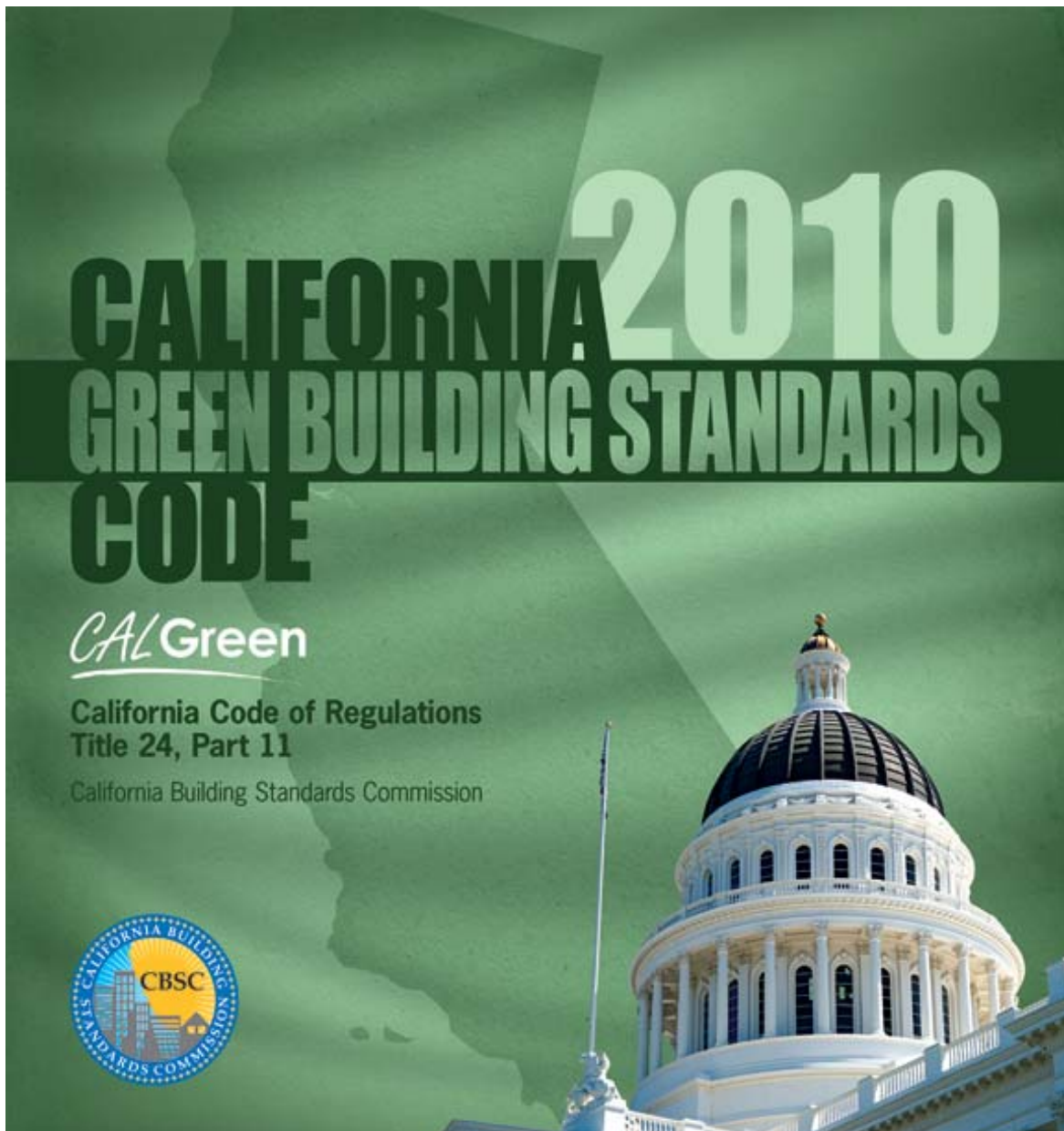


# Guide to the (Non-Residential) California Green Building Standards Code

Including changes effective July 1, 2012



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**CALGreen Section: 5.710.6.2 Bicycle parking.** Comply with Sections 5.710.6.2.1 and 5.710.6.2.2; or meet the applicable local ordinance, whichever is stricter.

**5.710.6.2.1 Short-term bicycle parking.** If the project is anticipated to generate visitor traffic and adds 10 or more vehicular parking spaces, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of the additional visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack.

