

City of Santa Clarita Building & Safety Division  
2022 CALGreen Nonresidential Mandatory Measures

The nonresidential mandatory measures of the 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGreen) applies to new construction, building additions of 1,000 square feet or greater, or building alterations with a permit valuation of \$200,000 or greater. This list is a summary of the nonresidential CalGreen provisions. For more detailed requirements with possible exceptions, please refer to the CALGreen Standards. The information in this outline is a summary of Chapter 5 (Nonresidential Mandatory Measures) and Chapter 7 (Installer and Special Inspector Qualifications), as adopted by the Building Standards Commission. This outline shall not replace the use of the Mandatory Measures Checklist of Table A5-602 of the 2022 CalGreen Standards. Effective date: January 1, 2023.

Chapter 5  
**NON-RESIDENTIAL MANDATORY MEASURES**

*Division 5.1 – Planning & Design*

**SITE DEVELOPMENT (Section 5.106)**

1. **Stormwater pollution prevention.** Newly constructed projects and additions shall prevent the pollution of stormwater runoff from the construction activities. The city’s local storm water ordinance requirements (NPDES). Best Management Practices (BMP’s) shall be followed to prevent the loss of soil through wind or water erosion by implementing a combination of erosion and sediment control. Soil loss BMP and good housekeeping BMP shall be reviewed and approved by the City Engineering Services Division of Public Works prior to beginning work. CALGreen Sec 5.106.1.2. Projects that disturb more than one acre of land have additional requirements.
2. **Bicycle parking.** Short-term and long-term bicycle parking facilities shall be provided as follows:
  - a. Short-term bicycle parking shall be provided for all new projects and for additions or alterations with 10 or more new parking spaces, as follows:
    - i. For projects that generate visitor (customer) traffic; provide permanently anchored visitor bicycle racks within 200 feet of the visitors’ entrance, readily visible to passers-by, based on 5% of the new visitor vehicle parking spaces with a minimum of one two-bike rack.
    - ii. Lockable bicycle rooms with permanently anchored racks; or
  - b. Long-term bicycle parking shall be provided for new buildings and for additions or alterations with 10 or more tenant-occupant parking spaces, shall provide secure bicycle parking based on 5% of the tenant vehicle parking spaces being added with a minimum of one bicycle parking space. Acceptable bicycle parking shall be convenient from the street and shall meet one of the following:
    - i. Covered, lockable enclosures with permanently anchored bicycle racks; or
    - ii. Lockable bicycle rooms with permanently anchored racks; or

iii. Lockable, permanently anchored bicycle lockers.

3. **Parking for clean air vehicles.** CALGreen section 5.106.5.2 has been deleted and does not require parking for Clear-Air Vehicles.
4. **Electric Vehicle (EV) charging.** For new buildings, construction shall provide the electric vehicle infrastructure to EV capable parking spaces to facilitate electric vehicle charging and shall be in accordance with the California Building and Electrical codes. Automated mechanical car parking systems are not required to comply with this section.

The number of EV capable spaces and the number of EV capable spaces with the installation of electric vehicle supply equipment (EVSE) shall be as follows:

TOTAL NUMBER OF ACTUAL PARKING SPACES	NUMBER OF REQUIRED EV CAPABLE SPACES	NUMBER OF EV CAPABLE SPACES WITH EVSE
10 to 25	4	0
26 to 50	8	2
51 to 75	13	3
76 to 100	17	4
101 to 150	25	6
151 to 200	35	9
201 and over	20% of total*	25% of EV capable spaces*

\*rounded up to the nearest whole number

**EV capable spaces.** To facilitate the installation of EVSE, the infrastructure shall be installed at the time of construction. Plans and electrical calculations shall comply with all the detailed infrastructure construction requirements for the future installation of EVSE as listed in CalGreen section 5.106.5.3.1.

