

## CALIFORNIA GREEN BUILDING STANDARDS CODE – MATRIX ADOPTION TABLE

### CHAPTER 3 – GREEN BUILDING

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

Adopting agency	BSC	SFM	HCD			DSA		OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
			1	2	1-AC	AC	SS	1	2	3	4								
Adopt entire CA chapter																			
Adopt entire chapter as amended (amended sections listed below)																			
Adopt only those sections that are listed below	X		X					X	X	X	X								
Chapter/Section																			
301	X		X					X	X	X	X								
301.1			X																
301.1.1			X																
301.2			X																
301.3	X																		
302	X		X					X	X	X	X								
303	X		X					X	X	X	X								
304	X		X					X	X	X									
304.1.1 (2nd paragraph)			X																
305								X											
306								X											

## CHAPTER 3

### GREEN BUILDING

#### SECTION 301

##### GENERAL

noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.

**301.1 Scope.** Buildings and structures shall be designed to include the green building measures indicated in Sections 301.1, 301.2, and 301.3.

**301.1.1 Residential construction. [HCD]** The mandatory provisions of Chapter 4 shall be applied to newly constructed low-rise and high-rise residential buildings and structures six stories or less and additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned volume or size. The requirements shall apply only to and/or within the specified area of the addition or alteration.

Newly constructed high-rise residential buildings of seven stories or greater shall comply with Section 301.3.

**Note:** On and after January 1, 2014, residential buildings undergoing permitted alterations, additions or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a

**301.2 Low-rise and high-rise residential buildings. [HCD]** The provisions of individual sections of *CALGreen* may apply to either low-rise residential buildings, high-rise residential buildings, or both. Individual sections will be designated by banners to indicate where the section applies specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and high-rise buildings, no banner will be used.

**301.3 Nonresidential construction. [BSC]** The provisions of individual sections of Chapter 5 apply to newly constructed buildings, building additions of 1,000 square feet or greater, and/or building alterations with a permit valuation of \$200,000 or above (for occupancies within the authority of California Building Standards Commission). Code sections relevant to additions and alterations shall only apply to the portions of the building being added or altered within the scope of the permitted work.

A code section will be designated by a banner to indicate where the code section only applies to newly constructed buildings [N] or to additions and alterations [AA]. When the code section applies to both, no banner will be used.

**301.3.1 Nonresidential buildings greater than or equal to 25,000 square feet.** In addition to the requirements of Section 301.3, any newly constructed nonresidential building greater than or equal to 25,000 square feet shall comply with all requirements of Section A5.601.2.4 Tier 1.

**Exceptions:**

1. Compliance with Section A5.601.2.3 shall be voluntary.
2. High-rise residential buildings of seven stories or greater shall comply with Table A4.106.5.1(3) in lieu of Table A5.106.11.2.2.

## SECTION 302 MIXED OCCUPANCY BUILDINGS

**302.1 Mixed occupancy buildings.** In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy.

## SECTION 303 PHASED PROJECTS

**303.1 Phased projects.** For shell buildings and others constructed for future tenant improvements, only those code measures relevant to the building components and systems considered to be new construction (or newly constructed) shall apply.

**303.1.1 Tenant improvements.** The provisions of this code shall apply only to the initial tenant or occupant improvements to a project.

## SECTION 304 VOLUNTARY TIERS

**304.1 Purpose.** Voluntary tiers are intended to further encourage building practices that improve public health, safety and general welfare by promoting the use of building concepts which minimize the building's impact on the environment and promote a more sustainable design.

**304.1.1 Tiers.** The provisions of Divisions A4.6 and A5.6 outline means, in the form of voluntary tiers, for achieving enhanced construction levels by incorporating additional measures for residential and nonresidential new construction. Voluntary tiers may be adopted by local governments and, when adopted, enforced by local enforcing agencies. Buildings complying with tiers specified for each occupancy contain additional prerequisite and elective green building measures necessary to meet the threshold of each tier. See Section 101.7 of this code for procedures and requirements related to local amendments, additions or deletions, including changes to energy standards.

