

**This table provides a comparison of a CALGreen Tier 1 standards designed building with a comparative LEED Silver designed building equaling 58 points (2 points short of LEED Gold).**

**It is difficult to provide a true comparison because CALGreen is a building standards code and LEED is a point based system approach. For Example:**

- ❖ **There are several items in the CALGreen standards that are not in LEED and therefore no similar or equivalent LEED points can be attributed.**
- ❖ **Many items that are addressed By both CALGreen and LEED are similar but not identical, i.e. energy reduction and water conservation.**
- ❖ **LEED points for guided tours and education programs are not building standards and will not be included as part of CALGreen.**

<b>2010 CA Nonresidential Building Standards – CALGreen Tier 1 (Example for comparison purposes)</b>		<b>LEED 2009 – New Construction (NC) LEED Silver Building (Example for comparison purposes)</b>	
Scope	New Construction – includes core and shell phased projects		New Construction and Major Renovations – includes core and shell phased projects
Cost of Implementation	Cost of local permit fees for a newly constructed building where applicable		Cost to USGBC for registration and certification Cost to GBCI for verification of credits for point total
Verification	Verification is provided by governmental enforcing agency primarily through on-site inspections		Verification is provided by GBCI by review of forms submitted through the internet by applicant

Technical requirements	<b>Adopted Mandatory (M) and Elective (E) Standards</b> <b>CALGreen Tier 1</b> – meet all Mandatory (M) and Tier 1 prerequisites (T-1) plus 5 additional Electives of choice (Tier 1 elective)		<b>Prerequisites (P) and Credit Points (C)</b> 40-49 points = LEED certified. <b>50-59 points = LEED Silver.</b> 60-79 = LEED Gold. 80+ = LEED Platinum.
<b>Section</b>	<b>Site Planning and Development</b>	<b>Credit</b>	<b>Sustainable Sites</b>
5.106.1	Storm water pollution prevention plan (SWPPP) for projects 1 acre or less; meet requirements of State NPDES (M)	SSp1	Construction Activity Pollution Prevention for projects 1 acre or less; meet requirements of EPA's NPDES (P)
5.106.4.1	Bicycle parking: Lockable racks equal to a minimum of 5% of visitor vehicle parking spaces within 200' of building entrance (M)	SS 4.2	Bicycle storage for 5% all building users within 600' of building entrance Changing room and shower within 600' of building for .5% FTE (C) <b>1 point</b>
5.106.4.2	Bicycle storage space for tenant-occupants equal to 5% of total parking capacity (M)		
5.106.5.2 Table 5.106.5.2.1 (T-1)	Designated parking for fuel efficient vehicles for 10% of parking capacity (M) Provide stall marking (M)	SS 4.3	Low Emitting & Fuel Efficient Vehicles: Preferred parking for 5% of total parking capacity, or 20% discount parking fees; alternate fueling stations for 3% parking capacity; low emitting company vehicles for 3% FTE; or vehicle sharing program (C) <b>3 points</b>
5.106.8	Light pollution reduction for interior and exterior lighting (M)	SS 8	Light Pollution Reduction for interior and exterior lighting (C) <b>1 point</b>
5.106.10	Grading and paving for site drainage away from the building(s) (M)		
A5.106.11.2 Table (T-1)	Cool Roof: Full roof heat island reductions of solar reflectance and thermal emittance, or meet SRI	SS 7.2	Cool Roof: Reduction of roof heat island effect, meet SRI for 75% of roof surface, or vegetative roof for 50% of roof area, or a combination (C) <b>1 point</b>
A5.103.1 (Tier 1 elective)	Where feasible, select sites for community conductivity, ½ mile from services (E)	SS 2	Development Density & Community Connectivity, ½ mile from services (C) <b>5 points</b>
A5.105.1 (Tier 1 elective)	Deconstruction, salvage, and reuse of 75% existing structures, 50% nonstructural interior elements, or	MR 1.1	Maintain 55% to 95% existing walls, floors and roofs. (C) <b>3 Points</b>

	other reusable items (E)	MR 1.2	Maintain 50% of interior non-structural elements. (C) <b>1 point</b>
	Local Jurisdiction (most building sites will automatically comply within urban areas)		Public transportation access to rail station (1/2 mile) or bus stop (1/4 mile) (C) <b>6 points</b>
			<b>21 Points</b>
<b>Section</b>	<b>Energy Efficiency</b>	<b>Credit</b>	<b>Energy and Atmosphere</b>
A5.601.2.2 <b>(T-1)</b>	15% Above current 2008 CA energy standards in Title 24, Part 6 (T-1) (T-24 estimated to be 15% to 20% above ASHRAE 90.1)	EA 1	28% above ASHRAE Standard 90.1-2007 (C) <b>9 points</b> (approximately equal to CALGreen Tier 1 requirements) (note – CA projects may use 2005 Title 24 Energy Code but not required)
			<b>9 Points</b>
<b>Section</b>	<b>Water Efficiency and Conservation</b>	<b>Credit</b>	<b>Water Efficiency</b>
5.303.1.1	Buildings in excess of 50,000 sq. ft.: Sub meter individual tenant spaces projected to consume more than 100 gallons per day (M)		
5.303.1.2	Sub meter buildings or individual units in buildings projected to consume more than 1000 gallons per day (M)		
5.303.2 <b>(T-1)</b>	30% reduction in indoor potable water use within buildings (M) Fixtures included in calculation: ❖ Showerheads ❖ Lavatory faucets ❖ Kitchen faucets ❖ Wash Fountains ❖ Water Closets ❖ Urinals	WEp1	20% reduction in indoor potable water use within buildings (P) Fixtures included in calculation: ❖ Lavatory faucets ❖ Water Closets ❖ Urinals ❖ Rinse Sprayers (food establishments)
5.303.2.1	Multiple showerheads in any single shower shall		

