



The California Green Building Standards
Code, Part 11 of Title 24
ORGANIZATION AND STRUCTURE



CALGREEN CARBON REDUCTION COLLABORATIVE
May 19, 2022



CALGreen CHAPTERS AND DIVISIONS

▶ CHAPTER 1 ADMINISTRATION

- ▶ Purpose, scope, application for BSC, DSA, HCD, OSHPD
- ▶ Local amendment findings can be based on environmental conditions
- ▶ Purpose. The purpose of this code is to improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories:
 - ▶ 1. Planning and design.
 - ▶ 2. Energy efficiency.
 - ▶ 3. Water efficiency and conservation.
 - ▶ 4. Material conservation and resource efficiency.
 - ▶ 5. Environmental quality.
- ▶ These 5 categories are used as Divisions throughout CALGreen



CALGreen CHAPTERS AND DIVISIONS

- ▶ CHAPTER 2 DEFINITIONS

- ▶ CHAPTER 3 GREEN BUILDING

- ▶ Provides general scoping information for mandatory, additions and alterations, mixed occupancy buildings and phased projects.
- ▶ **BSC-CG** All nonresidential occupancies where no other state agency has authority for green building standards (commercial /nonresidential)
- ▶ **HCD** Hotels, motels, apartments, condos, dwellings, etc.
- ▶ **DSA-SS** Public schools K-12 and community colleges
- ▶ **OSHPD** Healthcare Facilities (OSHPD 1, 2 & 4) - voluntary
- ▶ Explains the purpose of the voluntary tiers



CALGreen CHAPTERS AND DIVISIONS

- ▶ CHAPTER 4 and APPENDIX A4 – Residential
 - ▶ Chapter 4 Mandatory
 - ▶ Appendix A4 Voluntary
- ▶ CHAPTER 5 and Appendix A5 - Nonresidential
 - ▶ Chapter 5 Mandatory
 - ▶ Appendix A5 Voluntary



CALGreen CHAPTERS AND DIVISIONS

- ▶ EACH CHAPTER and APPENDIX CONTAIN DIVISIONS
 - ▶ Division 1 - Planning and Design
 - ▶ Division 2 - Energy Efficiency
 - ▶ Division 3 - Water Efficiency and Conservation
 - ▶ Division 4 - Material Conservation & Resource Efficiency
 - ▶ Division 5 - Environmental Quality



CALIFORNIA GREEN BUILDING STANDARDS CODE – MATRIX ADOPTION TABLE
CHAPTER 5 – NONRESIDENTIAL MANDATORY MEASURES
DIVISION 5.3 – WATER EFFICIENCY AND CONSERVATION

(Matrix Adoption Tables are nonregulatory, intended only as an aid to the code user.
 See Chapter 1 for state agency authority and building applications.)

EXAMPLE

Adopting agency	BSC	BSC- CG	SFM	HCD			DSA		OSHPD					BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	1	1R	2	3	4								
Adopt entire CA chapter		X																			
Adopt entire chapter as amended (amended sections listed below)																					
Adopt only those sections that are listed below								X													
Chapter/Section																					
5.304.1								X													
5.302.1 Definitions								X													
5.303.3.1								X													
5.303.3.2								X													
5.303.3.3								X													
5.303.3.4								X													
5.303.6								X													
5.304.6 and subsections			†					X													

The state agency does not adopt sections identified by the following symbol: †.

CHAPTER 5

NONRESIDENTIAL MANDATORY MEASURES

Division 5.3 – WATER EFFICIENCY AND CONSERVATION

SPECIAL LANDSCAPE AREA (SLA). [DSA-SS]
SUBMETER.

SECTION 5.301 GENERAL

5.301.1 Scope. The provisions of this chapter shall establish the means of conserving water used indoors, outdoors and in wastewater conveyance.

SECTION 5.303 INDOOR WATER USE

5.303.1 Meters. Separate submeters or metering devices shall be installed for the uses described in Sections 5.303.1.1 and 5.303.1.2.

5.303.1.1 New buildings or additions in excess of 50,000 square feet. Separate submeters shall be installed as follows:

- For each individual leased, rented or other tenant space within the building projected to consume more than 100 gal/day (380 L/day), including, but not limited to, spaces used for laundry or cleaners, restaurant or food service, medical or dental office, laboratory, or beauty salon or barber shop.
- Where separate submeters for individual building tenants are unfeasible, for water supplied to the following subsystems:
 - Makeup water for cooling towers where flow through is greater than 500 gpm (30 L/s).
 - Makeup water for evaporative coolers greater than 6 gpm (0.04 L/s).