**Electric vehicle charging stations (EVCS).** EV capable spaces provided with EVSE creates EVCS as required in column 3 shown above. EVCS may be provided with EVSE in any combination of Level 2 and Direct Current Fast Charging (DCFC) except that at least one Level 2 EVSE shall be provided. The installation of each DCFC EVSE shall be permitted to

reduce the minimum number of required EV capable spaces without EVSE by five and reduce proportionally the required electrical load capacity to the service panel or subpanel.

**Accessible EVCS.** Architectural plans shall further show all accessibility requirements for the EV parking spaces per the California Building Code section 11B-228.3 and 11B-812.

**Use of automatic load management systems (ALMS).** ALMS shall be permitted for EVCS. When ALMS is installed, the required electrical load capacity specified in section 5.106.5.3.1 for each EVCS may be reduced when serviced by an EVSE controlled by an ALMS.

5. **Light pollution reduction.** For newly constructed buildings, outdoor lighting systems shall be designed and installed to comply with the requirements of CalGreen section 5.106.8.
6. **Grading and paving.** For new buildings, and for additions and alterations that alter the drainage path: construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings.

### ***Division 5.3 – Water Efficiency and Conservation***

7. **Water Meters.** For new buildings or additions larger than 50,000 square feet, separate submeters shall be installed as follows:
  - a. Each tenant space within the building projected to consume more than 100 gallons per day, including, but not limited to laundry or cleaners, restaurant or food service, medical or dental office, laboratory, or beauty salon or barber shop.
  - b. A separate submeter or metering device shall be provided for excess consumption by any tenant within a new building or addition that is projected to consume more than 1,000 gallons per day.
8. **Water conserving plumbing fixtures and fittings.** All new plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) in new buildings and areas of additions or alterations, shall comply with the following maximum flow rates:
  - a. **Water closets:** 1.28 gallons per flush.
  - b. **Urinals:** Maximum 0.125 gallons per flush for wall-mounted. Other urinals: 0.5 gallons per flush.
  - c. **Single showerheads:** Maximum flow rate of 1.8 gallons per minute at 80 psi.
  - d. **Multiple showerheads serving one shower:** combined flow rate of all showerheads controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi.
  - e. **Lavatory faucets:** 0.5 gallons per min. at 60 psi.
  - f. **Kitchen faucets:** 1.8 gal per min. at 60 psi.
  - g. **Wash fountains:** 1.8 gal per min. /20 [rim space (inches) at 60 psi].

h. **Metering faucets:** 0.20 gallons per cycle.

9. **Outdoor potable water use in landscape areas.** Nonresidential developments shall comply with the local water efficient landscape ordinance or the current California Department of Water Resources Model Water Efficiency Landscape Ordinance (MWELO), whichever is more stringent.

### ***Division 5.4 – Material Conservation and Resource Efficiency***

10. **Weather protection.** Provide a weather-resistant exterior wall and foundation envelope as required by the *California Building Code* section 1404.2 (weather protection) and the *California Energy Code* section 150.
11. **Moisture control.** Provide moisture control measures by the following methods:
  - a. Landscape irrigation sprinkler systems shall be designed to prevent spray on structures.
  - b. Primary exterior doors shall be covered to prevent water intrusion by using nonabsorbent floor and wall finishes within 2-feet around such openings plus at least one of the following:
    - i. An installed awning at least 4 feet in depth.
    - ii. A roof overhang at least 4 feet in depth.
    - iii. The door is recessed at least 4 feet.
    - iv. Other equivalent protection.
  - c. Install flashings integrated with a drainage plane.
12. **Construction waste management.** Recycle and/or salvage for reuse a minimum of 65% of the non-hazardous construction and demolition waste in accordance with the City of Santa Clarita's Construction and Demolition Materials Management Plan (CDMMP) Ordinance. A City approved waste management company/hauler shall be used for recycling of construction waste. Documentation of compliance shall be provided to the City's Environmental Services Division.
13. **Excavated soil and Land clearing debris.** 100% of trees, stumps, rocks and associated vegetation and soils from land clearing shall be reused or recycled. Contaminated soil or materials are not required to be reused or recycled.
14. **Recycling by occupants.** Provide readily accessible areas serving the entire building for the collection of non-hazardous materials for recycling, including (but not limited to) paper, corrugated cardboard, glass, plastics, organic waste, and metals. The project shall also comply with the City's Recycling Ordinance.
15. **Commissioning.** For new buildings 10,000 square feet and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's

project requirements. Commissioning shall be performed in accordance with CALGreen Code section 5.410.2 by trained personnel with experience on projects of comparable size and complexity. Commissioning requirements to include:

