

**EXPRESS TERMS  
FOR  
PROPOSED BUILDING STANDARDS  
OF THE  
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT  
REGARDING THE AMENDMENT OF THE  
2013 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN)  
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11  
(HCD 05/13)**

---

The Department of Housing and Community Development (HCD) proposes to make necessary changes to be included in the 2013 edition of the California Green Building Standards Code, also known as CALGreen, as presented on the following pages.

---

**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~~.
  2. **Existing text not being modified:** All language not displayed in full is shown as “...” (i.e., ellipsis).
  3. **Repealed text:** All language appears in ~~strikeout~~.
  4. **Amended, adopted or repealed language after public hearing:** All language is shown in double underline or ~~double strikeout~~.
  5. **Notation:** Authority and Reference citations are provided at the end of each section.
- 

**1. HCD proposes to amend Chapter 1, Section 104.1, as follows:**

**CHAPTER 1  
ADMINISTRATION**

**SECTION 104  
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT**

**104.1 Scope.** Specific scope of application of the agency responsible for enforcement, the enforcement agency and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.

**1. Housing construction.**

**Application**—Hotels, motels, lodging houses, apartment houses, dwellings, dormitories, condominiums, shelters for homeless persons, congregate residences, employee housing, factory-built housing and other types of dwellings containing sleeping accommodations with or without common toilet or cooking facilities including accessory buildings, facilities and uses thereto. ~~Sections of this code which pertain to applications listed in this section are identified in the Matrix Adoption Table using the abbreviation “HCD-1.”~~

**Enforcing agency**—Local building department or the Department of Housing and Community Development.

**Authority cited**—*Health and Safety Code* Sections 17921, 17922 and 19990.

**Reference**—*Health and Safety Code* Sections 17000 through 17060, 17910 through 17990, and 19960 through 19997.

**NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

**2. HCD proposes to amend Chapter 2, Section 202, as follows:**

**CHAPTER 2  
DEFINITIONS**

**SECTION 202  
DEFINITIONS**

**ELECTRIC VEHICLE (EV).** An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, electric motorcycles, and the like, primarily powered by an electric motor that draws current from a rechargeable storage battery, fuel cell, photovoltaic array, or other source of electric current. Plug-in hybrid electric vehicles (PHEV) are considered electric vehicles. For purposes of the *California Electrical Code*, off-road, self-propelled electric vehicles, such as industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, boats, and the like, are not included.

**SMALL SOLAR PHOTOVOLTAIC (PV) SYSTEM.** A solar photovoltaic system with a maximum power output of less than 10 kW.

**NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

**3. HCD proposes to adopt Chapter 4, Section 4.106.4, as follows:**

**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 Sections 4.106.4.1 and 4.106.4.2 to facilitate future installation of electric vehicle supply equipment (EVSE). 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. Impracticability based on EV range or distances to known public charging facilities.
3. Where evidence substantiating that the local utility infrastructure design requirements will increase the cost by more than \$XXX.00 per dwelling unit.

**NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

**4. HCD proposes to adopt Chapter 4, Section 4.106.4.1, as follows:**

**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 in close proximity to the proposed location of the charging system into a listed cabinet, box or other enclosure. 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.

**NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

**5. HCD proposes to adopt Chapter 4, Section 4.106.4.1.1, as follows:**

**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”.

**NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

**6. HCD proposes to adopt Chapter 4, Section 4.106.4.2, as follows:**

**4.106.4.2 New multifamily dwellings.** Where more than 16 multifamily dwelling units are constructed on a building site, at least 3 percent of the total parking spaces provided for all types of parking facilities, but in no case less than one space, shall be capable of supporting future EVSE. Plans shall indicate the proposed location of EV charging spaces. EV charging spaces shall comply with the following:

1. At least one charging space shall be available in common use areas for use by all residents.
2. One in every 25 charging spaces, but not less than one space, shall meet the requirements of Section 4.106.2.1, Items 1-3, to be available for all users.
3. Common use EV charging spaces shall be provided in addition to the total number of required parking spaces.
4. Assigned EV charging spaces may be included in the total number of required parking spaces.
5. Attached private garages meeting the requirements of Section 4.106.4.1 shall not be included when calculating the total number of EV charging spaces.

**NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

## **7. HCD proposes to adopt Chapter 4, Section 4.106.4.2.1, as follows:**

**4.106.4.2.1 Dimensions and slope of EV charging spaces.** EV charging spaces shall be designed and constructed to comply with the following:

1. The minimum length of each EV charging space shall be 18 feet (5486 mm).
2. The minimum width of each EV charging space shall be 9 feet (2743 mm).
3. One in every 25 charging spaces, but not less than one space, shall provide a 5-foot (1524 mm) wide aisle, and surface slope in the charging space and 5-foot aisle shall not exceed 1/4-inch (6.35 mm) per foot (2.083 percent gradient) in any direction.

### **NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

## **8. HCD proposes to adopt Chapter 4, Section 4.106.4.2.2, as follows:**

**4.106.4.2.2 Installed EV chargers for multifamily dwellings.** When EV chargers are installed in common use areas for use by all residents, all EV charging spaces required by Section 4.106.4.2, Item 2, 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.

**Exception:** An EV charging space may be located in an alternate location when the charging space meets the requirements of Section 4.106.4.2.1, and is provided with an accessible route to the building.

### **NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

## **9. HCD proposes to adopt Chapter 4, Section 4.106.4.2.3, as follows:**

**4.106.4.2.3 Single charging space required.** When only a single charging space is 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 in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure. Plans 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.

### **NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

## **10. HCD proposes to adopt Chapter 4, Section 4.106.4.2.4, as follows:**

**4.106.4.2.4 Multiple charging spaces required.** Plans shall indicate the proposed type and location of EVSE. Plans shall include 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 electric vehicles at all designated EV charging spaces at their full rated amperage. Plans shall identify the raceway termination point. Plan design shall be based upon a 40-ampere minimum branch circuit. Only underground raceways and related underground components are required to be installed at the time of construction.

### **NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

## **11. HCD proposes to adopt Chapter 4, Section 4.106.4.2.5, including “Notes”, as follows:**

**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: [www.dot.ca.gov/hq/traffops/signtech/signdel/policy.htm](http://www.dot.ca.gov/hq/traffops/signtech/signdel/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 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](http://opr.ca.gov/docs/ZEV_Guidebook.pdf)
4. The Governor’s Office of Planning and Research (OPR) has developed draft guidelines, “Plug-In Electric Vehicles: Universal Charging Access Guidelines and Best Practices,” addressing physical accessibility standards and design guidelines for EVs. Website: [http://opr.ca.gov/docs/PEV\\_Access\\_Guidelines.pdf](http://opr.ca.gov/docs/PEV_Access_Guidelines.pdf).

### **NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

## 12. HCD proposes to amend Chapter 4, Table 4.504.3, as follows:

### SECTION 4.504 POLLUTANT CONTROL

**TABLE 4.504.3  
VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS<sup>2, 3</sup>  
Grams of VOC Per Liter of Coating, Less Water and Less Exempt Compounds**

Coating Category	Effective 1/1/2010	Effective 1/1/2012
Flat coatings	50	
Nonflat coatings	100	
Nonflat - high gloss coatings	150	
<b>Specialty Coatings</b>		
Aluminum roof coatings	400	
Basement specialty coatings	400	
Bituminous roof coatings	50	
Bituminous roof primers	350	
Bond breakers	350	
Concrete curing compounds	350	
Concrete/masonry sealers	100	
Driveway sealers	50	
Dry fog coatings	150	
Faux finishing coatings	350	
Fire resistive coatings	350	
Floor coatings	100	
Form-release compounds	250	
Graphic arts coatings (sign paints)	500	
High temperature coatings	420	
Industrial maintenance coatings	250	
Low solids coatings <sup>1</sup>	120	
Magnesite cement coatings	450	
Mastic texture coatings	100	
Metallic pigmented coatings	500	
Multi-color coatings	250	
Pre-treatment wash primers	420	
Primers, sealers, and undercoaters	100	
Reactive penetrating sealers	350	
Recycled coatings	250	
Roof coatings	50	
Rust preventative coatings	<del>400</del> 250	250
Shellacs:		
• Clear	730	
• Opaque	550	
Specialty primers, sealers, and undercoaters	<del>350</del> 100	100
Stains	250	
Stone consolidants	450	
Swimming pool coatings	340	
Traffic marking coatings	100	
Tub and tile refinish coatings	420	
Waterproofing membranes	250	
Wood coatings	275	
Wood preservatives	350	
Zinc-rich primers	340	

1. Grams of VOC per liter of coating, including water and including exempt compounds.
2. The specified limits remain in effect unless revised limits are listed in subsequent columns in the table.
3. Values in this table are derived from those specified by the California Air Resources Board, Architectural Coatings Suggested Control Measure, February 1, 2008. More information is available from the Air Resources Board.