**[BSC & HCD]** Where there are practical difficulties involved in complying with the threshold levels of a tier, the enforcing agency may grant modifications for individual cases. The enforcing agency shall first find that a special individual reason makes the strict letter of the tier impractical and that modification is in conformance with the intent and purpose of the measure. The details of any action granting modification shall be recorded and entered in the files of the enforcing agency.

## SECTION 305 [OSHPD 1] CALGreen TIER 1 AND CALGreen TIER 2

**305.1** *CALGreen* Tier 1 and *CALGreen* Tier 2 buildings contain voluntary green building measures necessary to meet the threshold of each level.

**305.1.1 *CALGreen* Tier 1.** To achieve *CALGreen* Tier 1, buildings must comply with the latest edition of "Savings By Design, Healthcare Modeling Procedures" found online at [http://www.energysoft.com/main/page\\_downloads\\_sbd\\_healthcare.html](http://www.energysoft.com/main/page_downloads_sbd_healthcare.html).

**305.1.2 *CALGreen* Tier 2.** To achieve *CALGreen* Tier 2, buildings must exceed the latest edition of "Savings By Design, Healthcare Modeling Procedures" by a minimum of 15 percent.

## SECTION 306 [DSA-SS] VOLUNTARY MEASURES

**306.1 Purpose.** For public schools and community colleges, Appendix A5, Nonresidential Voluntary Measures, is provided as a guideline to further encourage building practices that improve public health, safety and general welfare by promoting the use of building concepts which minimize the building's impact on the environment, promote a more sustainable design and high-performance educational facilities.

**306.1.1** The optional provisions of Appendix A5, Divisions A5.1 through A5.5, outline means of achieving enhanced construction levels by incorporating additional measures that exceed the mandatory code.

## CALIFORNIA GREEN BUILDING STANDARDS CODE – MATRIX ADOPTION TABLE

### CHAPTER 4 – RESIDENTIAL MANDATORY MEASURES

(Matrix Adoption Tables are non-regulatory, intended only as an aid to the user.  
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Adopting agency	BSC	SFM	HCD			DSA		OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
			1	2	1-AC	AC	SS	1	2	3	4								
Adopt entire CA chapter																			
Adopt entire chapter as amended (amended sections listed below)																			
Adopt only those sections that are listed below			X																
Chapter/Section																			
4.1			X																
4.2			†																
4.3			X																
4.4			X																
4.5			X																

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

## CHAPTER 4

### RESIDENTIAL MANDATORY MEASURES

#### **Division 4.1 – PLANNING AND DESIGN**

##### **SECTION 4.101** **GENERAL**

**4.101.1 Scope.** The provisions of this division outline planning, design and development methods that include environmentally responsible site selection, building design, building siting and development to protect, restore and enhance the environmental quality of the site and respect the integrity of adjacent properties.

##### **SECTION 4.102** **DEFINITIONS**

**4.102.1 Definitions.** The following terms are defined in Chapter 2.

##### **FRENCH DRAIN.**

##### **WATTLES.**

##### **SECTION 4.103** **SITE SELECTION** **(Reserved)**

##### **SECTION 4.104** **SITE PRESERVATION** **(Reserved)**

##### **SECTION 4.105** **DECONSTRUCTION AND REUSE** **OF EXISTING STRUCTURES** **(Reserved)**

##### **SECTION 4.106** **SITE DEVELOPMENT**

**4.106.1 General.** Preservation and use of available natural resources shall be accomplished through evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, management of storm water drainage and erosion controls shall comply with this section.

**4.106.2 Storm water drainage and retention during construction.** Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site.

1. Retention basins of sufficient size shall be utilized to retain storm water on the site.
2. Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency.
3. Compliance with a lawfully enacted storm water management ordinance.

**4.106.3 Grading and paving.** Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:

1. Swales
2. Water collection and disposal systems
3. French drains
4. Water retention gardens
5. Other water measures which keep surface water away from buildings and aid in groundwater recharge.

