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 (California only codes - Parts 1, 6, 8, 11, 12)

- 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- Repealed California language appears upright and in strikeout.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 amend Chapter 2, Section 202, as follows:
Chapter 2 Definitions
Section 202 Definitions
ACCESSORY DWELLING UNIT. [HCD] An attached or a detached residential dwelling unit, which provides complete independent living facilities for one or more persons and is located on a lot with a proposed or existing primary residence. Accessory dwelling units shall include permanent provisions for living, sleeping, eating, cooking, and sanitation on the same parcel as the primary single-family or multifamily dwelling is or will be situated. (See Government Code Section 65852.2.)

SUBMETER. [HCD 1] A secondary device beyond a meter that measures water consumption of an individual rental unit within a multiunit residential structure or mixed-use residential and commercial structure. (See Civil Code Section 1954.202(g) and Water Code Section 517 for additional details.)
Item 2  HCD proposes to amend Chapter 4, Division 4.1, as follows:

CHAPTER 4 Residential Mandatory Measures
SECTION 4.106 Site Development

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. 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 208/240-volt 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 an EV charger at the time of original construction in accordance with the California Electrical Code.

4.106.4.2 New multifamily dwellings. (No change to text.)

Notes:

1. Construction documents are intended to demonstrate the project’s capability and capacity for facilitating future EV charging. (No change to text.)

2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use. (No change to text.)

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.
4.106.4.2.3 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. (No change to text.)

**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 an EV charger, 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. (No change to text.)

**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 an EV charger, at the time of original construction in accordance with the California Electrical Code.

4.106.4.3 New hotels and motels. (No change to text.)

**Notes:**

1. Construction documents are intended to demonstrate the project’s capability and capacity for facilitating future EV charging. (No change to text.)
2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use. (No change to text.)
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.
Item 3  HCD proposes to amend Chapter 4, Division 4.3, as follows:

CHAPTER 4 Residential Mandatory Measures

SECTION 4.303 Indoor Water Use

4.303.1.4.5 Pre-rinse spray valves. When installed, shall meet the requirements in the California Code of Regulations, Title 20 (Appliance Efficiency Regulations), Sections 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 (d)(7), and shall be equipped with an integral automatic shutoff.

FOR REFERENCE ONLY: The following table and code section have been reprinted from the California Code of Regulations, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) and Section1605.3 (h)(4)(A).

<table>
<thead>
<tr>
<th>Product Class (spray force in ounce force (ozf))</th>
<th>Maximum Flow Rate (gpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Class 1 (≤ 5.0 ozf)</td>
<td>1.00</td>
</tr>
<tr>
<td>Product Class 2 (&gt; 5.0 ozf and ≤ 8.0 ozf)</td>
<td>1.20</td>
</tr>
<tr>
<td>Product Class 3 (&gt; 8.0 ozf)</td>
<td>1.28</td>
</tr>
</tbody>
</table>

Title 20 Section 1605.3 (h)(4)(A): Commercial pre-rinse spray valves manufactured on or after January 1, 2006, shall have a minimum spray force of not less than 4.0 ounces-force (ozf) [113 grams-force (gf)].

4.303.2 Submeters for multifamily buildings and dwelling units in mixed-use residential/commercial buildings. Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the California Plumbing Code.

4.303.3 Standards for plumbing fixtures and fittings. Plumbing fixtures and fittings shall be installed in accordance with the California Plumbing Code, and shall meet the applicable standards referenced in Table 1701.1 of the California Plumbing Code.
Item 4  HCD proposes to amend Chapter 4, Division 4.4, as follows:
CHAPTER 4 Residential Mandatory Measures
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 text.)

1. – 10. (No change to text.)

11. Information from the Department of Forestry and Fire Protection on maintenance of defensible space around residential structures.

Item 5  HCD proposes to amend Chapter 4, Division 4.5, as follows:
CHAPTER 4 Residential Mandatory Measures
SECTION 4.504 Pollutant Control

4.504.3 Carpet systems. All carpet installed in the building interior shall meet the testing and product requirements of one of the following:


3. NSF/ANSI 140 at the Gold level.


(See California Department of Public Health’s website for certification programs and testing labs.)

(https://www.cdph.ca.gov/Programs/CCDHP/DEODC/EHLB/IAQ/Pages/VOC.aspx)


(See California Department of Public Health’s website for certification programs and testing labs.)

(https://www.cdph.ca.gov/Programs/CCDHP/DEODC/EHLB/IAQ/Pages/VOC.aspx)

4.504.4 Resilient flooring systems. Where resilient flooring is installed, at least 80 percent of floor area receiving resilient flooring shall comply with one or more of the following; meet the requirements of


2. Products certified under UL GREENGUARD Gold (formerly the Greenguard Children & Schools program).

3. Certification under the Resilient Floor Covering Institute (RFI) FloorScore program.


(See California Department of Public Health’s website for certification programs and testing labs.)