#### NOTE:

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

### **13. HCD proposes to amend Chapter 4, Section 4.504.4, as follows:**

**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:

1. ~~VOC emission limits defined~~ Products compliant with the California Department of Public Health, “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers,” Version 1.1, February 2010 (also known as Specification 01350), certified as a CHPS Low-Emitting Material in the Collaborative for High Performance Schools (CHPS) High Performance Products Database.
2. Products ~~compliant with CHPS criteria~~ certified under UL GREENGUARD Gold (formerly the Greenguard Children & Schools program).
3. Certification under the Resilient Floor Covering Institute (RFCI) FloorScore program.
4. Meet the California Department of Public Health, “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers,” Version 1.1, February 2010 (also known as Specification 01350).

**NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

### **14. HCD proposes to amend Appendix A4, Section A4.106.8, as follows:**

**APPENDIX A4  
RESIDENTIAL VOLUNTARY MEASURES**

***Division A4.1 – PLANNING AND DESIGN***

**SECTION A4.106  
SITE DEVELOPMENT**

**A4.106.8 Electric vehicle (EV) charging for new construction.** Dwellings shall comply with the following requirements for installation or the future installation of electric vehicle supply equipment (EVSE). EVSE and all devices related to EV charging shall be installed in compliance with the California Electrical Code, Article 625.

**NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

### **15. HCD proposes to repeal Appendix A4, Section A4.106.8.1, and adopt new Section A4.106.8.1, as follows:**

**~~A4.106.8.1 One and two family dwellings.~~** Install a listed raceway to accommodate a dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1 inch inside diameter). The raceway shall be securely fastened at the main service or subpanel and shall terminate in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure. Raceways are required to be continuous at enclosed or concealed areas and spaces. A raceway may terminate in an attic or other approved location when it can be demonstrated that the area is accessible and no removal of materials is necessary to complete the final installation.

**~~Exception:~~** Other pre-installation methods approved by the local enforcing agency that provide sufficient conductor sizing and service capacity to install Level 2 EVSE.

**~~Note:~~** Utilities and local enforcing agencies may have additional requirements for metering and EVSE installation, and should be consulted during the project design and installation.

**A4.106.8.1 One- and two-family dwellings and townhouses with attached private garages.**

**Tier 1.** For each dwelling unit, a dedicated 208/240-volt branch circuit shall be installed in the raceway required by Section 4.106.4.1. The branch circuit and associated overcurrent protective device shall be rated at 40-ampere minimum. Other electrical components, including a receptacle or blank cover, related to this section shall be installed in accordance with the *California Electrical Code*.

**NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

**16. HCD proposes to repeal Appendix A4, Section A4.106.8.1.1, and adopt new Section A4.106.8.1.1, as follows:**

**A4.106.8.1.1 Labeling requirement.** A label stating “EV CAPABLE” shall be posted in a conspicuous place at the service panel or subpanel and next to the raceway termination point.

**A4.106.8.1.1 Identification.** The service panel or subpanel circuit directory shall identify the overcurrent protective device designated for future EV charging purposes as “EV READY” in accordance with the *California Electrical Code*. The receptacle or blank cover shall be identified as “EV READY.”

**NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

**17. HCD proposes to amend Appendix A4, Section A4.106.8.2, and add “Notes”, as follows:**

**A4.106.8.2 Multifamily dwellings.**

**Tier 1.** At least  $\frac{3}{5}$  percent of the total parking spaces, but not less than one space, shall be capable of supporting future EVSE and shall comply with Section 4.106.4.2.

**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: [www.dot.ca.gov/hq/traffops/signtech/signdel/policy.htm](http://www.dot.ca.gov/hq/traffops/signtech/signdel/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 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](http://opr.ca.gov/docs/ZEV_Guidebook.pdf).
- 4 The Governor’s Office of Planning and Research (OPR) has developed draft guidelines, “Plug-In Electric Vehicles: Universal Charging Access Guidelines and Best Practices,” addressing physical accessibility standards and design guidelines for EVs. Website: [http://opr.ca.gov/docs/PEV\\_Access\\_Guidelines](http://opr.ca.gov/docs/PEV_Access_Guidelines).

**NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

## **18. HCD proposes to repeal Appendix A4, Section A4.106.8.2.1, as follows:**

~~**A4.106.8.2.1 Single charge space required.** When only a single charging space is required, install a listed raceway capable of accommodating a dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1 inch inside diameter). The raceway shall be securely fastened at the main service or subpanel and shall terminate in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure.~~

~~**Exception:** Other pre-installation methods approved by the local enforcing agency that provide sufficient conductor sizing and service capacity to install Level 2 EVSE.~~

### **NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

## **19. HCD proposes to repeal Appendix A4, Section A4.106.8.2.2, as follows:**

~~**A4.106.8.2.2 Multiple charging spaces required.** When multiple charging spaces are required, plans shall include the location(s) and type of the EVSE, raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to simultaneously charge all the electrical vehicles at all designated EV charging spaces at their full rated amperage. Plan design shall be based upon Level 2 EVSE at its maximum operating ampacity. Only underground raceways and related underground equipment are required to be installed at the time of construction.~~

~~**Note:** Utilities and local enforcing agencies may have additional requirements for metering and EVSE installation, and should be consulted during the project design and installation.~~

### **NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

## **20. HCD proposes to repeal Appendix A4, Section A4.106.8.2.3, as follows:**

~~**A4.106.8.2.3 Labeling requirement.** A label stating "EV CAPABLE" shall be posted in a conspicuous place at the service panel or subpanel and the EV charging space.~~

### **NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

## **21. HCD proposes to renumber Appendix A4, Section A4.107 "Innovative Concepts and Local Environmental Conditions" to Section A4.108, and adopt new Sections A4.107, A4.107.1 and A4.107.2, as follows:**

### **SECTION A4.107** **SOLAR PHOTOVOLTAIC (PV) SYSTEMS**

**A4.107.1 General.** Solar photovoltaic (PV) systems provide a significant source of clean and renewable energy, and are encouraged to be installed to reduce the demand on non-renewable sources of energy. A simplified permit process for solar PV systems simplifies the structural and electrical review of the PV System, can minimize the need for detailed engineering studies, and avoids unnecessary delays.

**A4.107.2 Small solar photovoltaic (PV) system streamlined permitting process.** Small solar photovoltaic (PV) systems shall be reviewed and approved through a streamlined permitting process and shall include: a standard checklist identifying the required documentation to be submitted with the permit application; a standard plan for describing the proposed solar PV system; and an inspection checklist identifying all elements of the solar PV system to be inspected before final approval.

**Tier 1.** Adopt one or more of the following:

1. Develop and adopt a local streamlined permitting process.
2. Adopt the "California Solar Permitting Guidebook" streamlined permitting process.
3. Provide internet access to permit application materials through the local agency's website
4. Provide "over the counter" PV plan review.

**Tier 2.** Meet the requirements of Tier 1; plus:

1. Provide an "on-line" web based system for permit application submittals, and permit issuance; and
2. Develop and adopt a local streamlined inspection process; or
3. Adopt the "California Solar Permitting Guidebook" streamlined inspection process.

Note: Templates and other information are available in the "California Solar Permitting Guidebook" Developed by the Solar Permitting Workgroup and The Governor's Office of Planning and Research at: [http://opr.ca.gov/docs/California\\_Solar\\_Permitting\\_Guidebook.pdf](http://opr.ca.gov/docs/California_Solar_Permitting_Guidebook.pdf).

**NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

**22.HCD proposes to renumber Appendix A4, Sections A4.107 and A4.107.1, to new Sections A4.108 and A4.108.1, as follows:**

**SECTION A4.107 A4.108  
INNOVATIVE CONCEPTS AND LOCAL ENVIRONMENTAL CONDITIONS**

**A4.107.1 A4.108.1 Innovative concepts and local environmental conditions.** 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. This code does not limit the authority of city, county, or city and county government to make necessary changes to the provisions contained in this code pursuant to Section 101.7.1.

**NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

## **23. HCD proposes to amend Appendix A4, Section A4.504.2, as follows:**

### ***Division A4.5 – ENVIRONMENTAL QUALITY***

#### **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:

1. ~~VOC emission limits defined~~ Products compliant with the California Department of Public Health, “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers,” Version 1.1, February 2010 (also known as Specification 01350), certified as a CHPS Low-Emitting Material in the Collaborative for High Performance Schools (CHPS) High Performance Products Database.
2. ~~Products compliant with CHPS criteria~~ certified UL GREENGUARD GOLD (formerly under the Greenguard Children & Schools program.)
3. Certification under the Resilient Floor Covering Institute (RFCI) FloorScore program.
4. Meet the California Department of Public Health, “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers,” Version 1.1, February 2010 (also known as Specification 01350).

