2019 *CAL*Green Residential Checklist

Building Division · 1600 First Street · Napa · CA · 94559 · 707.257.9540

The 2019 CALGreen Code applies to additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size and also applies to all low-rise residential buildings, high-rise residential buildings, or both. Existing site and landscaping improvements that are not otherwise disturbed are not subject to the requirements of CALGreen.

*Note 2019 CALGreen Green Building Standard Code Section 301.1.1 states: On and after January 1, 2014, residential buildings undergoing permitted alterations, additions or improvements shall replace non-complaint plumbing fixtures with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy or final permit approval by the local building department.

Project Name: _____

Project Address: _____

Project Description: _____

Instructions:

1. The Owner or the Owner's Agent shall employ a licensed professional experienced with the 2019 California Green Building Standards Codes to verify and assure that all required work described herein is properly planned and implemented in the project.
2. The licensed professional, in collaboration with the owner and the design professional shall initial **Column 2** of this checklist, sign and date **Section 1 – Design Verification** at the end of this checklist and have the ***checklist printed on the approved plans*** for the project.
3. Prior to final inspection by the Building Division, the licensed professional shall **Complete 3** and sign and date **Section 2 – Implementation Verification** at the end of this checklist and submit the completed form to the Building Inspector.

MANDATORY FEATURE OR MEASURES	Column 2 Project Requirement	Column 3 Verification
A4.1 PLANNING AND DESIGN		
Planning and Design – Site Development		
4.106.2 Storm water drainage and retention during construction. Projects which disturb less than one acre of soil and are not part of a larger common plan of development shall manage storm water drainage during construction.		
4.106.3 Grading and paving. The site shall be planned and		

developed to keep surface water away from buildings. Construction plans shall indicate how site grading or a drainage system will manage all surface water flows.		
4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 4.106.4.1 and 4.106.4.2 to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with California Electrical Code (CEC), Article 625.		
A4.2 ENERGY EFFICIENCY		
GENERAL		
4.201.1 Low-rise residential buildings shall meet or exceed the minimum standard design required by the California Energy Standards.		
A4.3 WATER EFFICIENCY AND CONSERVATION		
Indoor Water Use		
4.303.1 Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following: ☐ **4.303.1.1 Water Closets.** The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specifications for Tank-type Toilets. ☐ **4.303.1.2 Urinals.** The effective flush volume of urinals shall not exceed 0.125 gallons per flush. ☐ **4.303.1.3.1 Single Showerheads.** Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for showerheads. ☐ **4.303.1.3.2 Multiple Showerheads.** When a shower is served by more than one showerhead, the combined flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to allow only one shower outlet to be in operation at a time. ☐ **4.303.1.4.1 Residential lavatory faucets.** The maximum flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall not be less than 0.8 gallons per minute at 20 psi.		

☐ **4.303.1.4.2 Lavatory faucets in common and public areas.** The maximum flow rate of lavatory faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential buildings shall not exceed 0.5 gallons per minute at 60 psi. ☐ **4.303.1.4.3 Metering faucets.** Metering faucets when installed in residential buildings shall not deliver more than 0.25 gallons per cycle. ☐ **4.303.1.4.4 Kitchen faucets.** The maximum flow rate of kitchen faucets shall not exceed 1.5 gallons per minute at 60 psi. City of Napa Municipal Code.		
4.303.2 Standards for plumbing fixtures and fittings. Plumbing fixtures and fittings shall be installed in accordance with the California Plumbing Code, and shall meet the applicable standards referenced in Table 1701.1 of the California Plumbing Code.		
Outdoor Water Use		
4.304.1 Outdoor potable water use in landscape areas. New residential developments with an aggregate landscape area equal to or greater than 500 square feet shall comply with one of the following options: ☐ A local water efficient landscape ordinance or the current California Department of Water Resources Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent; ☐ Projects with aggregate landscape areas less than 2,500 square feet may comply with the MWELO Appendix D Prescription Compliance Option.		
A4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY		
Enhanced Durability and Reduced Maintenance		
4.406.1 Rodent proofing. Annular spaces around pipes, electric cables, conduits, or other openings in plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or similar method acceptable to the enforcing agency.		
Construction Waste Reduction, Disposal and Recycling		
4.408.2 Construction waste management plan. Where a local jurisdiction does not have a construction and demolition waste management ordinance, a construction waste management plan shall be submitted for approval to the enforcing agency. Minimum 65% mixed-waste recycling facility requires third party verified diversion rates.		
Building Maintenance and Operation		