(https://www.cdph.ca.gov/Programs/CCDHP/DEODC/EHLB/IAQ/Pages/VOC.aspx)

4.504.5 Composite wood products. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde as specified in ARB’s Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.), by or before the dates specified in those sections, as shown in Table 4.504.5.
Notation:

Authority: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.5, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17922.14, 17927, 17928, 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.

References: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; Civil Code Sections 1101.4 and 1101.5; and Government Code Sections 12955.1 and 12955.1.1.

Item 6 HCD proposes to amend Appendix A4, Division A4.1, as follows:

APPENDIX A4 Residential Voluntary Measures
SECTION A4.106 Site Development

A4.106.5.3 Solar reflectance index alternative. (No change to text.)

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.

A4.106.8.2 New multifamily dwellings. (No change to text.)

A4.106.8.2.1 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.

A4.106.10 Light pollution reduction. (HR) Outdoor lighting systems shall be designed and installed to comply with the following:

1. The minimum requirements in the California Energy Code for Lighting Zones 1-4 as defined in Chapter 10 of the California Administrative Code; and

2. Backlight, Uplight and Glare (BUG) ratings as defined in IES TM-15-11; and

3. Allowable BUG ratings not exceeding those shown in Table A4.106.10; or

Comply with a local ordinance lawfully enacted pursuant to Section 101.7 of this code, whichever is more stringent.

Exceptions:

1. Luminaires that qualify as exceptions in the California Energy Code.

2. Emergency lighting.

3. One- and two-family dwellings.
**Note:** The International Dark-Sky Association (IDA) and the Illuminating Engineering Society of North America (IESNA) have developed a Model Lighting Ordinance (MLO). The MLO was designed to help municipalities develop outdoor lighting standards that reduce glare, light trespass, and skyglow. The model ordinance and user guides for the ordinance may be accessed at the International Dark-Sky Association web site.

### TABLE A4.106.10
**MAXIMUM ALLOWABLE BACKLIGHT, UPLIGHT AND GLARE (BUG RATINGS¹ ²)**

<table>
<thead>
<tr>
<th>Maximum Allowable Backlight Rating¹ ²</th>
<th>LIGHTING ZONE 1</th>
<th>LIGHTING ZONE 2</th>
<th>LIGHTING ZONE 3</th>
<th>LIGHTING ZONE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luminaire greater than 2 mounting heights (MH) from property line</td>
<td>No Limit</td>
<td>No Limit</td>
<td>No Limit</td>
<td>No Limit</td>
</tr>
<tr>
<td>Luminaire back hemisphere is 1 – 2 MH from property line</td>
<td>B2</td>
<td>B3</td>
<td>B4</td>
<td>B4</td>
</tr>
<tr>
<td>Luminaire back hemisphere is 0.5 – 1 MH from property line</td>
<td>B1</td>
<td>B2</td>
<td>B3</td>
<td>B3</td>
</tr>
<tr>
<td>Luminaire back hemisphere is less than 0.5 MH from property line</td>
<td>B0</td>
<td>B0</td>
<td>B1</td>
<td>B2</td>
</tr>
</tbody>
</table>

**Maximum Allowable Uplight Rating**

For area lighting¹ ²

<table>
<thead>
<tr>
<th>LIGHTING ZONE 1</th>
<th>LIGHTING ZONE 2</th>
<th>LIGHTING ZONE 3</th>
<th>LIGHTING ZONE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>U0</td>
<td>U0</td>
<td>U0</td>
<td>U0</td>
</tr>
</tbody>
</table>

For all other outdoor lighting, including decorative luminaires

<table>
<thead>
<tr>
<th>LIGHTING ZONE 1</th>
<th>LIGHTING ZONE 2</th>
<th>LIGHTING ZONE 3</th>
<th>LIGHTING ZONE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>U1</td>
<td>U2</td>
<td>U3</td>
<td>U4</td>
</tr>
</tbody>
</table>

**Maximum Allowable Glare Rating¹ ²**

<table>
<thead>
<tr>
<th>LIGHTING ZONE 1</th>
<th>LIGHTING ZONE 2</th>
<th>LIGHTING ZONE 3</th>
<th>LIGHTING ZONE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luminaire greater than 2 MH from property line</td>
<td>G1</td>
<td>G2</td>
<td>G3</td>
</tr>
<tr>
<td>Luminaire front hemisphere is 1 – 2 MH from property line</td>
<td>G0</td>
<td>G1</td>
<td>G1</td>
</tr>
<tr>
<td>Luminaire front hemisphere is 0.5 – 1 MH from property line</td>
<td>G0</td>
<td>G0</td>
<td>G1</td>
</tr>
<tr>
<td>Luminaire back hemisphere is less than 0.5 MH from property line</td>
<td>G0</td>
<td>G0</td>
<td>G0</td>
</tr>
</tbody>
</table>

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**Notation:**

**Authority:** Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.5, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17922.14, 17927, 17928, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18665, 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.