**Tier 1.** At least 90 percent of the total area of resilient flooring installed shall comply.

**Tier 2.** 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.

**Note:** Documentation must be provided that verifies that finish materials are certified to meet the pollutant emission limits in this section.

**NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

## **24. HCD proposes to amend Appendix A4, Section A4.504.3, as follows:**

**A4.504.3 Thermal insulation.** Thermal insulation installed in the building shall meet the following requirements:

**Tier 1.** Install thermal insulation in compliance with the ~~VOC emission limits defined in~~ California Department of Public Health, “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers,” Version 1.1, February 2010 (also known as Specification 01350), certified as a CHPS Low-Emitting Material in the Collaborative for High Performance Schools (CHPS) High Performance Products Database; products compliant with CHPS criteria certified under the UL GREENGUARD Gold (formerly Greenguard Children & Schools program); or meet California Department of Public Health, “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers,” Version 1.1, February 2010 (also known as Specification 01350).

**Tier 2.** Install insulation which complies with Tier 1 plus does not contain any added formaldehyde.

**Note:** Documentation must be provided that verifies the materials are certified to meet the pollutant emission limits in this section.

**NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

## **25. HCD proposes to amend Appendix A4, Section A4.601.4.2, as follows:**

### ***Division A4.6 – TIER I AND TIER 2***

#### **SECTION A4.601 GENERAL**

**A4.601.4.2 Prerequisite and elective measures for Tier 1.** In addition to the mandatory measures, compliance with the following prerequisite and elective measures from Appendix A4 is also required to achieve Tier 1 status:

1. From Division A4.1, Planning and Design.
  - 1.1 Comply with the topsoil protection requirements in Section A4.106.2.3.
  - 1.2 Comply with the 20 percent permeable paving requirements in Section A4.106.4
  - 1.3 Comply with the cool roof requirements in Section A4.106.5
  - 1.4 Comply with the electric vehicle charging requirements in Section A4.106.8.
  - 1.5 Comply with the solar photovoltaic (PV) system streamlined permitting process in Section A4.107.2.
  - 1.6 Comply with at least two elective measures selected from Division A4.1.
2. From Division A4.2, Energy Efficiency. (No change to text)
3. From Division A4.3, Water Efficiency and Conservation. (No change to text)
4. From Division A4.4, Material Conservation and Resource Efficiency. (No change to text)
5. From Division A4.5, Environmental Quality. (No change to text)

Note: ... (No change to text)

#### **NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

## **26. HCD proposes to amend Appendix A4, Section A4.601.5.2, as follows:**

### ***Division A4.6 – TIER I AND TIER 2***

#### **SECTION A4.601 GENERAL**

**A4.601.5.2 Prerequisite and elective measures for Tier 2.** In addition to the mandatory measures, compliance with the following prerequisite and elective measures from Appendix A4 is also required to achieve Tier 2 status:

1. From Division A4.1, Planning and Design.
  - 1.1 Comply with the topsoil protection requirements for Tier 1 and Tier 2 in Section A4.106.2.3.
  - 1.2 Comply with the 30 percent permeable paving requirements in Section A4.106.4.
  - 1.3 Comply with the cool roof requirements in Section A4.106.5.
  - 1.4 Comply with the solar photovoltaic (PV) system streamlined permitting process in Section A4.107.2.
  - 1.5 Comply with at least four elective measures selected from Division A4.1.
2. From Division A4.2, Energy Efficiency. (No change to text)
3. From Division A4.3, Water Efficiency and Conservation. (No change to text)
4. From Division A4.4, Material Conservation and Resource Efficiency. (No change to text)
5. From Division A4.5, Environmental Quality. (No change to text)

Note: ... (No change to text)

#### **NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

---

---

**27. HCD proposes to amend the “Residential Occupancies Application Checklist” (Appendix A4, Section A4.602) as follows:**

