/CALGreen.html may be used to assist in documenting compliance with CALGreen.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17921, 17921.5, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1, and Water Code Section 14877.3, 13552.2, 13552.4, 13553.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

8. HCD proposes to continue adoption of Appendix Chapter A4 from the 2016 CALGreen into the 2019 CALGreen with new modifications as follows:

**APPENDIX A4
RESIDENTIAL VOLUNTARY MEASURES**

Division A4.1 – PLANNING AND DESIGN

SECTION A4.106 SITE DEVELOPMENT

A4.106.5.3 Solar reflectance index alternative. Solar Reflectance Index (SRI) equal to or greater than the values specified in Tables A4.106.5.1(1) and A4.106.5.1(3) for Tier 1 and Tables A4.106.5.1(2) and A4.106.5.1(4) for Tier 2 may be used as an alternative to compliance with the 3-year aged solar reflectance values and thermal emittance.

SRI values used to comply with this section shall be calculated using the Solar Reflectance Index (SRI) Calculation Worksheet (SRI-WS) developed by the California Energy Commission or in compliance with ASTM E1980-01 as specified in the 2016 2019 *California Energy Code*. Solar reflectance values used in the SRI-WS shall be based on the aged reflectance value of the roofing product or the equation in Section A4.106.5.1 if the CRRRC certified aged solar reflectance are not available. Certified thermal emittance used in the SRI-WS may be either the initial value or the aged value listed by the CRRRC.

Solar reflectance and thermal emittance may also be certified by other supervisory entities approved by the Commission pursuant to Title 24, Part 1, *California Administrative Code*.

- **Rationale:** HCD proposes to continue adoption of the above referenced section with new amendment. HCD proposes to modify the reference to the applicable version of the California Energy Code. The proposed amendment provides clarity and consistency to the code user. There is no intended change in regulatory effect.

Note: The Solar Reflectance Index Calculation Worksheet (SRI-WS) is available by contacting the Energy Standards Hotline at 1-800-772-3300, website at www.energy.ca.gov or by email at Title24@energy.state.ca.us.

A4.106.8 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections A4.106.8.1 and A4.106.8.2, or A4.106.8.3, to facilitate future installation and use of electric vehicle chargers or other charging equipment. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code*, Article 625.

- **Rationale:** HCD proposes to continue adoption of the above referenced section with new amendments. HCD proposes to incorporate new language, recognizing other charging equipment as an option for charging electric vehicles. Modification is necessary since the California Electrical Code allows electric vehicles to be charged by portable chargers using standard receptacle outlets, and not fixed in place EV chargers only. In addition, HCD proposes to modify the language and refer to the newly proposed Section A4.106.8.3, addressing hotels/motels.

Proposed amendments provide clarity and consistency with other sections in CALGreen. There is no intended change in regulatory effect.

A4.106.8.2 New multifamily dwellings.

Tier 1 and Tier 2. Where 17 or more multifamily dwelling units are constructed on a building site, Five (5) percent of the total number of parking spaces 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. At least one EV space required in Tier 1 shall be an electric vehicle charging station (EVCS), as defined in Chapter 2, and available for use by all residents.

A4.106.8.2.1 Technical requirements. The EV spaces and EVCS required by Section A4.106.8.2 shall be designed and constructed in accordance with Sections 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.

See Section 4.106.4.2 for additional requirements related to EVCS for multifamily dwellings.

Notes:

1. The California Department of Transportation adopts and publishes the "California Manual on Uniform Traffic Control Devices (California MUTCD)" to provide uniform standards and specifications for all official traffic control devices in California. Zero Emission Vehicle Signs and Pavement Markings can be found in the New Policies & Directives Number 13-01. Website: <http://www.dot.ca.gov/hq/traffops/policy.htm>
2. See Vehicle Code Section 22511 for EV charging space signage in off-street parking facilities and for use of EV charging spaces.
3. The Governor's Office of Planning and Research (OPR) published a "Zero Emission Vehicle Community Readiness Guidebook" which provides helpful information for local governments, residents and businesses. Website: http://opr.ca.gov/docs/ZEV_Guidebook.pdf.