- a. Owner's or owner representative's project requirements.
- b. Basis of design.
- c. Commissioning measures shown in the construction documents.
- d. Commissioning plan.
- e. Functional performance testing.
- f. Documentation and training.
- g. Commissioning report.

Each of the above items shall individually comply with CALGreen Sections 5.410.2.1 through 5.410.2.6. Commissioning is not required for the following:

- a. Unconditioned warehouses of any size.
- b. Areas less than 10,000 square feet used for offices or other conditioned accessory spaces within unconditioned warehouses.
- c. Tenant improvements less than 10,000 s.f. and not the initial tenant to the space.
- d. Open parking garages, of any size, within a structure.

16. **Testing and adjusting.** New buildings less than 10,000 square feet or new systems that serve an addition or alteration, shall be tested and adjusted as follows:

- a. **Procedures.** Testing and adjusting shall be in accordance with manufacturer's specifications and applicable standards on each system.
- b. **HVAC balancing.** In addition to testing and adjusting, HVAC systems shall be adjusted and balanced before the system is operated for use.
- c. **Reporting.** After completion of all testing, adjusting and balancing, a final report of testing signed by the individual responsible for performing these services shall be giving to the owner.
- d. **Operation and Maintenance manual.** The building owner or representative shall be provided with a detailed operating and maintenance instructions and copies of guaranties/warranties for each system. The manual shall include a copy of all inspection verifications and reports.

### ***Division 5.5 – Environmental Quality***

17. **Fireplaces.** Any installed gas fireplace shall be direct-vent sealed combustion type. New permanently installed wood burning devices are prohibited per SCAQMD rule 445.

18. **Temporary ventilation.** The permanent HVAC system shall only be used during construction if necessary to condition the building or areas of addition or alteration within the required temperature range for material and equipment installation. If the system is used during

construction, use return air filters with a Minimum Efficiency Reporting Value (MERV) of 8. Replace all filters immediately prior to occupancy.

19. **Protection of HVAC equipment and duct systems.** At the time of rough installation and during storage on the construction site until final startup of the HVAC equipment, all duct openings and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other method to prevent dust or debris from entering the system.

20. **Finish material pollutant control,** shall comply as follows:

- a. **Adhesives, sealants and caulks** used on this project shall comply with SCAQMD Rule 1168 for VOC limits and toxic compounds. Aerosol adhesives, sealants and caulks shall comply with statewide VOC standards.
- b. **Paints and coatings** shall comply with VOC limits in Table 1 of the ARB Architectural Coatings Suggested Control Measure, as shown in CalGreen Table 5.504.4.3.
- c. **Aerosol paints and coatings** shall meet the PWMIR 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
- d. **Carpet Systems.** All carpeting shall meet the requirements of the Carpet and Rug Institute Green Label Plus Program or equivalent per CalGreen section 5.504.4.4. Carpet cushions shall meet the requirements of the Carpet and Rug Institute Green Label Program. Adhesives shall comply with VOC limits in CalGreen Table 5.504.4.1.
- e. **Composite wood products.** 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 (ATCM) for Composite Wood as shown in CALGreen Table 5.504.4.5. Verification of compliance shall be provided as requested by the enforcing agency.
- f. **Resilient flooring.** Where installed, 80% of the floor area receiving resilient flooring shall meet at least one of the standards listed in CALGreen Section 5.504.4.6. Documentation shall be provided verifying that resilient flooring materials meet the pollutant emission limits.
- g. **Thermal insulation** shall meet at least one of the standards listed in CALGreen Section 5.504.4.7. Documentation shall be provided verifying that thermal insulation materials meet the pollutant emission limits.
- h. **Acoustical ceilings and wall panels** shall meet at least one of the standards listed in CALGreen

Section 5.504.4.8. Documentation shall be provided verifying that acoustical finish materials meet the pollutant emission limits.

