



City of El Cajon
Building and Fire Safety Division
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GREEN BUILDING REQUIREMENTS FOR NON-RESIDENTIAL CONSTRUCTION

In order to facilitate sustainable construction practices, all projects must comply with the State of California Green Building Standards Code (CGBSC) at both the design and construction phases of development. Before preparing plans for submittal, please be aware of some of the following requirements.

Site Development — CGBSC 5.106

Site development must include the following features.

1. ***Bicycle parking.*** 5.106.4.1

- A. Short term bicycle parking for anticipated visitor traffic shall provide anchored bike racks within 200 feet of visitor entrance, readily visible, for 5 percent of new vehicle parking spaces being added, with a minimum of a one—two bike capacity rack.
- B. Long term bicycle parking for new buildings with tenant spaces that have 10 or more tenant occupants, provide secure bike parking for 5 percent of the vehicle parking spaces with a minimum of one bicycle parking facility.

Acceptable parking facilities shall be convenient from the street and may include:

- 1. Covered, lockable enclosures with permanently anchored bike racks.
- 2. Lockable bicycle rooms with permanently anchored racks.
- 3. Lockable bike lockers.

2. ***Designated parking for clean air, low emitting, fuel efficient and carpool/van pool vehicles.*** 5.106.5.2

In new projects, or additions or alterations that add 10 or more vehicle parking spaces provide designated parking for any combination of low—emitting, fuel efficient and carpool/van pool vehicles per Table 5.106.5.2. Paint in the stall 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

3. ***Electric vehicle charging space requirements.*** Charging space(s), future installations, branch circuits and service panel identification. Section 5.106.5.3 Future designated EVCS(s) with raceways shall be installed at the time of construction per table 5.106.5.3.3
4. ***Light pollution reduction.*** Comply with lighting power requirements in the California Energy Code, and design interior and exterior lighting such that

zero direct—beam illumination leaves the building site. Meet or exceed exterior light levels and uniformity ratios for lighting zones 0-4 as defined in Chapter 10 of the California Administrative Code using the following strategies:

- A. Shield all exterior luminaires or provide cutoff luminaires per Section 130.2 (b) of the California Energy Code.
- B. Contain interior lighting within each source.
- C. Allow no more than .01 horizontal lumen footcandles to escape 15 feet beyond the site boundary.
- D. Automatically control exterior lighting dusk to dawn to turn off or lower light levels during inactive periods.

Exceptions:

- 1. Luminaires that qualify as exceptions in Section 140.7 cec
- 2. Emergency lighting.
- 3. Custom lighting allowed by AHJ.

Indoor Water Use - CGBSC 5.303

Indoor water fixtures must incorporate the following fixture flow rates:

Fixture Type/Flow Rate:

Lavatory faucets	.5 gpm@60 psi
Kitchen faucets	1.8 gpm @60 psi
Metering faucets	.2 gallons/cycle
Urinals	.125 gallons/flush
Water Closets (toilets)	1.28 gallons/flush
Showerheads	1.8 gpm @ 80 psi

Outdoor Water Use - CGBSC 5.304

- 1. Outdoor water use in landscape areas equal to or greater than 500 square feet for new construction projects shall comply with the City of El Cajon Water Efficient Landscape ordinance as adopted by Dept. of Water Resources (DWR).
- 2. Rehabilitated landscape areas equal to or greater than 2500 sq. ft. shall comply with 5.304.1 item 1 or 2.

Construction Waste Reduction – CGBSC 5.408

- 1. Identify the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project, or salvage for future use or sale.
- 2. Specify if materials will be sorted on-site or mixed for transportation to a diversion facility.
- 3. Identify the diversion facility where the material collected will be taken.

4. Specify that the amount of materials diverted shall be calculated by weight or volume, but not by both.
5. Provide signed copy of construction and demolition debris recycling affidavit to Building Inspection Department personnel at final inspection.

Recycle and/or salvage for reuse, a minimum of 65% of non-hazardous construction and demolition waste. Forms are available for documenting waste reduction at www.hcd.ca.gov/calgreen . 100% of trees, stumps, rocks, vegetation, and soils from land clearing shall be reused or recycled.