**5.710.6.2.2 Long-term bicycle parking.** For buildings with over 10 tenant-occupants that add 10 or more vehicular parking spaces, provide secure bicycle parking for 5% of additional motorized vehicle parking capacity, with a minimum of one space. Acceptable parking facilities shall be convenient from the street and may include:

1. Covered, lockable enclosures with permanently anchored racks for bicycles;
2. Lockable bicycle rooms with permanently anchored racks; and
3. Lockable, permanently anchored bicycle lockers.

**Intent:**

The Intent of this section and subsections require additional bicycle parking when 10 or more parking spaces are added as part of an addition or alteration project, thus encouraging additional building occupants to use alternate forms of transportation to standard automobiles.

**Compliance and Enforcement:** See § 5.106.4 of this guide

**CALGreen Section: 5.710.6.3 Designated parking.** For projects that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient, and carpool/van pool vehicles as shown in Table 5.106.2.2 of Division 5.1 based on the number of additional spaces.

**5.106.5.2.1 Parking stall marking.** Paint, in the paint used for stall striping, the following characters such that the lower edge of the last word aligns with the end of the stall striping and is visible beneath a parked vehicle:

**CLEAN AIR/  
VANPOOL/EV**

**Note:** Vehicles bearing Clean Air Vehicle stickers from expired HOV lane programs may be considered eligible for designated parking spaces.

**Intent:**

**Change for 2012:** The intent of this section and subsections requires additional designated parking stalls when 10 or more parking spaces are added as part of an addition or alteration project, thus encouraging additional building occupants to use alternate forms of transportation to standard automobiles.

**Compliance and Enforcement:** See § 5.106.5.2 of this guide

## **NEW DIVISION for 2012**

### **DIVISION 5.7 ADDITIONS AND ALTERATIONS TO EXISTING NONRESIDENTIAL BUILDINGS**

This is a new division proposed to include standards for additions and alterations to existing nonresidential buildings. The reason for this proposal is to extend the benefits of reduction in greenhouse gas emissions, water use, and polluting finish products to a larger class of buildings than newly constructed buildings. It is modeled after similar provisions recently adopted locally by the City of Los Angeles for its considerable body of construction projects. It proposes and scopes some of the provisions from Divisions 5.3 through 5.5 for which cost benefit analysis was prepared last cycle for the mandatory code. The provisions are those readily applicable to additions and renovations.

#### **SECTION 5.701 – ADMINISTRATION**

**CALGreen Section: 5.701.1 Scope.** For those occupancies subject to section 103 of this code, the provisions of this division shall apply to the planning, design, operation, construction, use and occupancy of additions to buildings or structures unless otherwise indicated in this code. The provisions of this Division shall only apply to the portions of the building being added or altered within the scope of the permitted work. Compliance for additions and alterations is required on or after the dates shown in Table 5.701

**TABLE 5.701**

<b><u>Effective date of compliance</u></b>	<b><u>Square footage of addition</u></b>	<b><u>Permit valuation or estimated construction cost of alteration</u></b>
July 1, 2012	2000	\$500,000
Effective date of the 2013 California Building Standards Code	1000	\$200,000

**Notes:**

- 1) The effective date of the 2013 California Building Standards Code is currently projected to be January 1, 2014.
- 2) This division does not apply to additions and alterations of qualified historical buildings.

**Intent:** Scope for additions and alterations to existing nonresidential buildings is limited to 2000 s.f. for additions and \$500,000 for alterations, with that limit to drop in the next edition of the code. At the request of the Division of the State Architect, this section also includes an exception for qualified historic buildings regulated by that agency.

**Existing Law or Regulation:**

Building standards generally apply to additions and alterations for which a permit is applied. CALGreen has an exception, applying only to newly constructed buildings, so this division aligns CALGreen with other Parts of Title 24. There may be a more stringent local ordinance in place.

**Compliance Method:**

Determine if the addition or alteration triggers compliance (see Section 5.701 above and Section 7.502 Definitions) then comply with the specific provisions applicable.

**Enforcement:**

**Plan Intake:** The reviewer and/or plan checker should review the plans, specifications for the areas of additions and construction cost estimates for alterations for to confirm the need for compliance.

**On-Site Enforcement:** The inspector should review the permit set of plans and product data sheets for compliance with specific provisions, following.