- **Rationale:** HCD proposes to continue adoption of the above referenced section with new amendment. HCD proposes to change the application of Section A4.106.8.2 by modifying the first sentence. Currently Section A4.106.8.2 clarifies application to only projects with 17 or more multifamily dwelling units. HCD adopted this clarification responding to a stakeholder's concern about potential vandalism and maintenance issues for EV chargers installed in common and public use areas. CCR, Title 25, Section 42, requires an owner or other responsible person to reside on the premises if there are more than 16 apartments on the site. HCD's assumption was that the caretaker would assume responsibility for charging equipment, if installed. However, data collected by the California Air Resources Board (CARB) demonstrates that most of the EV charging equipment installed in common and public used areas is secured and maintained by the owner/lesser of the equipment, not the owner/manager of the residential property. Therefore, there is no reason for this condition (for 17 or more multifamily dwelling units on the site) to remain in this section.

The proposed amendment would apply the Tier 1 EV charging infrastructure requirements to all multifamily projects regardless of number of dwelling units if voluntary Tier 1 is adopted. It is unknown how many additional parking spaces may need EV charging capability from the existing Tier 1 requirement.

HCD proposes to adopt a new voluntary Tier 2 provision for newly constructed multifamily dwellings. The new Tier 2 will require at least one EVCS which means an EV charger or other charging equipment would be installed and available for use.

HCD proposes to include new Section A4.106.8.2.1 and repeal a sentence referencing Section 4.106.4.2. The new section provides more specific references and provides clarity to the code user. There is no intended change in regulatory effect.

HCD proposes to repeal the "Notes," and relocate the information to the CALGreen Guide upon the update to the 2019 version. The proposed repeal is necessary since the language in these notes is not regulatory and would be better placed in the Guide. The links provided as part of the notes are also difficult to maintain in an 18-month rulemaking process since HCD has no control over the websites of other state agencies.

The proposed amendment facilitates easier maintenance and updating of the references. There is no intended change in regulatory effect.

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	NUMBER OF REQUIRED EV SPACES
0-9	1
10-25	2
26-50	3
51-75	5
76-100	7
101-150	10
151-200	14
201 and over	8 percent of total

Tier 2. At least one EV space required in Tier 1 shall be an EVCS, as defined in Chapter 2.

A4.106.8.3.1 Technical requirements. The EV spaces and EV charging station(s) 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.

- **Rationale:** HCD proposes to adopt the above referenced sections. HCD proposes to include new voluntary Tier 1 and Tier 2 provisions for newly constructed hotels and motels, continuing its effort from the previous adoption cycle.

The initial proposal related to EV charging infrastructure for hotels/motels was submitted to HCD by the Air Resources Board (ARB) for inclusion in the 2016 Intervening Code Adoption Cycle. After research and coordination with stakeholders and other state agencies, HCD proposed the measures, which were approved for adoption by the Building Standards Commission. Currently the number of parking spaces required to have capability for EV charging mirrors the requirement for non-residential structures in Section 5.106.5.2. The space dimensions, identification and design are similar to the requirements for multifamily charging infrastructure. A reference to Chapter 11B of the California Building Code directs the code user to the accessibility provisions related to EV chargers and use for public accommodations.

The new proposal for Tier 1 is consistent with the requirement for non-residential structures in Section A5.106.5.3.1. HCD takes a different approach for Tier 2, requiring compliance with Tier 1 and at least one EVCS ensuring actual charging capability at the space.