**SECTION A4.602  
RESIDENTIAL OCCUPANCIES APPLICATION CHECKLIST  
Effective January 1, 2014 Effective July 1, 2015**

FEATURE OR MEASURE	LEVELS APPLICANT TO SELECT ELECTIVE MEASURES			VERIFICATIONS ENFORCING AGENCY TO SPECIFY VERIFICATION METHOD		
	Mandatory	Prerequisites and electives <sup>1</sup>		Enforcing Agency <input type="checkbox"/> All	Installer or Designer <input type="checkbox"/> All	Third party <input type="checkbox"/> All
		Tier 1	Tier 2			
<b>PLANNING AND DESIGN</b>						
<b>Site Selection</b>						
...		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Site Development</b>						
...						
<b>4.106.3</b> Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings.	<input checked="" type="checkbox"/>					
<b>4.106.4</b> Provide capability for dedicated electrical vehicle supply equipment (EVSE) in <u>one- and two-family dwellings and in townhouses with attached private garages; and 3 percent of total parking spaces, as specified, for multifamily dwellings.</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>A4.106.8</b> Provide capability for dedicated electrical vehicle supply equipment in single-family and multifamily structures.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>A4.106.8.1 Tier 1</b> for one- and two-family dwellings and townhouses with attached private garages. Install a dedicated 208/240-volt, branch circuit, including an overcurrent protective device, capable of supporting a 40-ampere minimum EVSE per dwelling unit.	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
<b>A4.106.8.2 Tier 1</b> for multifamily dwellings. Provide capability for dedicated electrical vehicle supply equipment (EVSE) in 5 percent of total parking spaces, as specified.	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	

FEATURE OR MEASURE	LEVELS APPLICANT TO SELECT ELECTIVE MEASURES			VERIFICATIONS ENFORCING AGENCY TO SPECIFY VERIFICATION METHOD		
	Mandatory	Prerequisites and electives <sup>1</sup>		Enforcing Agency <input type="checkbox"/> All	Installer or Designer <input type="checkbox"/> All	Third party <input type="checkbox"/> All
		Tier 1	Tier 2			
<p><b>A4.107</b> Provide a simplified permit process for small solar photovoltaic (PV) systems.</p> <p><b>Tier 1.</b> Adopt a local streamlined permitting process or the California Solar Permitting Guidebook streamlined permitting process; or provide internet access to permit application materials through the local agency's website, or provide "over the counter" PV plan review.</p> <p><b>Tier 2.</b> Meet Tier 1 plus provide an "on-line" web based system for permit application submittals and permit issuance and development adopt a local streamlined inspection process; OR adopt the "California Solar Permitting Guidebook" streamlined inspection process.</p>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Innovative Concepts and Local Environmental Conditions</b>						
<b>A4.107.1 A4.108.1</b> Items in this section are necessary to address innovative concepts or local environmental conditions.						
Item 1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item 2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Item 3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Energy Efficiency ENERGY EFFICIENCY</b>						
<b>General</b>						
...		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FEATURE OR MEASURE	LEVELS APPLICANT TO SELECT ELECTIVE MEASURES			VERIFICATIONS ENFORCING AGENCY TO SPECIFY VERIFICATION METHOD		
	Mandatory	Prerequisites and electives <sup>1</sup>		Enforcing Agency	Installer or Designer	Third party
		Tier 1	Tier 2	<input type="checkbox"/> All	<input type="checkbox"/> All	<input type="checkbox"/> All
<b>Pollutant Control</b>						
...						
<p><b>4.504.4</b> 80 percent of floor area receiving resilient flooring shall comply with the <u>specified VOC-emission limits defined in the Collaborative for High Performance Schools (CHPS) High Performance Products Database</u> or be certified under the Resilient Floor Covering Institute (RFCI) FloorScore program; or meet California Dept. of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers", Version 1.1, February 2010 (also known as Specification 01350-) <u>criteria</u></p>	<input checked="" type="checkbox"/>					
...						
<p><b>A4.504.3</b> Thermal insulation installed in the building shall meet the following requirements:</p> <p><b>Tier 1.</b> Install thermal insulation in compliance with the <u>VOC-emission limits defined in Collaborative for High Performance Schools (CHPS) Low-emitting Materials List.</u></p> <p><b>Tier 2.</b> Install insulation which contains No-Added Formaldehyde (NAF) and is in compliance with the <u>VOC-emission limits defined in Collaborative for High Performance Schools (CHPS) Low-emitting Materials List Tier 1.</u></p>		<input checked="" type="checkbox"/> <sup>2</sup>	<input checked="" type="checkbox"/> <sup>2</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Interior Moisture Control</b>						
...						

- 1 Green building measures listed in this table may be mandatory if adopted by a city, county, or city and county as specified in Section 101.7.
- 2 Required prerequisite for this Tier.

**NOTE:**

Authority cited: Health and Safety Code Sections 17921, 17922 and 19990. Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.