**Green Building Ordinance: Specific Local Requirements**  
**Table 3: Other New Non-Residential Occupancies, Additions, and Alterations** ( Sheet 1 of 2)

**Attachment B**  
**Table 3**

This table is a summary, provided for reference. See San Francisco Building Code 13C for details. The following summarizes requirements for new non-residential buildings that are not otherwise required to meet a green building standard (E, F, H, L, S, U occupancy of any size, or A, B, I, or M occupancy <25,000 sq. ft.), and for non-residential additions of ≥2,000 sq ft or alterations of ≥\$500,000 value required by CBC Part 11 Division 5.7. Applicability of measures to additions and alterations may depend on the presence of the regulated system, as well as additional criteria identified in CBC Part 11 Division 5.7.

<b>Specific Locally Required Measures</b> The following measures are mandatory in San Francisco, but may be different or not required elsewhere	<b>Other New Non-Residential</b>	<b>Non-Residential Additions &amp; Alterations<sup>1</sup></b>
<b>Construction and demolition debris diversion</b> – 100% of mixed debris must be transported by a registered hauler to a registered facility and be processed for recycling.	SF Construction and Demolition Debris Diversion Ordinance (Ord. No.27-06)	
<b>Recycling by occupants:</b> Provide adequate space and equal access for storage, collection and loading of <b>compostable, recyclable and landfill</b> materials.	SFBC 106A.3.3 and other local regulations (See DBI Administrative Bulletin 088 for details)	
<b>15% Energy reduction compared to Title-24 2008</b>	13C.5.201.1.1	N/A
<b>Construction site runoff pollution prevention</b> - Provide a construction site Stormwater Pollution Prevention Plan and implement SFPUC Best Management Practices.	13C.5.106.1 or CBC Part 11 Section 5.710.6, as well as NPDES Phase II General Permit and other local regulations.	
<b>Stormwater Control Plan</b> - Projects disturbing ≥5,000 square feet of ground surface must implement a Stormwater Control Plan meeting SFPUC Stormwater Design Guidelines.	SF Public Works Code Article 4.2, Sec. 147	
<b>Water efficient irrigation</b> - Projects that include 1,000 square feet or more of new or modified landscape must comply with the San Francisco Water Efficient Irrigation Ordinance.	SF Admin Code 63 (See the guide, <i>Complying with San Francisco's Water Efficient Irrigation Requirements</i> at <a href="http://www.sfwater.org/landscape">www.sfwater.org/landscape</a> .)	
<b>Additional Required Measures</b> The following California Green Building Standards Code (Title 24 Part 11) requirements for new construction have been integrated into San Francisco Building Code 13C.		
<b>Bicycle parking</b> - Provide short-term and long-term bicycle parking for 5% of total motorized parking capacity each, or meet San Francisco Planning Code Sec 155, whichever is greater.	13C.5.106.4	CBC Part 11 Section 5.710.6.2 - If 10 more more parking stalls are added
<b>Fuel efficient vehicle and carpool parking</b> - Mark 8% of total parking stalls for low-emitting, fuel efficient, and carpool/van pool vehicles.	13C.5.106.5	CBC Part 11 Section 5.710.6.3 - If 10 more more parking stalls are
<b>Light pollution reduction</b> - Contain lighting within each source. No more than .01 horizontal footcandles 15 feet beyond site.	13C.5.106.8	N/A
