

**COMMISSION ACTION MATRIX**

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, TITLE 24, PART 11

AGENCY: CALIFORNIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT (HCD 03/21)

**LEGEND:**

**CAC Actions:** Approve, Disapprove, Approve as Amended, Further Study Required

**Agency Responses:** Accept, Disagree, Withdraw

**CBSC Actions:** Approve, Disapprove, Approve as Amended, Further Study Required

**Matrix Paper Color (for commission action only):** GREEN = uncontested items, YELLOW = challenged items, SALMON = withdrawn, no action required

**GREEN CODE ADVISORY COMMITTEE – APRIL 28 & 29, 2021**

**CHAPTER 1-- ADMINISTRATION**

Adopt/Repeal sections from the 2019 CALGreen into the 2022 CALGreen as listed below:

Item Number 1	Code Section	CAC Action	Agency Response	Public Comments	Annotations	CBSC Action
HCD 03/21-1-1	104.1 Scope.	<b>Approve</b>	<b>Accept</b>		HCD proposes to continue adoption of this section and to amend the Authority and Reference. HCD: No action required.	<b>Approve</b>

**CHAPTER 2-- DEFINITIONS**

Adopt/amend definitions from the 2019 CALGreen into the 2022 CALGreen as listed below:

Item Number 2	Code Section	CAC Action	Agency Response	Public Comments	Annotations	CBSC Action
HCD 03/21-2-0*	AUTOMATIC LOAD MANAGEMENT SYSTEM (ALMS)	<b>Approve</b>	<b>Accept</b>	45-Day comments: R. Whitehair, San Mateo, CA Approve as Amended, Criteria #1 G. Hall, Electric Auto Association D. MacCurdy, Sacramento Electric Vehicle Association M. Geller, Plug In America Approve as Amended D. Jaff, Electric Vehicle Charging Association; K. Corby, California Electric Transportation Coalition; M. Alexander, CALSTART; S. Douglas,	* HCD added ALMS defined term to the Express Terms for 45-Day. HCD proposes to adopt the defined term also co-adopted with the California Building Standards Commission (CBSC). a new definition for EV capable spaces. HCD: No action required.  Commenters suggested definition is insufficient, ambiguous and unclear; suggest developing standards for listing of certified ALMS systems; concerned whether	<b>Approve</b>

Item Number 2	Code Section	CAC Action	Agency Response	Public Comments	Annotations	CBSC Action
				Alliance for Automotive Innovation; N. Derrickson, Tesla Support comments, Approve J. Hart, Powerflex Approve as Amended	transformer capacity requirements are adequate to serve at least 3.3 kW to each EVSE.	
HCD 03/21-2-1	ELECTRIC VEHICLE (EV) CAPABLE SPACE	Approve	Accept		HCD proposes to adopt a new definition for EV capable spaces. HCD: No action required.	Approve
HCD 03/21-2-2	ELECTRIC VEHICLE (EV) READY SPACE	Approve	Accept	45-Day Comment: C. Diaz, Chargepoint Approve as Amended	HCD proposes to adopt a new definition for EV ready spaces. HCD: No action required.  Commenter suggests revision to the defined term to include additional features to the equipment.	Approve
HCD 03/21-2-3	LEVEL 2 ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE).	Approve	Accept	45-Day comments: J. Hart, Powerflex Approve as Amended	HCD proposes to adopt a new definition for Level 2 EVSE. HCD: No action required.  Commenter suggests expanding the defined term to include branch circuits up to 60 amps.	Approve
HCD 03/21-2-4	LOW POWER LEVEL 2 ELECTRIC VEHICLE (EV) CHARGING RECEPTACLE.	Approve	Accept		HCD proposes to adopt new definition for EV charging receptacles. HCD: No action required.	Approve
HCD 03/21-2-5	NONWATER URINAL WITH DRAIN CLEANSING ACTION	Approve	Accept		HCD proposes to amend the title and the definition to align with newly defined term in the 2021 UPC. HCD: No action required.	Approve

**CHAPTER 3 – GREEN BUILDING**

Repeal sections from “designated parking” in the 2019 CALGreen into the 2022 CALGreen as listed below:

Item Number 3	Code Section	CAC Action	Agency Response	Public Comments	Annotations	CBSC Action
HCD 03/21-3-1	301.1.1 Additions and alterations.	Further Study	Accept		HCD proposes to amend to clarify that CALGreen provisions may apply to additions or alterations of existing parking facilities or new parking facilities added to existing multifamily residential buildings to avoid conflict with section 301.1.1. This amendment is associated with section 4.106.4.2.3. CAC: Provide clarification on types of repairs not subject to CALGreen. HCD: Note added to clarify types of alterations not subject to CALGreen provisions.	Approve