- 21. **Filters.** In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air that provides at least a Minimum Efficiency Reporting Value (MERV) of 13. Filters shall be clearly labeled by the manufacturer indicating the MERV rating.
- 22. **Tobacco smoke control.** Where outdoor areas are provided for smoking, signage shall be installed prohibiting smoking within 25 feet of building entries, outdoor air intakes and operable windows.
- 23. **Indoor moisture control.** Buildings shall meet or exceed the provisions of the California Building Code, Section 1202 (Ventilation) and Chapter 14 (Exterior walls).
- 24. **Carbon dioxide monitoring.** For buildings or additions equipped with demand control ventilation, CO2 sensors and ventilation controls shall be specified and installed in accordance with the requirements of the California Energy Code, Section 120.1(c)(4).

Carbon dioxide monitoring in each public K-12 school classroom shall be equipped with a carbon dioxide monitor or sensor that complies with the requirements of CALGreen new section 5.506.3.

- 25. **Acoustical control.** New buildings, additions, and alterations, located within the 65 CNEL or L<sub>dn</sub> noise contour of a freeway, expressway, railroad, industrial or other noise source as determined by the Noise Element of the General Plan, shall employ building assemblies and components with Sound Transmission Class (STC) values determined in accordance with ASTM E90 and ASTM E413 or Outdoor-Indoor Sound Transmission Class (OITC) determined in accordance with ASTM E1332, using either the prescriptive or performance method as follows:
  - a. **Prescriptive method for exterior noise sources.** Wall and roof-ceiling assemblies exposed to the noise source shall meet a STC rating of at least 50 or an OITC rating of no less than 40. Exterior windows shall meet a STC rating of at least 40 or an OITC rating of at least 30.
  - b. **Performance method for exterior noise sources.** Wall and roof-ceiling assemblies exposed to the noise source shall be constructed to provide an interior noise environment that does not exceed an hourly equivalent noise level (L<sub>dn</sub> -1Hr) of 50 dBA in occupied areas during any hour of operation. An acoustical analysis documenting complying interior sound levels shall be prepared by personnel approved by the architect or engineer of record.

Acoustical control does not apply to buildings with few or no occupants or where occupants are not likely to be

affected by exterior noise as determined by the enforcing agency, such as factories, warehouses, parking structures and utility buildings.

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

- 26. **Outdoor air quality. Ozone depletion and greenhouse gas reductions.** HVAC, refrigeration and fire suppression equipment shall not contain CFCs or Halons.
- 27. **Supermarket refrigerant leak reduction.** New and replacement refrigeration systems when installed in retail food stores 8,000 square feet or more conditioned area, and that utilize refrigerated display cases, or walk-in coolers or freezers connected to remote compressor or condensing units, shall comply with the provisions of CALGreen Sections 5.508.2 through 5.508.2.6, to reduce the potential for refrigerant leakage.

## Chapter 7 INSTALLER AND SPECIAL INSPECTOR QUALIFICATIONS

- 28. **Special inspection.** When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with the CALGreen Code. Special Inspectors shall be registered with the City of Santa Clarita Building & Safety Division prior to performing any special inspections of any component or system required. Special Inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting.
- 29. **Verifications.** Documentation used to show compliance with this code shall include but is not limited to: construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the City of Santa Clarita which demonstrates substantial conformance.

## Compliance Statement

As the design professional or designer of record for this project, I certify that this project will comply with all applicable provisions of the 2022 California Green Building Standards Code (CalGreen Code).

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Signature

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Print Name

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Date