SECTION 5.302 DEFINITIONS

5.302.1 Definitions. The following terms are defined in Chapter 2.

- EVAPOTRANSPIRATION ADJUSTMENT FACTOR (ETAf). [DSA-SS]
- FOOTPRINT AREA [DSA-SS]
- GRAYWATER.
- METERING FAUCET.
- MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO).
- POTABLE WATER.
- RECLAIMED (RECYCLED) WATER.
- RECYCLED WATER.



CALGreen VOLUNTARY MEASURES

- ▶ DIVISION A4.6 AND A5.6, TIER 1 and 2
 - ▶ **Scope.** The measures contained in this appendix are not mandatory unless adopted by a city, county, or city and county as specified in Section 101.7.... In order to meet one of the tier levels designers, builders or property owners are required to incorporate additional green building measures necessary to meet the threshold of each level.
 - ▶ **Prerequisite measures.** Tier 1 and Tier 2 thresholds require compliance with the mandatory provisions of this code and incorporation of the required prerequisite measures listed for Tier 1 and Tier 2. Prerequisite measures are also identified in the Application Checklists, A4.602.1 and A5.602.1



EXAMPLE

**TABLE A5.601 NONRESIDENTIAL BUILDINGS:
Green Building Standards Code Proposed Performance Approach**

*Note: This table is intended only as an aid in illustrating the nonresidential tier structure
(Refer to Checklists A5.602, A5.602.1 and A5.602.2 for CALGreen verification
guidelines for Mandatory Checklist, Tier 1 Checklist and Tier 2 Checklist.)*

CATEGORY	ENVIRONMENTAL PERFORMANCE GOAL	TIER 1	TIER 2
All	Minimum Mandatory (See Mandatory Checklist)	Meet all of the provisions of Chapter 5 (See Tier 1 Checklist)	Meet all of the provisions of Chapter 5 (See Tier 2 Checklist)
DIVISION 5.1 Planning and Design	Designated Parking for Fuel Efficient Vehicles (Tier 1 and Tier 2 only)	Approx. 35% of total spaces	Approx. 50% of total spaces
	Electric Vehicle Charging	Approx. 30% of total spaces	Approx. 45% of total spaces
	Cool Roof to Reduce Heat Island Effect	Roof Slope < 2:12 SRI 75 Roof Slope > 2:12 SRI 16	Roof Slope < 2:12 SRI 82 Roof Slope > 2:12 SRI 27
		1 additional Elective from Division A5.1	3 additional Electives from Division A5.1
DIVISION 5.2 Energy Efficiency	Energy Performance ^{2a, 2b}	Outdoor lighting power 90% of Part 6 allowance	Outdoor lighting power 90% of Part 6 allowance
		If applicable, solar water-heating system with minimum solar savings fraction of 0.15	If applicable, solar water-heating system with minimum solar savings fraction of 0.15
		Warehouse door seals	Warehouse door seals
		Comply with day lighting requirements	Comply with day lighting requirements
		Exhaust heat recovery	Exhaust heat recovery
		Energy Budget 95% or 90% of Part 6 calculated value of allowance	Energy Budget 90% or 85% of Part 6 calculated value of allowance
DIVISION 5.3 Water Efficiency and Conservation	Indoor Water Use	12% Savings	20% Savings
		1 additional Elective from Division A5.3	3 additional Electives from Division A5.3
DIVISION 5.4 Material Conservation and Resource Efficiency³	Construction Waste Reduction	At least 65% reduction	At least 80% reduction
	Recycled Content	Utilize recycled content materials for 10% of total material cost	Utilize recycled content materials for 15% of total material cost
		1 additional Elective from Division A5.4	3 additional Electives from Division A5.4
DIVISION 5.5 Environmental Quality	Low-VOC Resilient Flooring	90% of flooring meets VOC limits	100% of flooring meets VOC limits ¹
	Low-VOC Thermal Insulation	Comply with VOC limits	Install no-added formaldehyde insulation and comply with VOC limits
		1 additional Elective from Division A5.5	3 additional Electives from Division A5.5
Additional Measures		1 additional Elective from any division	3 additional Electives from any division
Approximate Total Measures		15	25



EXAMPLE A5.602.1 TIER 1 VERIFICATION CHECKLIST

**A5.602.1
CALGreen VERIFICATION GUIDELINES
TIER 1 CHECKLIST**

Application: This checklist shall be used for nonresidential projects that meet the following: new construction, or building additions of 1,000 square feet or greater, or building alterations with a permit valuation of \$200,000 or more pursuant to Section 301.3, AND are adopting Tier 1 voluntary measures.