**CHAPTER 4 – RESIDENTIAL MANDATORY MEASURES**

Adopt/Amend/Repeal sections from “Electric Vehicle Infrastructure” in the 2019 CALGreen into the 2022 CALGreen as listed below:

Item Number 4	Code Section	CAC Action	Agency Response	Public Comments	Annotations	CBSC Action
HCD 03/21-4-1	4.106.4 Electric Vehicle (EV) charging for new construction. Exceptions 1.2, 1.3 & 1.4.	Further Study	Accept	<p><u>45-Day comments:</u>  <b>137 Various commenters; see FSOR Attachment A for a complete list.</b>                      Approve as Amended</p> <p>G. Latshaw, Ph.D.                      Wei-Tai Kwok, Council Member, City of Lafayette                      Approve as Amended</p> <p>S. Dunlap; E. Dunlap                      Approve as Amended</p> <p>J. Kalb, EV Charging Pros                      Approve as Amended</p> <p>M. Roest, Sustainable Energy Inc.                      Approve as Amended</p>	<p>HCD proposes to amend Exception 1.2 and add new Exceptions 1.3 &amp; 1.4.                      CAC: 1. consider using BSC language Vs 3-exceptions; 2. Add technical infeasibility.                      HCD: Proposed exceptions modified to remove reference to cost thresholds and modified reference to commercial utility and added exception text for inability for local utility to supply power and possible exception based on adverse impacts to construction costs.</p> <p><u>45-Day Commenters:</u>                      Form Letters and delegation letter suggest 3 primary revisions to the proposed language regarding EV parking facilities. See FSOR and List Attachments for signatories.</p> <p><u>15-Day Commenters:</u>                      Form Letters and delegation letter: The basis of the comments is outside the scope of the</p>	Approve

Item Number 4	Code Section	CAC Action	Agency Response	Public Comments	Annotations	CBSC Action
				<p>J. Frey &amp; P. Mustacich, Statewide Utility Codes and Standards Team Comment not applicable to CRC.</p> <p>L. Emerson, National City, CA General comment.</p> <p>P. Kobernick, on behlf of Peninsula Clean Energy, MCE, Clean Power Alliance, Redwood Coast Energy Authority, and East Bay Community Energy Further Study Item 4, Criteria #3.</p> <p><b>15-Day comments:</b> Commenters: Senator Dave Cortese, plus 11 California Legislators &amp; Letter from Legislative Members; Approve as Amended</p> <p>Sven Thesen, Project Green Home Approve as Amended.</p> <p>Stacey Reineccius, Powertree Services Inc. Approve as Amended</p>	<p>15-day Express Terms. GOV Code Section 11346.9. See FSOR List Attachments. No changes to the FET were made as a result of these comments.</p>	
HCD 03/21-4-2	4.106.4.2 through 4.106.4.2.5	<b>Approve</b>	<b>Accept</b>		<p>HCD proposes to repeal this section and related subsections. HCD: No action required.</p>	<b>Approve</b>
HCD 03/21-4-3	4.106.4.2 New multifamily dwellings.	<b>Further Study</b>	<b>Accept</b>	<p><u>45-Day Comments:</u> S. Thesen, Project Green Home Approve as Amended</p> <p><u>15-Day Comments:</u> S. Thesen, Project Green Home Approve as Amended EV Charging Access, Light Duty - Group Letter See Attachment C for list of additional signatories.</p>	<p>On behalf of CARB, HCD proposes this new amendment which permits EV spaces to be counted as parking spaces only for the purposes of meeting parking space requirements at the local level. CAC: consider explicit language on ALMS; coordinate with BSC; Add word "when parking is provided" HCD: added use of ALMS in Section 4.106.4.2.2; changed text to "when parking is provided."</p>	<b>Approve</b>

