



TOWN OF HILLSBOROUGH
California

2019 CALGREEN RESIDENTIAL MANDATORY MEASURES CHECKLIST
ADDITIONS/REMODELS < 1000 SQ. FT.

DATE: _____

PERMIT NUMBER: _____

JOB ADDRESS: _____

CONTACT INFORMATION:

Applicant's Name _____

Phone Number _____

Email _____

Following is a standardized checklist of the 2019 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.

MANDATORY FEATURE OR MEASURE	Verification	
	by owner, contractor, designer, or licensed professional	
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 WaterSense 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. Special inspectors employed by the enforcing agency must be qualified and able to demonstrate competence in the discipline they are inspecting.		
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.		

The following section shall be completed by a person with overall responsibility for the planning and design portion of the project, i.e., owner, contractor, designer, or licensed professional.

DECLARATION STATEMENT

- I certify under penalty of perjury, under the laws of the State of California, the information provided is true and correct.
- I certify that the installed measures, materials, components, or manufactured devices identified on this certificate conform to all applicable codes and regulations, and the installation is consistent with the plans and specifications approved by the enforcing agency.

Responsible Person's Signature: _____
(Please print)

Responsible Person's Name: _____

Position/Title: _____

Date Signed: _____