<b>Water meters</b> - Provide submeters for spaces projected to consume more than 1,000 gal/day, or more than 100 gal/day if in building over 50,000 sq. ft.	13C.5.303.1	CBC Part 11 Section 5.712.3.1
<b>Indoor water efficiency</b> - Reduce overall use of potable water within the building by 20% for showerheads, lavatories, kitchen faucets, wash fountains, water closets, and urinals.	13C.5.303.2	CBC Part 11 Section 5.712.3.1. See also SFBC 13A Commercial Water Conservation Requirements.
<b>Commissioning</b> - For new buildings greater than 10,000 square feet, commissioning shall be included in the design and construction of the project to verify that the building systems and components meet the owner's project requirements. <b>OR</b> for buildings less than 10,000 square feet, testing and adjusting of systems is required.	13C.5.410.2 for buildings >10,000 square feet 13C.5.410.4 for buildings ≤ 10,000 square feet	CBC Part 11 Section 5.713.10.4
<b>Ventilation system protection during construction</b> - Protect openings and mechanical equipment from dust and pollutants during construction	13C.5.504.3	CBC Part 11 Section 5.714.4.1
<b>Adhesives, sealants, and caulks</b> - Comply with VOC limits in SCAQMD Rule 1168 VOC limits and California Code of Regulations Title 17 for aerosol adhesives.	13C.5.504.4.1	CBC Part 11 Section 5.714.4.4.1
<b>Paints and coatings</b> - Comply with VOC limits in the Air Resources Board Architectural Coatings Suggested Control Measure and California Code of Regulations Title 17 for aerosol paints.	13C.5.504.4.3	CBC Part 11 Section 5.714.4.4.3
<b>Carpet</b> - All carpet must meet one of the following: 1. Carpet and Rug Institute Green Label Plus Program 2. California Department of Public Health Standard Practice for the testing of VOCs (Specification 01350) 3. NSF/ANSI 140 at the Gold level 4. Scientific Certifications Systems Sustainable Choice <b>AND Carpet cushion</b> must meet CRI Green Label, <b>AND Carpet adhesive</b> must not exceed 50 g/L VOC content.	13C.5.504.4.4	CBC Part 11 Section 5.714.4.4.4
<b>Composite wood</b> - Meet CARB Air Toxics Control Measure for Composite Wood.	13C.5.504.4.5	CBC Part 11 Section 5.714.4.4.5
<b>Resilient flooring systems</b> - For 50% of floor area receiving resilient flooring, install resilient flooring complying with the VOC-emission limits defined in the 2009 Collaborative for High Performance Schools (CHPS) criteria or certified under the Resilient Floor Covering Institute (RFCI) FloorScore program.	13C.5.504.4.6	CBC Part 11 Section 5.714.4.4.6
<b>Air Filtration</b> - Provide at least MERV-8 filters in regularly occupied spaces of mechanically ventilated buildings.	13C.5.504.5.3	CBC Part 11 Section 5.714.4.5.3
<b>Acoustical control</b> - Wall and roof-ceilings STC 50, exterior windows STC 30, party walls and floor-ceilings STC 40.	13C.5.507.4	CBC Part 11 Section 5.714.7.1
<b>CFCs and halons</b> - Do not install equipment that contains CFCs or Halons.	13C.5.508.1	CBC Part 11 Section 5.714.8.1
<b>Sprinklers</b> - Design and maintain landscape irrigation systems to prevent spray on structures.	13C.5.407.2.1	CBC Part 11 Section 5.713.7.2.1
<b>Entries and openings</b> - Design exterior entries and/or openings subject to foot traffic or wind-driven rain to prevent water intrusion into buildings.	13C.5.407.2.2	CBC Part 11 Section 5.713.7.2.2