Item Number 4	Code Section	CAC Action	Agency Response	Public Comments	Annotations	CBSC Action
				<p>Approve as Amended</p> <p>V. Warheit, EV Charging Access for All See Attachment B for list of additional signatories. Approve as Amended</p> <p>P. Kobernick, Peninsula Clean Energy Approve as Amended</p>	<p><u>45-Day Commenters:</u> S. Thesen: Commenter suggests that HCD change the code to require a low power Level 2 receptacle for every multifamily dwelling unit that has access to parking.</p> <p><u>15-Day Commenters:</u> Form Letters and delegation letter and comments: The basis of the comments is outside the scope of the 15-day Express Terms. GOV Code Section 11346.9.</p> <p>No changes to the FET were made as a result of these comments.</p> <p>See FSOR List Attachments.</p>	
HCD 03/21-4-4	4.106.4.2.1 Multifamily development projects with less than 20 dwelling units; and hotels and motels with less than 20 sleeping units or guest rooms.	Further Study	Accept	<p>45-Day Comments: C. Diaz, Chargepoint Approve as Amended</p> <p>T. Burroughs, StopWaste; Alma Freeman, StopWaste Approve as Amended</p> <p>R. Whitehair, San Mateo, CA Approve as Amended</p> <p>V. Warheit, EV Charging Access for All See Attachment B for list of signatories. Approve as Amended</p> <p>B. Formigli, Qualcomm Technologies, Inc. Approve as Amended</p> <p>B. Gross, Carbon-Free Mobility Approve as Amended</p>	<p>On behalf of CARB, HCD proposes a new percentage requirement for installation of low power Level 2 receptacles for parking spaces in all new multifamily developments with additional stipulations regarding costs. CAC: Coordinate with BSC total Parking spaces; outlet configuration; address parking lifts. HCD: Percentage has always been based on total parking spaces (no change); outlet configuration could not identified as a specific NEMA outlet (left to designer); parking lift exception determined to be valid since not all parking lifts are suitable for supporting EV charging.</p> <p>C. Diaz: Commenter recommends that HCD require 100% EV ready parking for new multifamily, hotel and motel occupancies in several sections.</p> <p>StopWaste: Suggest 30% of all new parking spaces should be EV capable.”</p>	Approve

Item Number 4	Code Section	CAC Action	Agency Response	Public Comments	Annotations	CBSC Action
HCD 03/21-4-5	4.106.4.2.2 Multifamily development projects with 20 or more dwelling units, hotels and motels with 20 or more sleeping units or guest rooms.	Further Study	Accept	<p><u>45-Day comments:</u>            Ida Claire, Division of the State Architect (DSA)            Approve as Amended</p> <p>Various comments – refer to FSOR for summaries.</p> <p>Whitehair            Approve as Amended</p> <p>V. Warheit, EV Charging Access for All            See FSOR Attachments B for list of additional signatories.            Approve as Amended</p> <p><u>15-Day comments</u>            EV Charging Access, Light Duty - Group Letter – increase EV Ready percentage.            – See FSOR List Attachments.            Approve as Amended</p> <p>V. Warheit, EV Charging Access for All            – See FSOR List Attachments.            Approve as Amended</p> <p>EV Charging Access, Light Duty - Group Letter - remove the clarifying ALMS language.            – See FSOR List Attachments.            Approve as Amended</p> <p>Phillip Kobernick, Peninsula Clean Energy            Approve as Amended.</p>	<p>HCD proposes adoption of this new section regarding larger projects and installation of Level 2 EV chargers for 5 percent of parking spaces with exceptions for voluntary compliance measures that exceed requirements in this section.            CAC: Use section number instead of “3;” use the word percent “minimum;” consider Alternate compliance option.            HCD: Recommended editorial changes made. Alternative Compliance Pathway method analyzed, but not included due to lack of sufficient public review.</p> <p><u>45-Day Commenters:</u>            Suggest increase the residential EV ready percentage from 25% to 85%, and some comments suggested 100%.</p> <p>DSA comments regarding general support and requests amendments to coordinate efforts with agencies to maintain consistency with the regulations already adopted.</p> <p><u>15-Day Commenters:</u>            Form Letters and comments: The basis of the comments is outside the scope of the 15-day Express Terms. GOV Code Section 11346.9.</p> <p>See FSOR List Attachments.            No changes to the FET were made as a result of these comments.</p>	Approve
HCD 03/21-4-6	4.106.4.2.2.1	Approve	Accept		<p>Proposes adoption of this new section regarding EVCS.            HCD: No action required.</p>	Approve
HCD 03/21-4-7	4.106.4.2.2.2	Approve	Accept		<p>Proposes adoption of this new section regarding EVCS dimensions.            HCD: No action required.</p>	Approve