**Exception:** Additions and alterations not altering the drainage path.

**4.106.4 Low-impact development (LID).** New development or alterations to existing developed sites shall comply with Chapter 12.84 of Title 12 of the *Los Angeles County Code*.

## CHAPTER 4

# RESIDENTIAL MANDATORY MEASURES

### Division 4.3 – WATER EFFICIENCY AND CONSERVATION

#### SECTION 4.301 GENERAL

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

#### SECTION 4.302 DEFINITIONS

**4.302.1 Definitions.** Reserved.

#### SECTION 4.303 INDOOR WATER USE

**4.303.1 Water conserving plumbing fixtures and fittings.** Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:

**4.303.1.1 Water closets.** The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-type Toilets.

**Note:** The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.

**4.303.1.2 Urinals.** The effective flush volume of urinals shall not exceed 0.5 gallons per flush.

**4.303.1.3 Showerheads.**

**4.303.1.3.1 Single showerhead.** Showerheads shall have a maximum flow rate of not more than 2.0 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads.

**4.303.1.3.2 Multiple showerheads serving one shower.** When a shower is served by more than one showerhead, the combined flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 2.0 gallons per minute at 80 psi, or the shower shall be designed to allow only one shower outlet to be in operation at a time.

**Note:** A hand-held shower shall be considered a showerhead.

**4.303.1.4 Faucets.**

**4.303.1.4.1 Residential lavatory faucets.** The maximum flow rate of residential lavatory faucets shall not

exceed 1.5 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall not be less than 0.8 gallons per minute at 20 psi.

**4.303.1.4.2 Lavatory faucets in common and public use areas.** The maximum flow rate of lavatory faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential buildings shall not exceed 0.5 gallons per minute at 60 psi.

**4.303.1.4.3 Metering faucets.** Metering faucets when installed in residential buildings shall not deliver more than 0.25 gallons per cycle.

**4.303.1.4.4 Kitchen faucets.** The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.

**Note:** Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

**4.303.2 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 1401.1 of the *California Plumbing Code*.

#### SECTION 4.304 OUTDOOR WATER USE

**4.304.1 Irrigation controllers.** Automatic irrigation system controllers for landscaping shall be installed at the time of final inspection and shall comply with the following:

1. Controllers shall be weather- or soil moisture-based controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change.
2. Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.

**Note:** More information regarding irrigation controller function and specifications is available from the Irrigation Association.

**4.304.2 Reserved.**

**4.304.3 Water budget.** A water budget shall be developed for landscape irrigation use installed in conjunction with new

<sup>L</sup> building that conforms to the California Department of Water  
<sup>L</sup> Resources Model Water-Efficient Landscape Ordinance.

<sup>A</sup>  
<sup>L</sup> **Exception:** As an alternative to a water budget, developer-installed landscapes with a landscape area less than  
<sup>A</sup> 2,500 square feet, or homeowner-provided and/or home-  
<sup>L</sup> owner-hired landscapes with a landscaped area less than  
<sup>L</sup> 5,000 square feet may comply with all of the following mea-  
<sup>A</sup> sures:

- <sup>A</sup>  
<sup>L</sup> 1. Turf area shall be water-efficient and shall not exceed  
<sup>A</sup> 25 percent of the total landscaped area.
- <sup>A</sup>  
<sup>L</sup> 2. Non-invasive drought-tolerant plant and tree species  
<sup>A</sup> appropriate for the climate zone region shall be uti-  
<sup>L</sup> lized in at least 75 percent of the total landscaped area.
- <sup>A</sup>  
<sup>L</sup> 3. Hydrozoning irrigation techniques shall be incorpo-  
<sup>A</sup> rated into the landscape design.

<sup>L</sup> **Note:** Prescriptive measures to assist in compliance with the  
<sup>A</sup> water budget are listed in Sections 492.5 through 492.8,  
<sup>A</sup> 492.10, and 492.11 of the MWELO.

**SECTION 4.305**  
**WATER REUSE SYSTEMS**  
**(Reserved)**