

Note:

This document is intended for educational purposes only, without any express or implied warranty of any kind, including warranties of accuracy, completeness, or fitness for any particular purpose. You agree that your use of the template is without any recourse whatsoever to PG&E, SCE, SDG&E, or their affiliates. The template is a draft, and anyone using this document should seek the advice of an attorney to develop appropriate ordinance language to meet its jurisdiction's specific needs, as state and local laws may differ.

Contact the Codes and Standards Reach Codes Team at info@LocalEnergyCodes.com for additional information.

This program is funded by California utility customers and administered by Pacific Gas and Electric Company, San Diego Gas & Electric Company (SDG&E®), and Southern California Edison Company under the auspices of the California Public Utilities Commission and in support of the California Energy Commission.

Recently Adopted and Proposed Changes to CALGreen, the Plumbing Code and the Energy Code

Version 1.2

The California Building Standards Code (Title 24) is comprised of several "Parts", including the Energy Code (Part 6), the Green Building Standards Code, or CALGreen (Part 11), and the Uniform Plumbing Code (Part 5). The entire code is normally updated every three years. The current code is the 2022 Code Cycle, effective January 1, 2023 through December 31, 2025.

CALGreen and the Uniform Plumbing Code have both been amended mid-cycle (or intervening cycle) effective July 1, 2024; these changes flow down to local governments.

The State has also begun the preadoption phase for the 2025 Energy Code and Green Building Standards Code (CALGreen) and has issued a draft set of Express Terms. These proposals may change.

The tables below provide high-level summaries of the adopted changes in CALGreen and the California Plumbing Code as well as the draft of proposed changes to the Energy Code and CALGreen. They are not comprehensive. Please refer to the source materials for details - CALGreen Intervening Cycle, California Plumbing Code Intervening Cycle, 2025 15-Day Energy Code (Part 6) Express Terms, 2025 Energy Code-related 45-Day CALGreen (Part 11) Express Terms, and 2025 Electric Vehicle Charging and Bicycle Parking CALGreen (Part 11) Express Terms (BSC and HCD).

Intervening Cycle

- Adopted Changes to Mandatory Provisions of CALGreen
- Adopted Changes to California Plumbing Code
- Additional Resources: Electric Vehicle Charging and Embodied Carbon

2025 Code Cycle

- Proposed Electrification-Related Changes to 2025 Energy Code (Title 24, Part 6)
- Proposed Voluntary Energy-Related Changes to 2025 Cycle of the Green Building Standards Code (CALGreen)
- <u>Proposed Electric Vehicle Charging and Bicycle Parking Related Changes to 2025 Cycle of the</u> Green Building Standards Code (CALGreen)

Adopted Changes to Mandatory Provisions of CALGreen					
Intervening Cycle, effective July 1, 2024					
Occupancy	Event	Code Reference	Topic	Changes	
MF, Hotels & Motels	New	4.106.4	EV Chargers	Increased requirements to 40% low-power level 2 receptacles plus 10% level 2 chargers. Specifies requirements for assigned spaces and minimum number of J1772 chargers.	
NR	New	5.106.5	EV Chargers	Extends off-street medium- and heavy-duty requirements to offices and manufacturing facilities. Requires at least 1 charger for facilities with less than 10 spaces. Specifies minimum number of J1772 chargers. Offers alternative compliance pathway – Power Allocation Method.	
NR	Additions & Alterations	5.106.5	EV Chargers	Extends requirements to certain additions and alterations.	
NR (Public Schools and Community Colleges)	New and Existing	5.106.5.6	EV Chargers	Requirements specific to public schools and community colleges are included in separate sub-section.	
NR	Both	5.409	Lifecycle Assessment	Projects greater than 100,000 sf are required to demonstrate a 10% reduction in Global Warming Potential (GWP) using ISO methodology or install only products that meet prescriptive GWP standards. A&A projects may comply with 5.105 (Reuse) instead.	
NR	Additions & Alterations	5.105	Deconstruction and Reuse	Projects greater than 100,000 sf are required to maintain 45% of existing primary structural elements or demonstrate 10% reduction in GWP (5.409) instead.	

Adopted Changes to California Plumbing Code Intervening Cycle, effective July 1, 2024				
Occupancy Event Code Topic Changes Reference				
SF, MF	NA (voluntary, not a requirement)	610.5	Reduced water pipe sizing	Allows voluntary use of the Peak Water Demand Calculation method for water pipe sizing, known as UPC Appendix M. The method allows for a reduction in pipe sizing for single family and multifamily dwellings.

Proposed Electrification-Related Changes to 2025 Energy Code (Title 24, Part 6)

