



TOWN OF HILLSBOROUGH
California

2019 CALGREEN RESIDENTIAL MANDATORY MEASURES 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 Owner's agent shall employ a qualified licensed CALGreen Inspector to verify and assure that all required work described herein is properly planned and implemented in the project in accordance with the 2019 California Green Building Standards Code (CALGreen).
2. The CALGreen Inspector, in collaboration with the owner and the design professional shall initially complete **Column 2** of this checklist, sign and date **Section 1, Design Verification** at the end of this checklist and have the checklist printed on or attached to the approved plans for the project.
3. Prior to final inspection by the Building Division, the CALGreen Inspector 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 Division.

MANDATORY FEATURE OR MEASURE	Column 2	Column 3
	Project Requirements	Compliance Verified by CAL-Green Inspector
General Requirements		
Project meets all of the requirements of Divisions 4.1 through 4.5.		
DIVISION 4.1 - PLANNING AND DESIGN		
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		
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.		
4.106.4 Provide capability for electric vehicle charging in one- and two - family dwellings and in townhouses with attached private garages and 3% of total parking spaces as specified for multifamily dwellings.		
DIVISION 4.2 - ENERGY EFFICIENCY		
General Requirements		
4.201.1 Scope. Building meets or exceeds the requirements of the California Building Energy Efficiency Standards.		

DIVISION 4.3 - WATER EFFICIENCY AND CONSERVATION

Indoor Water Use

<p>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 4303.1.1 through 4303.1.4.4.</p>		
<p>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.</p>		
<p>4.303.1.2 Urinals. The effective flush volume of urinals shall not exceed 0.5 gallons per flush.</p>		
<p>4.303.1.3 Showerheads.</p>		
<p>4.303.1.3.1 Single showerhead. Showerheads shall have a maximum flow rate of not more than 2.0 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the US EPA Water Sense Specification for Showerheads.</p>		
<p>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 2.0 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.</p> <p>Note: A hand-held shower shall be considered a showerhead.</p>		
<p>4.303.1.4.1 Residential lavatory faucets. The maximum flow rate of residential lavatory faucets shall not exceed 1.5 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.</p>		
<p>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.</p> <p>Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.</p>		
<p>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.</p>		

Outdoor Water Use

4.304.1 After December 1, 2015, new residential developments with an aggregate landscape area equal to or greater than 500 square feet shall comply with one of the following options:

1. 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
2. Projects with aggregate landscape areas less than 2,500 square feet may comply with the MWELO's Appendix D Prescriptive Compliance Option.

DIVISION 4.4 - 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

4.408.1 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:

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.

Building Maintenance and Operation

4.410.1 An operation and maintenance manual shall be provided to the building occupant or owner.

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. See exception for rural jurisdictions.

DIVISION 4.5 - ENVIRONMENTAL QUALITY

Fireplaces

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.

Pollutant Control		
4.504.1 Duct openings and other related air distribution component openings shall be covered during construction.		
4.504.2.1 Adhesives, sealants and caulks shall be compliant with VOC and other toxic compound limits		
4.504.2.2 Paints, stains and other coatings shall be compliant with VOC limits.		
4.504.2.3 Aerosol paints and coatings shall be compliant with product weighted MIR limits for ROC and other toxic compounds.		
4.504.2.4 Documentation shall be provided to verify that compliant VOC limit finish materials have been used		
4.504.3 Carpet and carpet systems shall be compliant with VOC limits		
4.504.4 80 percent of floor area receiving resilient flooring shall comply with specified VOC criteria		
4.504.5 Particleboard, medium density fiberboard (MDF) and hardwood plywood used in interior finish systems shall comply with low formaldehyde emission standards.		
Indoor Moisture Control		
4.505.2 Vapor retarder and capillary break is installed at slab-on-grade foundations		
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.		
Environmental Comfort		
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-2011 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 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 CALGreen Inspector for this project is listed by the County of San Mateo as an approved licensed CALGreen Inspector and is qualified and able to demonstrate competence in the discipline they inspect and verify.		
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.		

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 (Column 2) (printed on or attached to the approved plans) with the building permit application to the Building Division.

The owner, design professional, and licensed CalGreen Inspector* have reviewed the plans and certified 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 Town of Hillsborough.

Owner's Signature

Date

Owner's Name (please print)

Design Professional's Signature

Date

Design Professional's Name (please print)

CalGreen Inspector's Signature

Date

CalGreen Inspector's Name (please print)

CalGreen Inspector's Email Address

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's 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 Town of Hillsborough.

CalGreen Inspector's Signature

Date

CalGreen Inspector's Name (please print)

Phone

CalGreen Inspector's Email Address

*Note: The CalGreen Inspector shall not be the owner, design professional or contractor for the project and shall not have a financial interest in the project for which services are being provided except for the cost of providing said services.