Note: All applicable mandatory requirements in Chapter 5 shall be met prior to applying Tier 1 voluntary measures.

Instructions:

Comply with all Tier 1 prerequisite measures from the various categories shown on the table below.

Add a “Y” to all mandatory and Tier 1 prerequisite measures in the appropriate columns.

Select the required number of additional electives from those categories shown on the table below and add a “Y” on the selected elective and add an “N” on the rest.

Count the total number of Tier 1 prerequisite measures plus the additional electives and write down the total number at the end of the checklist. Determine if the required number of Tier 1 measures have been selected to achieve Tier 1 compliance.

Y = Yes (section has been selected and/or included)

N = No (section has not been selected and/or included)

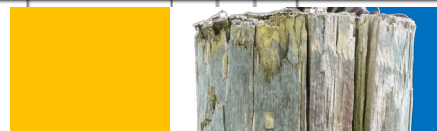
O = Other (provide explanation)

[N] = New construction pursuant to Section 301.3

[A] = Additions and/or Alterations pursuant to Section 301.3

APPENDIX A5—NONRESIDENTIAL VOLUNTARY MEASURES

CHAPTER 5 DIVISIONS		SECTION TITLE	CODE SECTION	Y	N	O	PLAN SHEET, SPEC OR ATTACH REFERENCE
DIVISION 5.5 Environmental Quality (continued)	Mandatory	Fireplaces	5.503.1				
	Mandatory	Woodstoves	5.503.1.1				
	Mandatory	Temporary ventilation	5.504.1				
	Mandatory	Covering of ducts openings and protection of mechanical equipment during construction	5.504.3				
	Mandatory	Adhesives, sealants and caulks	5.504.4.1				
	Mandatory	Paints and coatings	5.504.4.3				
	Mandatory	Aerosol paints and coatings	5.504.4.3.1				
	Mandatory	Aerosol paints and coatings: verification	5.504.4.3.2				
	Mandatory	Carpet systems	5.504.4.4				
	Mandatory	Carpet cushion	5.504.4.4.1				
	Mandatory	Carpet adhesives per Table 5.504.4.1	5.504.4.4.2				
	Mandatory	Composite wood products	5.504.4.5				
	Mandatory	Composite wood products: documentation	5.504.4.5.3				
	Mandatory	Resilient flooring systems	5.504.4.6				
	Mandatory	Resilient flooring: verification of compliance	5.504.4.6.1				
	<i>Tier 1 Prerequisite</i>	<i>Resilient flooring systems, Tier 1 (with verification of compliance)</i>	<i>A5.504.4.7, A5.504.4.7.2</i>				
	Mandatory	Thermal insulation	5.504.4.7				
	Mandatory	Verification of compliance	5.504.4.7.1				
	<i>Tier 1 Prerequisite</i>	<i>Thermal insulation, Tier 1 (with verification of compliance)</i>	<i>A5.504.4.8.1, A5.504.4.8.1</i>				



EXAMPLE A5.602.1 TIER 1 VERIFICATION CHECKLIST

APPENDIX A5—NONRESIDENTIAL VOLUNTARY MEASURES

CHAPTER 5 DIVISIONS		SECTION TITLE	CODE SECTION	Y	N	O	PLAN SHEET, SPEC OR ATTACH REFERENCE
(continued) DIVISION 5.5 Environmental Quality	Elective	Indoor air quality (IAQ) during construction	A5.504.1, A5.504.1.1, A5.504.1.2				
	Elective	IAQ postconstruction	A5.504.2				
	Elective	IAQ testing	A5.504.2.1, A5.504.2.1.1, A5.504.2.1.2, A5.504.2.1.3				
	Elective	No added formaldehyde Tier 1 (with notes)	A5.504.4.5.1				
	Elective	Hazardous particulates and chemical pollutants	A5.504.5				
	Elective	Entryway systems	A5.504.5.1				
	Elective	Isolation of pollutant sources	A5.504.5.2				
	Elective	Lighting and thermal comfort controls	A5.507.1, A5.507.1.1 through A5.507.1.2				
	Elective	Daylight	A5.507.2				
	Elective	Views	A5.507.3				
	Elective	Interior office spaces	A5.507.3.1				
	Elective	Multi-occupant spaces (with exceptions)	A5.507.3.2				
	Elective	Hydrochlorofluorocarbons (HCFCs)	A5.508.1.3				
	Elective	Hydrofluorocarbons (HFCs)	A5.508.1.4				
	Additional Measures	Select 1 additional measure from any division		Add section #			
Total number of Measures required			15				
Total number of Measures selected							

