



Think Inside the Triangle™

City of Tracy
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 DEVELOPMENT SERVICES DEPARTMENT
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2019 CALGREEN MANDATORY ITEMS RESIDENTIAL CHECKLIST

PURPOSE:

The residential provisions of the 2019 CalGreen Code outline planning, design and development methods that include environmentally responsible site selection, building design, building siting and development to protect, restore and enhance the environmental quality of the site and respect the integrity of adjacent properties; establishes the means of conserving water used indoors, outdoors and in wastewater conveyance; outlines means of achieving material conservation and resource efficiency; and outlines means of reducing the quantity of air contaminants.

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 **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.

MANDATORY FEATURE OR MEASURE	COLUMN 2 Projection Requirement	COLUMN 3 Verification
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CHAPTER 4 - RESIDENTIAL MANDATORY MEASURES

General Requirements

Project meets all of the requirements of Divisions 4.1 through 4.5.	Mandatory	
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Site Development

4.106.2 Storm water drainage and retention during construction. A plan is developed and implemented to manage storm water drainage during construction	Mandatory	
4.106.3 Grading and paving. Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings.	Mandatory	
4.106.4 Electric Vehicle (EV) charging for new construction. New construction shall comply with Section 4.106.4.1, 4.106.4.2, or 4.106.4.3, to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the California Electric Code, Article 625.	Mandatory	

General Requirements		
4.201.1 Scope. Building meets or exceeds the requirements of the California Building Energy Efficiency Standards ³ .	Mandatory	
Indoor Water Use		
4.303.1 Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) installed in residential buildings shall comply with the prescriptive requirements of Sections 4.303.1.1 through 4.303.1.4.4.	Mandatory	
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 US EPA WaterSense Specification for Tank-type Toilets.	Mandatory	
4.303.1.2 Urinals. The effective flush volume of urinals shall not exceed 0.5 gallons per flush.	Mandatory	
4.303.1.3 Showerheads.	Mandatory	
4.303.1.3.1 Single showerhead. 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 US EPA WaterSense Specification for Showerheads.	Mandatory	
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. Note: A hand-held shower shall be considered a showerhead.	Mandatory	
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.	Mandatory	
4.303.1.4.3 Metering Faucets. Metering faucets when installed in residential buildings shall not deliver more than 0.2 gallons per cycle.	Mandatory	
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. Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.	Mandatory	
4.303.2 Standards for plumbing fixtures and fittings. Plumbing fixtures and fittings required in Section 4.303.1 shall be installed in accordance with the California Plumbing Code, and shall meet the applicable referenced standards.	Mandatory	
Outdoor Water Use		

<p>4.304.1 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), whichever is more stringent.</p> <p>Notes:</p> <ol style="list-style-type: none"> 1. The MWELO is located in the California Code of Regulations, Title 23, Chapter 2.7, Division 2. <p>MWELO and supporting documents, including a water budget calculator, are available at: https://www.water.ca.gov/.</p>	Mandatory	
Water Reuse Systems		
<p>4.305.1 Recycled water supply systems. Newly constructed residential developments, where disinfected tertiary recycled water is available from a municipal source to a construction site, may be required to have recycled water supply systems installed, allowing the use of recycle water for residential landscape irrigation systems. See Chapter 15 of the California Plumbing Code.</p>	Mandatory	
Enhanced Durability and Reduced Maintenance		
<p>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.</p>	Mandatory	
Construction Waste Reduction, Disposal and Recycling		
<p>4.408.1 Construction waste management. Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with one of the following:</p> <ol style="list-style-type: none"> 1. Comply with a more stringent local construction and demolition waste management ordinance; or 2. A construction waste management plan, per Section 4.408.2; or 3. A waste management company, per Section 4.408.3; or 4. The waste stream reduction alternative, per Section 4.408.4. 	Mandatory	
Building Maintenance and Operation		
<p>4.410.1 An operation and maintenance manual shall be provided to the building occupant or owner.</p>	Mandatory	
<p>4.410.2 Where 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of non-hazardous materials 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. <u>See exception for rural jurisdictions.</u></p>	Mandatory	
Fireplaces		
<p>4.503.1 Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove 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 limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.</p>	Mandatory	

Pollutant Control		
4.504.1 Duct openings and other related air distribution component openings shall be covered when stored on site, and during construction.	Mandatory	
4.504.2.1 Adhesives, sealants and caulks shall be compliant with VOC and other toxic compound limits provided in Tables 4.504.1 or 4.504.2, as applicable.	Mandatory	
4.504.2.2 Paints, stains and other coatings shall be compliant with VOC limits provided in Table 4.504.3.	Mandatory	
4.504.2.3 Aerosol paints and coatings shall be compliant with product weighted MIR limits for ROC and other toxic compounds.	Mandatory	
4.504.2.4 Documentation shall be provided to verify that compliant VOC limit finish materials have been used.	Mandatory	
4.504.3 Carpet and carpet systems shall be compliant with VOC limits.	Mandatory	
4.504.4 80 percent of floor area receiving resilient flooring shall comply with specified VOC criteria.	Mandatory	
4.504.5 Particleboard, medium density fiberboard (MDF) and hardwood plywood used in interior finish systems shall comply with low formaldehyde emission standards.	Mandatory	
Indoor Moisture Control		
4.505.2 Vapor retarder and capillary break is installed at slab-on-grade foundations.	Mandatory	
4.505.3 Moisture content of building materials used in wall and floor framing is checked before enclosure Wall and floor framing shall not be enclosed when the framing members exceed 19% moisture content.	Mandatory	
Indoor Air Quality and Exhaust		
<p>4.506.1 Bathroom exhaust fans. Each bathroom shall be mechanically ventilated and shall comply with the following:</p> <ol style="list-style-type: none"> 1. Fans shall be ENERGY STAR compliant and be ducted to terminate outside of the building. 2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidity control. <ol style="list-style-type: none"> A. Humidity controls shall be capable of adjustment between relative humidity range of ≤ 50 percent to a maximum of 80 percent. A humidity control may utilize manual or automatic means of adjustment. B. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built in). <p>Notes:</p> <ol style="list-style-type: none"> 1. For the purpose of this section, a bathroom is a room that contains a bathtub, shower, or tub/shower combination. 2. Lighting integral to bathroom exhaust fans shall comply with the California Energy Code. 	Mandatory	
Environmental Comfort		
4.507.2 Heating and air-conditioning system design. Duct systems are sized, designed, and equipment is selected using the following methods:	Mandatory	
1. Establish heat loss and heat gain values according to ANSI/ACCA 2 Manual J-2016, ASHRAE handbooks or equivalent design software or methods.	Mandatory	

2. Size duct systems according to ANSI/ACCA 1 Manual D-2016, ASHRAE handbooks or equivalent design software or methods.	Mandatory	
3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S- 2014 or equivalent.	Mandatory	
Installer and Special Inspector Qualifications		
Qualifications		
702.1 Installer training. HVAC system installers are trained and certified in the proper installation of HVAC systems.	Mandatory	
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.	Mandatory	
Verifications		
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 compliance.	Mandatory	
3. These measures are currently required elsewhere in statute or in regulation.		

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.

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 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.

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 _____