**References:** Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; Civil Code Sections 1101.4 and 1101.5; and Government Code Sections 12955.1 and 12955.1.1.

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APPENDIX A4 Residential Voluntary Measures
SECTION A4.504 Pollutant Control

A4.504.2 Resilient flooring systems. Resilient flooring systems installed in the building shall meet the percentages specified in this section and comply with the VOC-emission limits defined in at least one of the following: meet the requirements of


2. Products certified UL GREENGAURD Gold (formerly the Greenguard Children & Schools program).

3. Certification under the Resilient Floor Covering Institute (RFCI) FloorScore program.


(See California Department of Public Health’s website for certification programs and testing labs.)

(https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx)

Tier 1. (No change to text.)

Tier 2. At least 100 percent of the total area of resilient flooring installed shall comply.

Exception for Tier 2: An allowance for up to 5-percent specialty purpose flooring may be permitted. (No change to text.)

Note: Documentation must be provided that verifies that finish materials are certified to meet the pollutant emission limits in this section. (No change to text.)

A4.504.3 Thermal insulation. Thermal insulation installed in the building shall meet the following requirements: (No change to text.)

(See California Department of Public Health’s website for certification programs and testing labs.)

Tier 2. (No change to text.)

Note: (No change to text.)

Notation:

Authority: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.5, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17922.14, 17927, 17928, 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.

References: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; Civil Code Sections 1101.4 and 1101.5; and Government Code Sections 12955.1 and 12955.1.1.
**VERIFICATIONS**

**ENFORCING AGENCY**

TO SPECIFY VERIFICATION METHOD

<table>
<thead>
<tr>
<th>FEATURE OR MEASURE</th>
<th>LEVELS APPLICANT TO SELECT ELECTIVE MEASURES</th>
<th>VERIFICATIONS ENFORCING AGENCY TO SPECIFY VERIFICATION METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mandatory</td>
<td>Prerequisites and electives</td>
</tr>
<tr>
<td></td>
<td>Tier 1</td>
<td>Tier 2</td>
</tr>
</tbody>
</table>

**Site Development**

A4.106.10 (HR)-Outdoor-lighting systems shall be
designed and installed to comply with:
1. The minimum requirements in the California Energy
   Code for Lighting Zones 1-4; and
2. Backlight, Uplight and Glare (BUG) ratings as defined in
   IES TM-15-11; and
3. Allowable BUG ratings not exceeding those shown in
   Table A4.106.10, or
Comply with a lawfully enacted local ordinance, whichever
is more stringent.

**WATER EFFICIENCY AND CONSERVATION**

**Indoor Water Use**

4.303.1 Plumbing fixtures (water closets and urinals) and
   fittings (faucets and showerheads, faucets and pre-rinse
   spray valves) installed in residential buildings shall comply
   with the prescriptive requirements of Section 4.303.1.1
   through 4.303.1.4.4, 4.303.1.4.5.

4.303.2 Submeters for multifamily building and
   dwelling units in mixed-use residential/commercial
   buildings. Submeters shall be installed to measure water
   usage of individual rental dwelling units in accordance with
   the California Plumbing Code.

4.303.3 Plumbing fixtures and fittings required in
   Section 4.303.1 shall be installed in accordance with the
   California Plumbing Code, and shall meet the applicable
   referenced standards.

**ENVIRONMENTAL QUALITY**

**Pollutant Control**

A4.504.2 Install VOC compliant resilient flooring systems.
   Tier 1. At least 50 percent of the resilient flooring installed
   shall comply.
   Tier 2. At least 100 percent of the resilient flooring
   installed shall comply.

A4.504.3 Thermal insulation installed in the building shall
   meet the following requirements:
   Tier 1. Install thermal insulation in compliance with VOC
   limits.
   Tier 2. Install insulation which contains Non-Added
   Formaldehyde (NAF) and is in compliance with Tier 1.
Notation:

Authority: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.5, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17922.14, 17927, 17928, 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.

References: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; Civil Code Sections 1101.4 and 1101.5; and Government Code Sections 12955.1 and 12955.1.1.