

# 2013 CALGreen

## RESIDENTIAL MANDATORY MEASURES CHECKLIST

(Including supplement effective July 1, 2015)

SECTION	MEASURES	REQUIREMENTS	Measures provided on plan sheet:																
<b>PLANNING AND DESIGN (Site Development)</b>																			
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 drainage system will manage all surface water flows to keep water from entering buildings.																	
4.106.4	Electric Vehicle (EV) Charging for New Construction	Provide capability for electric vehicle charging in one- and two-family dwellings and in townhouses with attached private garages; and 3 percent of total parking spaces, as specified, for multifamily dwellings.																	
<b>ENERGY EFFICIENCY</b>																			
4.201.1	General	Building meets or exceeds the requirements of the 2013 California Building Energy Efficiency Standards.																	
<b>WATER EFFICIENCY AND CONSERVATION (Indoor Water Use)</b>																			
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 requirements of Sections 4.303.1.1 through 4.303.1.4.4:																	
		<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="width: 60%;">Plumbing fixtures &amp; fittings</th> <th style="width: 40%;">Maximum</th> </tr> </thead> <tbody> <tr> <td>Water closets</td> <td>1.28 gallons/flush</td> </tr> <tr> <td>Showerheads</td> <td>2.0 gpm @ 80 psi</td> </tr> <tr> <td>Kitchen faucets</td> <td>1.8 gpm @ 60 psi</td> </tr> <tr> <td>Residential lavatory faucets</td> <td>1.5 gpm @ 60 psi max, 0.8 gpm @ 20 psi min.</td> </tr> <tr> <td>Lavatory faucets in common &amp; public use areas</td> <td>0.5 gpm @ 60 psi</td> </tr> <tr> <td>Metering faucets</td> <td>0.25 gallons/cycle</td> </tr> <tr> <td>Urinals</td> <td>0.5 gallons/60 psi</td> </tr> </tbody> </table>		Plumbing fixtures & fittings	Maximum	Water closets	1.28 gallons/flush	Showerheads	2.0 gpm @ 80 psi	Kitchen faucets	1.8 gpm @ 60 psi	Residential lavatory faucets	1.5 gpm @ 60 psi max, 0.8 gpm @ 20 psi min.	Lavatory faucets in common & public use areas	0.5 gpm @ 60 psi	Metering faucets	0.25 gallons/cycle	Urinals	0.5 gallons/60 psi
		Plumbing fixtures & fittings		Maximum															
		Water closets		1.28 gallons/flush															
		Showerheads		2.0 gpm @ 80 psi															
		Kitchen faucets		1.8 gpm @ 60 psi															
		Residential lavatory faucets		1.5 gpm @ 60 psi max, 0.8 gpm @ 20 psi min.															
Lavatory faucets in common & public use areas	0.5 gpm @ 60 psi																		
Metering faucets	0.25 gallons/cycle																		
Urinals	0.5 gallons/60 psi																		
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 2013 California Plumbing Code, and shall meet the applicable referenced standards.																	
<b>WATER EFFICIENCY AND CONSERVATION (Outdoor Water Use)</b>																			
4.304.1	Irrigation Controllers	Automatic irrigation system controllers installed at the time of final inspection shall be weather or soil moisture-based.																	
<b>MATERIAL CONSERVATION &amp; RESOURCE EFFICIENCY (Enhanced Durability &amp; Reduced Maintenance)</b>																			
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 a similar method acceptable to the enforcing agency.																	
<b>MATERIAL CONSERVATION &amp; RESOURCE EFFICIENCY (Construction Waste Reduction, Disposal &amp; Recycling)</b>																			
4.408.1	Construction Waste Management	Recycle and/or salvage for reuse a minimum of 50% of the nonhazardous construction and demolition waste in accordance with one of the following: <ol style="list-style-type: none"> <li>1. Comply with a more stringent local construction and demolition waste management ordinance; or</li> <li>2. A construction waste management plan, per Section 4.408.2; or</li> <li>3. A waste management company, per Section 4.408.3; or</li> <li>4. The waste stream reduction alternative, per Section 4.408.4.</li> </ol>																	
<b>MATERIAL CONSERVATION &amp; RESOURCE EFFICIENCY (Building Maintenance &amp; Operation)</b>																			
4.410.1	Operation and Maintenance Manual	An operation and maintenance manual shall be provided to the building occupant or owner.																	
<b>ENVIRONMENTAL QUALITY (Fireplaces)</b>																			
4.503.1	General	Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA Phase II emission limits where applicable. Woodstoves, pellet stoves and fireplaces shall also comply with all applicable local ordinances.																	
<b>ENVIRONMENTAL QUALITY (Pollutant Control)</b>																			

## RESIDENTIAL MANDATORY MEASURES

SECTION	MEASURES	REQUIREMENTS	Measures provided on plan sheet:
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 compliant with VOC and other toxic compound limits.	
4.504.2.2	Paints and Coatings	Paints, stains and other coatings shall be compliant with VOC limits.	
4.504.2.3	Aerosol Paints and Coatings	Aerosol paints and 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 compliant with VOC limits.	
4.504.4	Resilient Flooring Systems	80 percent of floor area receiving resilient flooring shall comply with specified VOC criteria.	
4.504.5	Composite Wood Products	Particleboard, medium density fiberboard (MDF) and hardwood plywood used in the interior finish systems shall comply with low formaldehyde emission standards.	
<b>ENVIRONMENTAL QUALITY (Interior Moisture Control)</b>			
4.505.2	Concrete Slab Foundations	Vapor retarder and capillary break is installed at slab-on-grade foundations.	
4.505.3	Moisture Content of Building Materials	Moisture content of building materials used in wall and floor framing is checked before enclosure.	
<b>ENVIRONMENTAL QUALITY (Indoor Air Quality &amp; Exhaust)</b>			
4.506.1	Bathroom Exhaust Fans	<p>Each bathroom shall be mechanically ventilated and shall comply with the following:</p> <ol style="list-style-type: none"> <li>1. Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building.</li> <li>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"> <li>a) Humidity controls shall be capable of manual or automatic adjustment between a relative humidity range of less than 50% to a maximum of 80%.</li> <li>b) A humidity control may be a separate component to the exhaust fan and is not required to be integral or built-in.</li> </ol> </li> </ol> <p>Note: For the purposes of this section a bathroom is a room which contains a bathtub, shower, or tub/shower combination. Fans are required in each bathroom.</p>	
<b>ENVIRONMENTAL QUALITY (Environmental Comfort)</b>			
4.507.2	Heating and Air Conditioning System Design	<p>Duct systems are sized, designed, and equipment is selected using the following methods:</p> <ol style="list-style-type: none"> <li>1. Establish heat loss and heat gain values according to ANSI/ACCA 2 Manual J - 2004 (Residential Load Calculation), or equivalent.</li> <li>2. Size duct systems according to ANSI/ACCA 1 Manual D - 2009 (Residential Duct Systems), or equivalent.</li> <li>3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S - 2004 (Residential Equipment Selection) or equivalent.</li> </ol>	
<b>INSTALLER &amp; SPECIAL INSPECTOR QUALIFICATIONS (Qualifications, Verifications)</b>			
702.1	Installer Training	HVAC system installers are trained and certified in the proper installation of HVAC systems.	
702.2	Special Inspection	Special inspectors must be qualified and able to demonstrate competence to the enforcing agency in the discipline in which they are inspecting.	
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 conformance.	

**Note:**

This check list is intended only as an aid to the user and may not contain complete code language. Refer to 2013 CALGreen Chapter 4 for complete code language.