Item Number 4	Code Section	CAC Action	Agency Response	Public Comments	Annotations	CBSC Action
HCD 03/21-4-8	4.106.4.2.2.3	Approve	Accept		Proposes adoption of this new section regarding Accessible EV spaces. HCD: No action required.	Approve
HCD 03/21-4-9	4.106.4.2.3	Further Study	Accept	<u>45-Day comments:</u> G. Hall, Electric Auto Association D. MacCurdy, Sacramento Electric Vehicle Association M. Geller, Plug In America Approve as Amended	HCD proposes adoption this referenced new section regarding proposed requirements for EV infrastructure in existing multifamily buildings when new parking facilities are added and undergoing permitted upgrades. CAC: Suggestion: Add note to exempt stripping and resurfacing HCD: Clarification on exemptions added to Section 301.1.1.	Approve
HCD 03/21-4-10	4.106.4.2.4	Approve	Accept		Propose new section regarding EV space requirements. HCD: No action required.	Approve
HCD 03/21-4-11	4.106.4.2.5 Identification.	Approve	Accept		Propose new section regarding EV space identification requirements for future EV charging purposes. HCD: No action required.	Approve
HCD 03/21-4-11.1*	4.106.4.2.6 Electric Vehicle Ready Space Signage.	*	*	<u>45-Day comments:</u> R. Whitehair, San Mateo, CA Support comment, Approve.  T. Burroughs, StopWaste Support comment, Approve. V. Warheit, EV Charging Access for All, See FSOR List Attachments Support comment, Approve.	* Post CAC: Section 4.106.4.2.6 added to the Express Terms. HCD proposes new section as a result of comments and discussions during CAC regarding EV ready space signage in residential parking facilities. See FSOR.	Approve
HCD 03/21-4-12	4.106.4.3 through 4.106.8.3.6	Approve	Accept		Repeal this section and related subsections and table for purposes of reformatting. HCD: No action required.	Approve

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

Continue adoption of sections into the 2022 CALGreen as listed below:

Item Number 5	Code Section	CAC Action	Agency Response	Public Comments	Annotations	CBSC Action
HCD 03/21-5-1	DIVISION 4.3	<b>Approve</b>	<b>Accept</b>	<p><b>45-Day comments:</b>  <b>137 Various commenters; see FSOR Attachment A for a complete list.</b>                      Approve as Amended</p> <p>G. Latshaw, Ph.D.                      Wei-Tai Kwok, Council Member, City of Lafayette                      Approve as Amended</p> <p>S. Dunlap; E. Dunlap                      Approve as Amended</p> <p>J. Kalb, EV Charging Pros                      Approve as Amended                      M. Roest, Sustainable Energy Inc.                      Approve as Amended</p> <p>J. Frey &amp; P. Mustacich, Statewide Utility Codes and Standards Team                      Comment not applicable to CRC.</p> <p>L. Emerson, National City, CA                      General comment.</p> <p>P. Kobernick, on behlf of Peninsula Clean Energy, MCE, Clean Power Alliance, Redwood Coast Energy Authority, and East Bay Community Energy                      Further Study Item 4, Criteria #3.</p> <p><b>15-Day comments:</b>                      Commenters:                      Senator Dave Cortese,                      plus 11 California Legislators</p>	<p>Continue adoption of Chapter 4, Division 4.3, without amendment.                      HCD: No action required.</p>	<b>Approve</b>



Item Number 5	Code Section	CAC Action	Agency Response	Public Comments	Annotations	CBSC Action
				& Letter from Legislative Members; Approve as Amended  Sven Thesen, Project Green Home Approve as Amended.  Stacey Reineccius, Powertree Services Inc. Approve as Amended		

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

Continue adoption of sections and new amendments into the 2022 CALGreen as listed below:

Item Number 6	Code Section	CAC Action	Agency Response	Public Comments	Annotations	CBSC Action
HCD 03/21-6-1	DIVISION 4.4	<b>Further Study</b>	<b>Disagree</b>		Continue adoption of Chapter 4, Division 4.4, with new amendments. HCD: This is just a carryover of Division 4.4 with the exception of Section 4.410.1. This should have been an “approve as Submitted.” No change made	<b>Approve</b>
HCD 03/21-6-2	4.410.1 Operation and maintenance manual.	<b>Further Study</b>	<b>Disagree</b>		HCD proposes new grab bar reinforcements in certain circumstances to align with statute. CAC: Include text justifying reason for placement in CALGreen. HCD: No change to text to follow format of the other listed items which do not include justifications; justification for reducing construction waste lumber included in ISOR.	<b>Approve</b>

**CHAPTER 4 – RESIDENTIAL MANDATORY MEASURES, DIVISION 4.5, ENVIRONMENTAL QUALITY**

Continue adoption of sections without amendments into the 2022 CALGreen as listed below:

Item Number 7	Code Section	CAC Action	Agency Response	Public Comments	Annotations	CBSC Action
HCD 03/21-7-1	DIVISION 4.5	Approve	Accept		Continue adoption of Chapter 4, Division 4.5, without additional amendments. HCD: No action required.	Approve