1) Requirements for additions or alterations apply to applications received on or after July 1, 2012.



# Green Building Ordinance: Specific Local Requirements

## Table 1: Requirements for projects meeting a LEED Standard

(Sheet 1 of 2)

**Attachment B**  
**Table 1**

This table is a summary, provided for reference. See San Francisco Building Code 13C for details.

		New Large Commercial	New Mid Rise Residential <sup>1</sup>	New High Rise Residential <sup>1</sup>	Commercial Interior	Commercial Alteration	Residential Alteration
Locally Required LEED Measures	LEED Credit	Code Reference					
<b>Construction Waste Management</b> – 75% Diversion AND comply with San Francisco Construction & Demolition Debris Ordinance	LEED MR c2 (2 points)	13C.5.103.1.2	Meet C&D ordinance only	13C.4.103.2.3	Meet C&D ordinance only		
<b>15% Energy Reduction Compared to Title-24 2008</b> (or ASHRAE 90.1-2007)	LEED EA c1 (3 points)	13C.5.103.1.7	13C.4.201.1.1	13C.4.201.1.1	LEED prerequisite (EAp2 Minimum energy performance)		
<b>Enhanced Commissioning</b> of Building Energy Systems	LEED EA c3	13C.5.103.1.3	LEED prerequisite (EAp1.2 Testing & Verification)	LEED prerequisite (EAp1 Fundamental Commissioning)			
<b>Renewable Energy</b> - Effective Jan 1, 2012, permit applicants must either: generate 1% of energy on-site with renewables, OR purchase renewable power, OR achieve an additional 10% beyond Title 24 2008.	LEED EA c2 OR EA c6 OR EA c1	13C.5.103.1.5	-	-	-	-	-
<b>Indoor Water Efficiency</b> - Reduce overall use of potable water within the building by specified percentage for showerheads, lavatories, kitchen faucets, wash fountains, water closets, and urinals.	LEED WE c3	13C.5.103.1.2 (30% reduction)	-	13C.4.103.2.2 (30% reduction)	LEED WE prerequisite1 (20% reduction below UPC/IPC 2006, et al)		
<b>Stormwater Control Plan</b> - Projects disturbing ≥5,000 square feet of ground surface must implement a Stormwater Control Plan meeting SFPUC Stormwater Design Guidelines.	LEED SS c6.1/ SS c6.2	13C.5.103.1.6	13C.4.103.1.2	13C.4.103.2.4	-	SF Public Works Code 4.2 (SFPUC stormwater ordinance)	
<b>Construction Site Runoff Pollution Prevention</b> - Provide a construction site Stormwater Pollution Prevention Plan and implement SFPUC Best Management Practices.	LEED SS p1 <sup>1</sup>	13C.5.103.1.6	13C.4.103.1.2	13C.4.103.2.4.1	-	NPDES Phase II General Permit and other regulations.	
<b>Water Efficient Irrigation</b> - Projects with ≥ 1,000 square feet of new or modified landscape must comply with the San Francisco Water Efficient Irrigation Ordinance.	LEED WE c1	SF Admin Code 63 (See "Complying with San Francisco's Water Efficient Irrigation Requirements" at <a href="http://www.sfwater.org/landscape">www.sfwater.org/landscape</a> .)					
<b>Enhanced Refrigerant Management</b> - Do not install equipment that contains CFCs or Halons	LEED EA c4	13C.5.508.1.2	-	-	-	-	-
<b>Indoor Air Quality Management During Construction</b> - Meet SMACNA Guidelines for Occupied Buildings Under Construction, protect materials from moisture damage, protect return air grills	LEED EQ c3.1	13C.5.103.1.8	-	-	-	-	-
<b>Low-Emitting Adhesives, Sealants, and Caulks - Adhesives and Sealants meet VOC materials meeting SCAQMD Rule 1168, aerosol adhesives meet Green Seal standard GS-36</b>	LEED EQ c4.1	13C.5.103.1.9	-	-	13C.5.103.4.2	13C.5.103.3.2	13C.4.103.2.2
<b>Low-Emitting Paints and Coatings</b> - Architectural paints and coatings meet Green Seal GS-11 standard, anti-corrosive paints meet GC-03, and other coatings meet VOC limits of SCAQMD Rule 1113	LEED EQ c4.2	13C.5.103.1.9	-	-	13C.5.103.4.2	13C.5.103.3.2	13C.4.103.2.2
<b>Low-Emitting Flooring, including Carpet</b> - Hard surface flooring (vinyl, linoleum, laminate, wood, ceramic, and/or rubber) must be Resilient Floor Covering Institute (RFCI) FloorScore certified; Carpet must meet Carpet and Rug Institute (CRI) Green Label Plus; Carpet Cushion must meet CRI Green Label; Carpet Adhesive must meet LEED EQc4.1.	LEED EQ c4.3	13C.5.103.1.9	-	-	13C.5.103.4.2	13C.5.103.3.2	13C.4.103.2.2
<b>Low-Emitting Composite Wood</b> - Composite wood and agrifiber must contain no added urea-formaldehyde resins, and meet applicable CARB Air Toxics Control Measure.	LEED EQ c4.4	13C.5.103.1.9	-	-	13C.5.103.4.2	13C.5.103.3.2	13C.4.103.2.2
<b>Recycling by Occupants:</b> Provide adequate space and equal access for storage, collection and loading of <b>compostable, recyclable and landfill materials.</b> Exceeds requirements of LEED MR prerequisite 1.	LEED MRp1	SFBC 106A.3.3 and 13C.5.410.1; (See DBI Administrative Bulletin 088 for details)					
<b>Bicycle parking:</b> Provide short-term and long-term bicycle parking for 5% of total motorized parking capacity each, or meet San Francisco Planning Code Sec 155, whichever is greater.	LEED SSC4.2	13C.5.106.4 and SF Planning Code Sec 155	SF Planning Code Sec 155	SF Planning Code Sec 155			

1) New residential projects of 75' or greater to the highest occupied floor must use the "New Residential High Rise" column. New residential projects with 4 or more occupied floors which are less than 75 feet to the highest occupied floor may use GreenPoint Rated (see table B2) or the LEED for Homes Mid Rise Rating System (see "New Mid Rise Residential" column in this table.)