4.410.0 Operation and maintenance manual. At the time of final inspection, an operation and maintenance manual shall be provided to the building occupant or owner.		
4.410.2 Recycling by occupants. Where 5 or more multi-family dwelling units are constructed on a building site, provide readily accessible area(s) that serves all buildings on the site and is identified for the depositing, storage and collection of non-hazardous material for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.		
A4.5 ENVIRONMENTAL QUALITY		
Fireplaces		
4.503.1 General. Install only direct-vent sealed-combustion gas fireplace. Bay Area Air Quality Management District (BAAQMD) does not allow indoor wood-burning fireplaces.		
Pollutant Control		
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.		
4.504.2.1 Adhesives, sealants and caulks. Adhesives, sealants and caulks shall be complaint with VOC and other toxic compound limits (Table 4.504.1 & 4.504.2).		
4.504.2.2 Paints and coatings. Paints, stains and other coatings shall be compliant with VOC limits (Table 4.504.3).		
4.504.2.3 Aerosol paints and coatings. Aerosol and paints and other coatings shall be compliant with product weighted MIR Limits for ROC and other toxic compounds.		
4.504.2.4 Verification. Documentation shall be provided to verify that compliant VOC limit finish materials have been used.		
4.504.3 Carpet Systems. Carpet and carpet systems shall be complaint with VOC limits.		
4.504.4 Resilient flooring systems. At least eighty (80) percent of floor area receiving resilient flooring shall comply with the VOC-emission limits defined in the Collaborative for High Performance Schools (CHPS) Low-emitting Materials List or be certified under the Resilient Floor Covering Institute (RCFI) FloorScore program and UL GREENGUARD Gold.		
4.504.5 Composite wood products. Particleboard, medium density fiberboard (MDF), and hardwood plywood used in interior finish systems shall comply with low formaldehyde emission standards (Table 4.504.4).		
Interior Moisture Control		
4.505.2 Concrete slab foundation. Required vapor retarders and capillary breaks are also required to comply with CALGreen		

Section 4.505.2.1.		
4.505.3 Moisture content of building materials. Moisture content (maximum 19%, minimum.3%) of building materials used in wall and floor framing is checked before enclosure.		
Indoor Air Quality and Exhaust		
4.506.1 Bathroom exhaust fans. Exhaust fans which terminate outside the building are provided in every bathroom (Energy Star complaint with Humidity Control on part of whole house ventilation system).		
Environmental Comfort		
4.507.2 Heating and air-conditioning system design. Duct systems are sized and designed and equipment is selected using the following methods: 1. Establish heat loss and heat gain values according to ACCA Manual J (2011) or equivalent. 2. Size duct systems according to ACCA 29-D (Manual D-2014) or equivalent. 3. Select heating and cooling equipment according to ACCA 31-S (Manual S-2014) or equivalent.		
INSTALLER AND SPECIAL INSPECTOR QUALIFICATIONS		
Qualifications		
702.1 Installer Training. HVAC system installers are trained and certified in the proper installation of HVAC systems.		
702.2 Special Inspection. The Licensed Professional responsible to verify CALGreen compliance is qualified and able to demonstrate competence in the discipline they inspect and verify.		
Verifications		
703.1 Documentation. Verification of compliance with CALGreen may include construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which show substantial conformance. Implementation verification shall be submitted to the Building Division after implementation pf all required measures and prior to final inspection approval.		

CALGREEN SIGNATURE DECLARATIONS

Project Name: _____

Project Address: _____

Project Description: _____

SECTION 1 – DESIGN VERIFICATION

Complete all lines of Section 1 – "Design Verification" and submit the complete checklist (Columns 1 and 2) with the plans and building permit application to the Building Division.

The owner and design professional responsible for compliance with CALGreen Standards have revised the plans and certify that the items checked above are hereby incorporated into the project plans and will be implemented into the project in accordance with the requirements set forth in the 2019 California Green Building Standards Code as adopted by the City of Napa.

_____ _____
Owner's Signature Date

_____ _____
Owner's Name (Please Print) Date

_____ _____
Design Professional's Signature Date

_____ _____
Design Professional's Name (Please Print) Date

_____ _____
Signature of Licensed Professional Responsible for CALGreen Compliance Date

_____ _____
Name of Licensed Professional Responsible for CALGreen Compliance (Print) Date

_____ _____
Email Address for Licensed Professional Responsible for CALGreen Compliance Date

SECTION 2 – IMPLEMENTATION VERIFICATION

Complete, sign and submit the completed checklist, including column 3, together with all original signatures on Section 2 to the Building Division prior to Building Division Final Inspection.

I have inspected the work and have received sufficient documentation to verify and certify that the project identified above was constructed in accordance with this Green Building Checklist and in accordance with the requirements of the 2019 California Green Building Standards Code as adopted by the City of Napa.

_____ _____
Signature of Licensed Professional Responsible for CALGreen Compliance Date

_____ _____
Name of Licensed Professional Responsible for CALGreen Compliance (Print) Date

_____
Email Address for Licensed Professional Responsible for CALGreen Compliance