**CHAPTER 6 – REFERENCED ORGANIZATIONS AND STANDARDS**

Continue adoption of sections without amendments into the 2022 CALGreen as listed below:

Item Number 8	Code Section	CAC Action	Agency Response	Public Comments	Annotations	CBSC Action
HCD 03/21-8-1	CHAPTER 6	Approve	Accept		Continue adoption of Chapter 6 without additional amendments. HCD: No action required.	Approve

**CHAPTER 7 – INSTALLER AND SPECIAL INSPECTOR QUALIFICATIONS**

Continue adoption of sections without amendments into the 2022 CALGreen as listed below:

Item Number 9	Code Section	CAC Action	Agency Response	Public Comments	Annotations	CBSC Action
HCD 03/21-9-1	CHAPTER 7	Approve	Accept		Continue adoption of Chapter 7 without additional amendments. HCD: No action required.	Approve

**CHAPTER 8 – COMPLIANCE FORM, WORKSHEET, AND REFERENCE MATERIAL**

Continue NON-adoption of sections into the 2022 CALGreen as listed below:

Item Number 10	Code Section	CAC Action	Agency Response	Public Comments	Annotations	CBSC Action
HCD 03/21-10-1	CHAPTER 8	Approve	Accept		Continue NON-adoption of Chapter 8 from the 2019 CALGreen. HCD: No action required.	Approve

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

Continue adoption of sections and new amendments into the 2022 CALGreen as listed below:

Item Number 11	Code Section	CAC Action	Agency Response	Public Comments	Annotations	CBSC Action
HCD 03/21-11-1	A4.106.8.2.1 Multifamily development projects and hotels and motels. Tier 1 & 2	<b>Approve</b>	<b>Accept</b>	45-Day comments: Phillip Kobernick, On behalf of Peninsula Clean Energy, MCE, Clean Power Alliance, Redwood Coast Energy Authority, and East Bay Community Energy Further Study, Criteria #3  Ida Claire, Division of the State Architect (DSA) Approve as Amended	Modify title and repeal Tier 1 and Tier 2 provisions. HCD: No action required.  Comments regarding charging access to 100% of parking spaces with various levels of charging capacities.  DSA requests deleting references to CBC Chapter 11B.	<b>Approve</b>
HCD 03/21-11-2	A4.106.8.2.1	<b>Approve</b>	<b>Accept</b>		HCD proposes to add new section and include provisions for Tier 1 and Tier 2 regarding low power Level 2 receptacles and options. HCD: No action required.	<b>Approve</b>
HCD 03/21-11-3	A4.106.8.2.2 (formerly A4.106.8.2.1)	<b>Approve</b>	<b>Accept</b>		Renumber this section with editorial changes. HCD: No action required.	<b>Approve</b>
HCD 03/21-11-4	A4.106.8.3	<b>Approve</b>	<b>Accept</b>		Repeal this section and related subsections and tables. HCD: No action required.	<b>Approve</b>

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

Continue adoption of sections and new amendments into the 2022 CALGreen as listed below:

Item Number 12	Code Section	CAC Action	Agency Response	Public Comments	Annotations	CBSC Action
HCD 03/21-12-1	A4.303.4 Nonwater urinals and waterless toilets	<b>Approve</b>	<b>Accept</b>		HCD proposes to adopt this section (formerly hybrid urinals) with modification to align terminology with the 2021 CPC. HCD: No action required.	<b>Approve</b>

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

Continue adoption of sections without amendments into the 2022 CALGreen as listed below:

Item Number 13	Code Section	CAC Action	Agency Response	Public Comments	Annotations	CBSC Action
HCD 03/21-13-1	APPENDIX A4, Division A4.4	Approve	Accept		HCD proposes to continue adopting APPENDIX A4, Division A4.4 without additional amendments. HCD: No action required.	Approve

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

Continue adoption of sections without amendments into the 2022 CALGreen as listed below:

Item Number 14	Code Section	CAC Action	Agency Response	Public Comments	Annotations	CBSC Action
HCD 03/21-14-1	APPENDIX A4, Division A4.5	Approve	Accept		Continue adoption of APPENDIX A4, Division A4.5 without additional amendments. HCD: No action required.	Approve

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

Continue adoption of sections and new amendments into the 2022 CALGreen as listed below:

Item Number 15	Code Section	CAC Action	Agency Response	Public Comments	Annotations	CBSC Action
HCD 03/21-15-1	A4.602 Residential occupancies application checklist.	Approve	Accept		HCD proposes to amend Table A4.602 to align with proposed code amendments to Chapters 4 and A4. HCD: No action required.	Approve