Highlights from 6/13/2024 Express Terms, 15-day Language

Note these have not been adopted and modifications are possible

Occupancy	Event	Code	Topic	Proposed Changes
		Reference	•	, 3
SF	Both	150.0(h)	Space Conditioning Equipment	New requirements for load calculations, system selection, defrost, supplementary heating and thermostat controls.
SF	New	150.1(c)6, 150.1(c)8	Heat pumps	Both heating appliances (space and water) prescriptively required to be heat pumps in all climate zones. 2022 Code requires only one to be heat pump.
SF	Additions & Alterations	150.2(a)1D	Hot Water	For additions, any additional water heater is prescriptively required to be a heat pump.
MF	New	160.9	Electric Readiness	Flectric readiness requirements moved from 160.4 to 160.9 for in-unit systems and added for central hot water systems. Physical space and overall electrical capacity of the building must be sufficient to serve all-electric systems.
MF	New	170.2(d)	Hot water	Disallows gas instantaneous water heat as a prescriptive option for systems serving individual units in low-rise buildings. 120V heat pumps allowed in 1 bedroom units in place of 240V units.
NR	Both	120.6(k)	Commercial Kitchen electric readiness	Commercial kitchens required to include 208V/50 amp circuit for "cookline appliances", and electrical panel capacity for an additional circuit.
NR	New	140.4(a)3	Space Conditioning	Extends prescriptive heat pump space conditioning requirements to all office and school occupancies.
NR	Additions & Alterations	141.0(b)2Cii	Heat pumps	Heat pumps prescriptively required for small, packaged unit replacements in offices, financial institutions, retail, grocery, school, and library occupancies in most climate zones. Alternatively, air conditioners with furnaces and dual-fuel heat pumps must install economizer and/or variable speed fans.
NR	New	140.10	PV and Battery	Changes to prescriptive requirements and storage capacity calculation and breaks out additional occupancies.

Proposed Voluntary Energy-Related Changes to 2025 Cycle of the Green Building Standards Code (CALGreen)

Highlights from <u>45-Day Express Terms</u>, May <u>16</u>, <u>2024</u>

Note these have not been adopted and modifications are possible

Occupancy	Event	Code Reference	Topic	Proposed Changes
SF	New	A4.203.1.1	Performance margins	Higher performance margins (0.18 to 2.7, depending upon climate zone)
All	New	A4.203.1.4 & A5203.1.1.1	Outdoor lighting standards	Downlit and shielded
SF	A&A	A4.204.1.1	Air conditioner replacements	Prescriptive requirement for heat pump space conditioning when replacing an air conditioner. Standard air conditioners allowed with additional efficiency measures. Supplemental heating (only) may be provided by either existing or new gas furnace.
MF/NR	A&A	A4.204.1.2 A5.204.1.1	Pools and spas	Heat pump (gas back up allowed) or gas with 60% solar thermal/recovered energy fraction.

Proposed Electric Vehicle Charging and Bicycle Parking Related Changes to 2025 Cycle of the Green Building Standards Code (CALGreen)

Highlights from <u>45-Day Express Terms</u>

Note: proposed changes only. They have not been adopted; modifications are possible

Occupancy	Event	Code	Topic	Proposed Changes
, ,		Reference		
MF	New	4.106.4.2.2	EV Charging	EVSEs or low power EV receptacles must be no less than the number of dwelling units, or 100% of the spaces (up from 50%, i.e., 10% + 40%). At least one low power EV receptacle must be provided for each dwelling unit with an assigned space (up from 40%). At least 25% of unassigned or common spaces must be equipped with EVSEs (up from 10%) Tier 1: 40% EVSE; low power Level 2 receptacle to be full power capable
				EVSEs must be equipped with J1772 or J3400 connectors. ALMS may be used for unassigned spaces to reduce electrical capacity.
Hotels and Motels	New	4.106.4.2.6	EV Charging	Low power receptacles at 40% of spaces (no change from intervening cycle) EVSEs at 25% of spaces (up from 10%) Tier 1: 60% low power Level 2 receptacles; 40% EVSE EVSEs must be equipped with J1772 or J3400 connectors. ALMS may be used to reduce electrical capacity.
MF, Hotels and Motels	A&A	4.106.4.3	EV Charging	Scope of defined alterations and additions broadened. Alterations to existing parking spaces or spaces added shall have "access to" a low power receptacle or EVSE.

Proposed Electric Vehicle Charging and Bicycle Parking Related Changes to 2025 Cycle of the Green Building Standards Code (CALGreen)

Highlights from 45-Day Express Terms

Note: proposed changes only. They have not been adopted; modifications are possible

Occupancy	Event	Code Reference	Topic	Proposed Changes
NR	New	5.106.5.3	EV Charging	15% EVSE for office/retail 10% EVSE other occupancies Expanded technical infeasibility exception for new construction to align with multifamily/hotels/motels.
MF, Hotels and Motels	New*	4.106.4.4.1	Short-term Bicycle Parking	2 short-term parking spaces per 10,000 sf.
MF	New*	4.106.4.4.2	Long-term Bicycle Parking	1 long-term parking space per 2 dwelling units
Hotels and Motels	New*	4.106.4.4.3	Long-term Bicycle Parking	1 long-term parking space per 25,000 sf.
			Voluntary	
MF	New	A4.106.8.2.1	Low Power Receptacles	Low power Level 2 installations to be full-power capable.
MF	New	A4.106.8.2.1	Exceptions	Exception for mechanical lifts deleted.
MF	New	A4.106.8.2.2	EVSEs	40% EVSEs
Hotels and Motels	New	A4.106.8.2.1	Low Power Receptacles	60% low power Level 2 receptacles
Hotels and Motels	New	A4.106.8.2.2	EVSE	40% EVSE
NR	New	A5.105.5.3.2	Tier 1	~30% EV-Capable/EVSE ~24% EVSE office/retail ~15% EVSE all other
NR	New	A5.105.5.3.3	Tier 2	~45% EV-Capable/EVSE ~30% EVSE office/retail ~23% EVSE all other

^{*} Bicycle parking presumably applies to new construction only.

Notes and Abbreviations

- A&A Additions and alterations Applies to certain additions and alterations
- New Applies to newly constructed buildings
- Both Applies to both newly constructed buildings as well as additions and alterations
- MF Multifamily residential buildings
- NR Nonresidential buildings
- SF Single family buildings