Contact Waste Management Construction Solution Specialist for assistance at 1-877-731-0118

Building Maintenance and Operation — CGBSC 5.410

1. Provide areas that serve the entire building for collection of non—hazardous materials for recycling.
2. New buildings 10,000 square feet and over must comply with Sections 5.410.2 through 5.410.2.6 of the California Green Building Standards Code. The final commissioning report required by Section 5.410.2.6 must be provided to the building owner and to the City's Building Division prior to Certificate of Occupancy.
3. New buildings under 10,000 square feet in area must comply with the following.
 - A. Systems; Develop a written plan of procedures for testing and adjusting systems.
Systems to be included:
 1. HVAC balancing
 2. Indoor and outdoor lighting and controls
 3. Water heating systems
 4. Renewable energy systems
 5. Landscape irrigation systems
 6. Water reuse systems
 - B. Perform testing and adjusting procedures in accordance with industry practices and applicable standards on each system.
 - C. In addition to testing and adjusting a new space—conditioning system, the system must be balanced in accordance with procedures defined by approved national standards. After completion of testing, adjusting and balancing, a final report of testing signed by the testing agency must be completed.
 - D. An operation and maintenance manual with operating and maintenance instructions and copies of warranties for each system in the building must be provided to the building owner.
 - E. All inspection reports and certification that the operation and maintenance manual has been provided for the building owner must be submitted to the Building Division prior to Certificate of Occupancy. 5.410.4.5.1

Fireplaces – CGBSC 5.503

Fireplaces must be of the direct-vent sealed-combustion gas or sealed wood burning fireplace. see CEC Title 24 Part 6 Subchapter 7 Section 150

Pollution Control – CGBSC 5.504

Pollution control must be provided as follows.

1. All duct and related distribution component openings must be covered with tape or other approved means to prevent dust accumulation.
2. Adhesives, sealants, and caulks must meet minimum VOC limits
3. Paints and coatings must meet minimum VOC limits
4. Aerosol Paints and coatings shall meet the Product-Weighted MIR Limits for ROC in Section 94522(a)(3) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(c)(2) and (d)(2) of California Code of Regulations, Title 17, commencing with Section 94520.
5. All carpet installed in the building interior shall meet the testing and product requirements of one of the following:
 - a. Carpet and Rug Institute's Green Label Plus Program.
 - b. California Department of Public Health Standard Method for the testing of VOCs (Specification 01350).
 - c. NSF/ANSI 140 at the Gold Level.
 - d. Scientific Certifications Systems Indoor Advantage Gold.
6. All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute Green Label program.
7. All carpet adhesive shall meet minimum VOC limits
8. Where resilient flooring is installed, at least 80 percent of floor area receiving resilient flooring shall comply with the VOC emission limits defined in Collaborative for High Performance Schools (CHPS) Low-emitting Materials List or certified under the Resilient Floor Covering Institute (RCFI) Floor Score program. CGBS 5.504.4.6
9. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.), by or before the dates specified in those sections, as shown in Table 5.504.4.5
10. Filters in outside and return air paths must provide Minimum Efficiency Reporting Value (MERV) of **13**.
11. Where outdoor areas are provided for smoking, prohibit smoking within 25 feet of building entries, outdoor air intakes and operable windows and in buildings. Post signage to inform building occupants of the prohibitions.

Environmental Comfort – CGBSC 5.507

Building assemblies and components must have Sound Transmission Coefficients (STC) values as determined in accordance with ASTM E90 and ASTM E413 where required by A. and B. below.

A. Exterior noise transmission. Wall and roof-ceiling assemblies making up the building envelope have an STC of at least 50, and exterior windows have a minimum STC of 40 or OITC of 30 where sound levels at the property line regularly exceed 65 decibels.

Exception: Buildings with few or no occupants and where occupants are not likely to be affected by exterior noise, such as factories, storage, parking, and utility buildings.

B. Interior sound. Wall and floor-ceiling assemblies tenant spaces and tenant spaces and public places shall have an STC of at least 40.

Outdoor Air Quality 5.508

Installations of HVAC, refrigeration and fire suppression equipment must comply with A and B below.

A. Chlorofluorocarbons (CFCs). HVAC equipment and fire suppression shall not contain CFC's.

B. Halons. Halons have not been installed in HVAC, refrigeration, or fire suppression systems.