	equal the maximum flow rate of a single showerhead (M)		
5.303.4	20% all wastewater reduction generated by the building (M)	WE 2	Innovative Wastewater Technologies: Reduce potable water building sewage conveyance by 50%) (C) <b>2 points</b>
5.303.6	Fixtures and Fittings must meet specific referenced standards (M)		
5.304.	Develop a water budget for landscape irrigation meeting the California Department of Water Resources Model Water Efficient Landscape Ordinance or meet local ordinance (M)		
5.304.2	Sub meter buildings and landscaping separately where landscaping covers 1,000 – 5000 sq. ft. (M) Note: Req. for 5000 sq. ft. and over are in existing law		
5.304.3 (.3.1 and .3.2)	Weather or soil-moisture based irrigation controllers and rain sensors for 1000 – 2500 sq. ft. of landscape area (M) Note: Req. for 2500 sq. ft. and over are in existing regulations.		
A5.304.4.1 (T-1)	Based on the water budget, water for irrigation not to exceed 60% ETo times the landscape area	WE-1	50% water use reduction for landscaping (C) <b>2 points</b>
A5.304.7 (Tier 1 elective)	Restore 50% of previously developed site with native vegetation (E)	SS 5.1	Site Development: Protect or Restore Habitat (C) <b>1 point</b>
			<b>5 Points</b>
<b>Section</b>	<b>Materials &amp; Resources</b>	<b>Credit</b>	<b>Materials and Resources</b>
5.407.1	Weather protection: protect building envelop from irrigation sprinkler spray and weather protect entries and openings (M)		
5.408.1, .2	Construction waste management plan or meet local ordinance, whichever is more stringent (M)		

5.408.3 <b>(T-1)</b>	Divert at least <u>65%</u> construction waste from landfills or meet local land ordinance, whichever is more stringent	MR 2	Divert 50% construction waste from landfills. (C) <b>1 point</b>
5.408.4	100% of trees, stumps, rocks and associated vegetation and soils to be used or recycled (M)		
5.410.1	Onsite storage and collection of recyclables (M)	MRp1	Onsite storage and collection of recyclables (P)
5.410.2	Building commissioning for buildings 10,000 s.f. and over (M)	EA 3	Enhanced commissioning: all buildings (C) <b>2 Points</b>
5.410.4	Testing and adjusting of systems for buildings smaller than 10,000 s.f. (M)		See EA 3
A5.405.2.1	Encourages use of building components of certified wood.	MR 7	50% of wood used in the project to be <b>FSC</b> certified wood (C) <b>1 point</b>
A5.405.4 <b>(T-1)</b>	Recycled content: Use a minimum of 10% of recycled materials based on estimated material cost (M)	MR 4	Use 10% recycled materials, based on cost, of total value of materials (C) <b>1 point</b>
			<b>5 Points</b>
<b>Section</b>	<b>Environmental Quality</b>	<b>Credit</b>	<b>Indoor Environmental Quality (IEQ)</b>
5.503.1	Fireplaces: Direct-vent sealed-combustion gas or wood-burning (M)		
5.504.3	Covering of duct openings and protection of mechanical equipment during construction (M)		
5.504.4.1	Finish material pollutant control: Adhesives and sealants meeting SCAQMD limits and aerosols meeting Title 17 (M)	EQ 4.1	Adhesives and sealants meeting SCAQMD limits and aerosols meeting Green Seal (C) <b>1 point</b>
5.504.4.3	Low VOC-emitting paints and coatings meeting ARB control measures and aerosols meeting Title 17. (M)	EQ 4.2	Architectural paints and coatings for walls and ceilings and ferrous metal primers meeting Green Seal; other interior sealers and stains meeting SCAQMD (C) <b>1 point</b>
5.504.4.4	Low VOC-emitting carpet meeting Green Label Plus or other standards (M)	EQ 4.3	Low VOC-emitting carpet meeting Green Label Plus, (C) <b>1 point</b>