According to ARB, EV charging infrastructure in CALGreen supports the California's Zero Emission Vehicle Program, which aims to improve air quality and reduce greenhouse gas emissions. Although CALGreen has increased the number of required EV spaces from three percent (2013 code) to six percent (2016 code) for nonresidential uses, and requires EV charging infrastructure in 100 percent of new one- and two-family homes and townhomes with attached private garages, and three percent of multifamily homes (2013 and 2016 codes); there was no requirement to facilitate EV charging for hotels and motels. The availability of EV charging (when installed) at hotels and motels provides charging service to EV users traveling between their homes and vacation or other travel locations. This helps reduce range anxiety for some EV users and also provides charging while in a safe and comfortable location or even overnight.

Based upon the cost estimates, provided by the ARB, the cost to install a raceway with an adequate panel capacity is approximately \$800 per EV charging space. This represents a cost increase of only 0.1 percent. By installing EV charging infrastructure in new construction a retrofit costs of \$3,750 to \$6,975 per charging space could be avoided. Statewide, a retrofit costs of \$9.6–\$21.3 million can be avoided by installing EV charging infrastructure in new construction, which results in a benefit of \$7.5–\$18.8 million.

The technical and cost analysis, provided by ARB, is based on the need for California's Zero Emission Vehicle (ZEV) infrastructure to support up to 1 million vehicles by 2020. ARB staff used the National Renewable Energy Laboratory (NREL) plug-in electric vehicle (PEV) infrastructure assessment as the source of information on projected EV charging needs. ARB staff also gathered information on existing, funded and proposed EV charging infrastructure to determine the gap in needed charge points remaining for 2020.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17921, 17921.5, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1, and Water Code Section 14877.3, 13552.2, 13552.4, 13553.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

Division A4.3 – WATER EFFICIENCY AND CONSERVATION

**SECTION A4.302
DEFINITIONS**

A4.302.1 Definition. The following term is defined in Chapter 2.

ALTERNATE WATER SOURCE.

REFERENCE EVAPOTRANSPIRATION (E_{To})

- **Rationale:** HCD proposes to continue adoption of the above referenced section with new amendment. HCD proposes to add a term that is proposed to be defined in Chapter 2, and to repeal a term that is no longer used in CALGreen.

The proposed amendment provides clarity and consistency to the code user. There is no intended change in regulatory effect.

**SECTION A4.304
OUTDOOR WATER USE**

A4.304.2 Potable water elimination. When landscaping is provided and as allowed by local ordinance, a water efficient landscape irrigation design that eliminates the use of potable water beyond the initial requirements for plant installation and establishment ~~should~~ **shall** be provided. Methods used to accomplish the requirements of this section must be designed to the requirements of the *California Building Standards Code* and shall include, but not be limited to, the following:

- **Rationale:** HCD proposes to continue adoption of the above referenced section with new amendment. HCD proposes to repeal “should” and replace it with “shall” since “shall” is used in the California Building Standards Code to denotes a mandatory specification or requirement.

The proposed amendment provides clarity and consistency to the code user. There is no intended change in regulatory effect.

Division A4.5 – ENVIRONMENTAL QUALITY

**SECTION A4.506
INDOOR AIR QUALITY AND EXHAUST**

A4.506.1 Filters. Return air filters with a value greater than MERV 6 shall be installed on HVAC systems. Pressure drop across the filter shall not exceed 0.1 inches water column.

- **Rationale:** HCD proposes to repeal the above referenced section. The California Energy Commission currently requires MERV 8 filters for specific applications, and is proposing MERV 13 filters for all residential occupancies during this triennial rulemaking cycle. There is no need for HCD to include MERV 6 or greater as a voluntary measure, while Energy Commission already requires MERV 8 and is currently proposing MERV 13.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17921, 17921.5, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1, and Water Code Section 14877.3, 13552.2, 13552.4, 13553.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

SECTION A4.602
RESIDENTIAL OCCUPANCIES APPLICATION CHECKLIST
Effective ~~July 1, 2015~~ January 1, 2020

To be amended to correspond with proposed changes in Chapter 4 and Appendix A4.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17921, 17921.5, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1, and Water Code Section 14877.3, 13552.2, 13552.4, 13553.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.