



City of Oakland

Building Bureau- Permit Inspections Services

250 FRANK H. OWAGA PLAZA. SECOND FLOOR. OAKLAND CA 94612

https://www.oaklandca.gov/topics/building-inspections

2019 CalGREEN Residential Mandatory Measures Checklist

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 new 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. For more information about CalGreen please visit:

https://www.oaklandca.gov/topics/green-building

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 Department, the licensed professional shall complete Column 3 and sign and date Section 2 - Implementation Verification at the end of this checklist and submit the completed form to the Building Inspector.

Table with 3 columns: MANDATORY FEATURE OR MEASURE, Column 2 Project Requirements, and Column 3 Verification. Rows include sections for A4.1 PLANNING AND DESIGN (Storm water drainage, Grading and paving, Electric vehicle charging) and A4.2 ENERGY EFFICIENCY (General Low-rise residential buildings).

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 wall-mounted urinals shall not exceed 0.125 gallons per flush or 0.5 gallons for all other urinals.
- 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 serving one shower.** 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 use 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 0.2 gallons per cycle.
- 4.303.1.4.4 Kitchen Faucets.** The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.



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; or



<input type="checkbox"/> Projects with aggregate landscape areas less than 2,500 square feet may comply with the MWELo's 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.	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>
Building Maintenance and Operation		
4.410.1 Operation and maintenance manual. At the time of final inspection, an operation and maintenance manual shall be provided to the building occupant or owner.	<input type="checkbox"/>	<input type="checkbox"/>
4.410.2 Recycling by occupants. Where 5 or more multifamily 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.	<input type="checkbox"/>	<input type="checkbox"/>
A4.5 ENVIRONMENTAL QUALITY		
Fireplaces		
4.503.1 General. Install only a direct-vent sealed-combustion gas fireplace. B.A.A.Q.M.D. does not allow indoor wood-burning fireplaces.	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>
4.504.2.1 Adhesives, sealants and caulks. Adhesives, sealants and caulks shall be compliant with VOC and other toxic compound limits (Table 4.504.1 & 4.504.2).	<input type="checkbox"/>	<input type="checkbox"/>
4.504.2.2 Paints and coatings. Paints, stains and other coatings shall be compliant with VOC limits (Table 4.504.3).	<input type="checkbox"/>	<input type="checkbox"/>
4.504.2.3 Aerosol paints and coatings. Aerosol paints and other coatings shall be compliant with product weighted MIR Limits for ROC and other toxic compounds. B.A.A.Q.M.D. has additional guidelines in Regulation 8, Rule 49.	<input type="checkbox"/>	<input type="checkbox"/>
4.504.2.4 Verification. Documentation shall be provided to verify that compliant VOC limit finish materials have been used.	<input type="checkbox"/>	<input type="checkbox"/>

4.504.3 Carpet Systems. Carpet and carpet systems shall be compliant with VOC limits.	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>
4.504.5 Composite wood products. Particleboard, medium density fiberboard, and hardwood plywood used in interior or exterior finish systems shall comply with low formaldehyde emission standards (Table 4.504.5).	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>
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 .	<input type="checkbox"/>	<input type="checkbox"/>
Indoor Air Quality and Exhaust		
4.506.1 Bathroom exhaust fans. Exhaust fans must terminate outside the building and be provided in every bathroom with a shower, tub, or tub/shower (Energy Star compliant with humidity control or part of whole house ventilation	<input type="checkbox"/>	<input type="checkbox"/>
Environmental Comfort		
4.507.2. Heating and air-conditioning system design. HVAC systems shall be sized, designed and the equipment selected using the following methods: 1. Establish heat loss and heat gain values according to ANSI/ACCA 2 Manual J-2016 or other equivalent design methods. 2. Size duct systems according to ANSI/ACCA 1 Manual D-2016 or other equivalent design methods. 3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S-2014 or other equivalent design methods.	<input type="checkbox"/>	<input type="checkbox"/>
INSTALLER AND SPECIAL INSPECTOR QUALIFICATIONS		
Qualifications		
702.1 Installer training. HVAC system installers are trained and certified in the proper installation of HVAC systems.	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>
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 demonstrate substantial conformance. Implementation verification shall be submitted to the Building Department after implementation of all required measures and prior to final inspection approval.	<input type="checkbox"/>	<input type="checkbox"/>

CALGREEN SIGNATURE DECLARATIONS

Project Name: _____
Project Address: _____
Project Description: _____

SECTION 1 – DESIGN VERIFICATION

Complete all lines of Section 1 – “Design Verification” and submit the completed checklist (Columns 1 and 2) with the plans and building permit application to the Building Department.

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 Oakland.

Owner's Signature	Date
Owner's Name (Please Print)	
Design Professional's Signature	Date
Design Professional's Name (Please Print)	
Signature of License Professional responsible for CalGreen compliance	Date
Name of License Professional responsible for CalGreen compliance (Please Print)	Phone
Email Address for License Professional responsible for CalGreen compliance	

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 Department prior to Building Department 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 Oakland.

Signature of Person responsible for CalGreen compliance	Date
Name of Person responsible for CalGreen compliance (Please Print)	Phone
Email Address for Person responsible for CalGreen compliance	