5.504.4.4.1	Low VOC-emitting carpet cushion meeting Green Label (M)	EQ 4.3	Low VOC-emitting carpet cushion meeting Green Label, no additional points for cushion
5.504.4.5	Composite wood products: Formaldehyde limits meeting ARB's air toxic control measure (M)	EQ 4.4	Composite wood and agrifiber products to contain no added urea formaldehyde (C) <b>1 point</b>
5.504.4.6 (T-1)	Resilient flooring systems: Low VOC-emitting resilient floor systems meeting CHPS or FloorScore for <u>80%</u> of total resilient flooring	EQ 4.3	Hard surface flooring meeting FloorScore, credit alternative to carpet system
5.504.5.3	Filters: Provide MERV 8 filters (M)	EQ 5	Filters: Provide MERV 13 filters, no additional point
5.504.7	ETS control: When smoking areas are designed they must be at least 25' from building openings (M)	EQp2	Requires Environmental Tobacco Smoke (ETS) control (P)
5.505.1	Indoor moisture control: Meet or exceed building code and 5.407.2 (M)		
5.506.1	Requires outside air ventilation that meets Title 24, Parts 6 and Title 8 or local ordinance. (M)	EQ 2*	Exceed ventilation requirements of ASHRAE 62.1-2007 by 30% (C) <b>1 point</b>
5.506.2	CO <sub>2</sub> monitoring: Install systems in accordance with Title 24, Part 6 for buildings with demand control vent. (M)	EQ 1	Outdoor air delivery monitoring for CO <sub>2</sub> (C) <b>1 point</b>
5.507.4.1	Acoustical control - Exterior noise transmission with an STC of at least 50 (M)		
5.507.4.2	Acoustical control – Interior sound for tenant separations with an STC of at least 40 (M)		
5.508.1.1	Ozone depletion and GHG reductions: Install equipment with no CFC's (M)	EAp2	Install equipment with no CFC's (P)
5.508.1.2	Ozone depletion and GHG reductions: Install equipment with no CFC's or Halons (M)	EQ 4	Install equipment with no Halons, CFCs or HCFCs (C) <b>1 point</b>
A5.504.4.8 (T-1)	Low VOC-emitting thermal insulation meeting Title 24, Part 12 and CHPS		
A5.504.1.1, 1.2 (Tier 1 elective)	Indoor air quality, including temporary ventilation, during construction (E)	EQ 3.1	Indoor air quality management plan during construction (C) <b>1 point</b>
			<b>8 Points</b>

	Additional Requirements and Electives		Additional Bonus Points
702.3	Special inspections: Qualifications and specifications for special inspector on-site field inspections		
101.8	Alternate materials and methods (E)	ID 1	Innovation and design process for exemplary performance and innovative strategies, i.e. <u>guided tours of project, educational outreach programs, electronic newsletter for building occupants and visitors about the project, etc.</u> (C) <b>5 bonus points</b>
	California licensed architects professional and engineers on design team	ID 2	LEED accredited professional used on the project. (C) <b>1 bonus point</b>
A5.405.1	California material priorities or regional within 500 miles (Tier 1 elective)	RP 1	Regional priority credit for defined region. Meet USGBC's environmental zone priority list. points awarded in addition to credit earned in regional materials in MR 5 (C) <b>4 bonus points</b>
			<b>10 Points</b>
			<p><b><i>LEED Silver requires 50 -59 Points</i></b></p> <p><b>Sustainable Sites            21 points</b>  <b>Energy and Atmosphere   9 Points</b>  <b>Water Efficiency            5 Points</b>  <b>Material and Resources   5 Points</b>  <b>Indoor Air Quality         8 Points</b>  <b>Bonus Points                <u>10 Points</u></b></p> <p><b><i>58 total points</i></b></p>

The following Table is provided to clarify elements of the Tier measures and is intended as informational only.

**Table 1: NON-RESIDENTIAL BUILDINGS: Green Building Standards Code for CALGreen Tier 1 and Tier 2 Performance Approach**

Category	Environmental Performance Goal	Tier 1	Tier 2
All	Minimum Mandatory	Meet all of the provisions of Chapter 5	Meet all of the provisions of Chapter 5
Planning and Design	Designated Parking for Fuel Efficient Vehicles	10% of total spaces	12% of total spaces
	Cool Roof to Reduce Heat Island Effect	Roof Slope < 2:12 SRI 64 Roof Slope > 2:12 SRI 16	Roof Slope < 2:12 SRI 78 Roof Slope > 2:12 SRI 20
		1 additional Elective from Division A5.1	3 additional Electives from Division A5.1
Energy Efficiency	Energy Performance	Exceed 2008 CA Energy Code by 15%	Exceed 2008 CA Energy Code by 30%
Water Efficiency and Conservation	Indoor Water Use	30% Savings	35% Savings
	Outdoor Water Use	60% of ETo times the landscape area	55% of ETo times the landscape area
		1 additional Elective from Division A5.3	3 additional Electives from Division A5.3
Material Conservation and Resource Efficiency	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
Environmental Quality	Low-VOC Resilient Flooring	80% of flooring meets CHPS VOC limits	90% of flooring meets CHPS VOC limits
	Low-VOC Thermal Insulation	Comply with CHPS VOC limits	Install no-added formaldehyde insulation & comply CHPS VOC limits
		1 additional Elective from Division A5.5	3 additional Electives from Division A5.5
Additional Measures	Added measures shall be achieved across at least 3 categories	1 Additional Elective from any category	3 Additional Electives from any category