



CALGREEN RESIDENTIAL MANDATORY CHECKLIST

THESE REQUIREMENTS APPLY TO BUILDING PERMITS SUBMITTED ON OR AFTER JANUARY 1, 2023

Following is a standardized checklist of the 2022 California Green Building Standards Code (CalGreen) requirements that may be used to demonstrate compliance with the CalGreen Mandatory Measures (Chapter 4). This checklist is required for all new buildings and additions/alterations that increase the building's conditioned area. The requirements shall apply only to and/or within the specific area of the addition or alteration.

CALGreen Reference	Description	Designer's Comments with Plan Sheet Reference
4.1 Planning and Design		
4.106.2	Storm Water Drainage and Retention during construction. A plan is developed and implemented to manage storm water drainage during construction.	Sheet:
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	Sheet:
4.106.4.1	New one- and two-family dwellings and townhouses with attached private garages. 1. In private garages with two or more parking spaces, install a Level 2 EV Ready Space and Level 1 EV Ready Space. 2. In private garages with only one parking space, install a Level 2 EV Ready Space. 3. In each carport space assigned to a dwelling unit, install a Level 2 EV Ready Space. 4. For parking spaces not assigned to a dwelling unit: a. 30% of the unassigned parking space(s) shall be provided with at least one Level 2 EV Ready Space. Calculations for the required minimum number of Level 2 EV Ready spaces shall be rounded up to the nearest whole number. b. In addition, each remaining unassigned parking space(s) shall be provided with at least a Level 1 EV Ready Space.	Sheet:
4.106.4.1.1	Identification. The raceway termination location shall be permanently and visibly marked as "Level 2 EV-Ready".	
4.106.4.2	New multifamily dwellings. The following requirements apply to all new multifamily dwellings: 1. 30% of the dwelling units with parking space(s) shall be provided with at least one Level 2 EV Ready Space. Calculations for the required minimum number of Level 2 EV Ready spaces shall be rounded up to the nearest whole number. 2. In addition, each remaining dwelling unit with parking space(s) shall be provided with at least a Level 1 EV Ready Space.	Sheet:
Notes: 1. ALMS may be installed to decrease electrical service and transformer costs associated with EV Charging Equipment subject to review of the authority having jurisdiction. 2. Installation of Level 2 EV Ready Spaces above the minimum number required level may offset the minimum number Level 1 EV Ready Spaces required on a 1:1 basis. 3. The requirements apply to multifamily buildings with parking spaces including: a) assigned or leased to individual dwelling units, and b) unassigned residential parking. 4. If a building permit applicant provides documentation detailing that the increased cost of utility service or on-site transformer capacity would exceed an average of \$4,500 for each parking		

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spaces with Level 2 EV Ready Spaces and Level 1 EV Ready Spaces, the applicant shall provide EV infrastructure up to a level that would not exceed this cost for utility service or on-site transformer capacity. 5. All accessible parking spaces for covered newly constructed multifamily dwellings shall provide Level 1 EV Ready Space or Level 2 EV Ready Spaces.	
4.106.4.2.2.1 Electric vehicle charging stations (EVCS). Electric vehicle charging stations required by Section 4.106.4.2 shall comply with Section 4.106.4.2.2.1. Exception: Electric vehicle charging stations serving public accommodations, public housing, motels and hotels shall not be required to comply with this section. See California Building Code Chapter 11B, for applicable requirements.	
4.106.4.3 New hotels and motels. In residential new construction buildings designated primarily for hotel and motel use with parking: 20% of parking spaces shall be provided with at least one Level 2 Ready Space. Calculations for the required minimum number of Level 2 Ready Space shall be rounded up to the nearest whole number. - An additional 50% shall be provided with at least EV Capable. Calculations for the required minimum number of spaces equipped with Level 2 Ready Space and EV Capable spaces shall all be rounded up to the nearest whole number. Construction plans and specifications shall demonstrate that all raceways shall be a minimum of 1" and sufficient for installation of Level 2 Ready Space and all required EV Capable spaces; Electrical calculations shall substantiate the design of the electrical system to include the rating of equipment and any on-site distribution transformers, and have sufficient capacity to simultaneously charge EVs at all required EV spaces including EV Capable spaces; and service panel or subpanel(s) shall have sufficient capacity to accommodate the required number of dedicated branch circuit(s) for the future installation of the EVSE. Notes: - ALMS may be installed to increase the number of EV chargers or the amperage or voltage beyond the minimum requirements in this code. The option does not allow for installing less electrical panel capacity than would be required without ALMS.	Sheet:
4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing multifamily buildings. When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or altered shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Notes: - Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging. - There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.	

4.2 Energy Efficiency	
4.201.1 Scope Compliance with the California Energy Commission mandatory standards.	Sheet:
4.3 Water Efficiency and Conservation	
4.303.1.1 Water Closets. Effective flush volume of all water closets shall not exceed 1.28 gallons per flush.	Sheet:
4.303.1.2 Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush.	Sheet:
4.303.1.3 Showerheads. Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. When a shower is served by more than one showerhead, the combined flow rate of all shower heads shall not exceed 1.8 gallons per minute at 80 psi.	Sheet:
4.303.1.4 Faucets. Residential lavatory faucets shall not exceed 1.2 gpm at 60 psi. Lavatory faucets in common and public use areas in residential buildings shall not exceed 0.5 gpm at 60 psi. Metering faucets installed in residential buildings shall not deliver more than 0.2 gallons per cycle. Kitchen faucets shall not exceed 1.8 gpm at 60 psi.	Sheet:
4.303.2 Submeters for multifamily building and dwelling units in mixed-use residential/commercial buildings. Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the California Plumbing Code.	Sheet:
4.303.3 Standards for plumbing fixtures and fittings. Plumbing fixtures and fittings shall be installed per the California Plumbing Code.	Sheet:
4.304.1 Outdoor potable water use in landscape areas. Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO).	Sheet:
4.305.1 Recycled water supply systems. Newly constructed residential developments, where recycled water is available from a municipal source may be required to have recycled water supply systems installed.	Sheet:
4.4 Material Conservation and Resource Efficiency	
4.406.1 Rodent Proofing. Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents.	Sheet:
4.408 Construction waste management. Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste. The City of Sunnyvale requires the use of Green Halo, the Construction and Demolition Waste Management Plan (CDWMP) waste-tracking program to document and monitor compliance.	Sheet:
4.410.1 Operation and maintenance manual. An operation and maintenance manual shall be provided to the building occupant or owner.	Sheet:
4.410.2 Recycling by occupants. Where 5 or more multifamily dwelling units are constructed on a building site, readily accessible areas shall be identified for the collection of recycling.	Sheet:
4.5 Environmental Quality	
4.503.1 Fireplaces. Any installed wood stove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable and shall have a permanent label indicating they are certified to meet the emission limit.	Sheet:
4.504.1 Covering of duct openings and protection of mechanical equipment during construction. Duct openings and other related air distribution component openings shall be covered during construction.	Sheet:

4.504.2 Finish material pollutant control. Adhesives, sealants and caulks. Adhesives, sealants and caulks shall be compliant with VOC and other toxic compound limits. Paints and coatings. Paints, stains and other coatings shall be compliant with VOC limits. Aerosol paints and coatings. Aerosol paints and coatings shall be compliant with product weighted MIR limits for ROC and other toxic compounds. Verification. Documentation shall be provided to verify that compliant voe limit finish materials have been used.	Sheet:
4.504.3 Carpet systems. All carpet and carpet cushion installed in the building interior shall meet the testing and product requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (also known as Specification 01350.) Carpet adhesive. All carpet adhesive shall meet the requirements of Table 4.504.1.	Sheet:
4.504.4 Resilient flooring systems. Where resilient flooring is installed, at least 80 percent of floor area receiving resilient flooring shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (also known as Specification 01350.)	Sheet:
4.504.5 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 for Composite Wood (17 CCR 93J20 et seq.)	Sheet:
4.505.2 Concrete slab foundations. Vapor retarder and capillary break is installed at slab-on-grade foundations.	Sheet:
4.505.3 Moisture content of building materials. Moisture content of building materials used in wall and floor framing is checked before enclosure.	Sheet:
4.506.1 Each bathroom shall be provided with the following: 1. ENERGY STAR fans ducted to terminate outside the building. 2. Fans must be controlled by a humidity control (separate or built-in); OR functioning as a component of a whole-house ventilation system. 3. Humidity controls with manual or automatic means of adjustment, capable of adjustment between a relative humidity range of ≤ 50 percent to a maximum of 80 percent.	Sheet:
4.507.2 Heating and air-conditioning system design. Duct systems are sized, designed, and equipment is selected using the following methods: 1. Establish heat loss and heat gain values according to ANSI/ACCA 2 Manual J-2016 or equivalent. 2. Size duct systems according to ANSI/ACCA 1 Manual D-2014 or equivalent. 3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual 5-2016 or equivalent.	Sheet:
Chapter 7: Installer and Special Inspector Qualifications	
702.1 Installer Training. HVAC system installers are trained and certified in the proper installation of HVAC systems.	Sheet:

702.2 Special Inspection. Special inspectors employed by the enforcing agency must be qualified and able to demonstrate competence in the discipline they are inspecting. 703.1 Documentation. Verification of compliance with this code may include construction documents, plans, specifications builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which show substantial conformance.	
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