



## RESIDENTIAL 2010 CALGreen+Tier 1 Checklist

*(Revised per CALGreen Supplement and City of Santa Rosa Requirements - Based on CALGreen + Tier 1)*

**Applies to building permit applications received on or after July 1, 2012, for newly constructed hotels, motels, lodging houses, dwellings, dormitories, condominiums, shelters, congregated residences, employee housing, factory-built housing and other types of dwellings containing sleeping accommodations with or without common toilet or cooking facilities including accessory buildings, facilities and uses thereto.**

**(Residential additions, alterations, and repairs to existing structures are not subject to CALGreen at this time.)**

Project Address: \_\_\_\_\_

Project Name: \_\_\_\_\_

Project Description: \_\_\_\_\_

**Instructions:**

1. The Owner or the Owner's agent shall employ a qualified Green Building Special Inspector, listed by the City of Santa Rosa Building Division, to perform Green Building Special Inspector services and to verify and assure the Owner and the Building Division that all required work described herein is properly planned and implemented in the project.
2. The Green Building Special Inspector shall not be the 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.
3. The Green Building Special Inspector, in collaboration with the owner and the design professional, shall initially complete **Columns 1 and 2** of this checklist, sign and date the CALGreen Building Acknowledgements section at the end of this checklist and have the checklist printed on or attached to the approved plans for the project.
4. Prior to final inspection by the Building Division, CALGreen Building Special Inspector, except where verification by City is noted, shall complete **Column 3** and provide verification of completion prior to final inspection by City staff.

<b>Column 1 Feature or Measure</b>	<b>Column 2 Project Requirements</b> <i>When checked, these items become a part of the approved plans and must be installed or incorporated into the project.</i>		<b>Column 3 Verification</b> <i>Complete after installation &amp; prior to final inspection approval</i>
<i>See Chapter 4 and Appendix A4 of the 2010 California Green Building Code and the local jurisdiction for complete descriptions of features or measures listed here.</i>	<b>Mandatory &amp; Tier 1 Prerequisites</b>	<b>Tier 1 electives</b> <i>Applicant selects required elective measures</i>	Verification by a 3rd party Special Inspector or by local jurisdiction staff as noted below
<b>A4.1 PLANNING AND DESIGN</b>	<i>All checked items are required for the project</i>	<i>Select at least two (2) elective measures from A4.1</i>	<i>Select all measures verified in the completed project</i>
<b>Site Selection</b>			

Feature or Measure	Required	Electives	Verification by
<p><b>A4.103.1 Selection.</b> A site which complies with at least one of the following characteristics is selected: <b>(Support documentation required at application submittal)</b></p> <ol style="list-style-type: none"> <li>1. An infill site is selected.</li> <li>2. A greyfield site is selected.</li> <li>3. An EPA-recognized and remediated Brownfield site is selected.</li> </ol>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	City Plan Check staff <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>Site Preservation</b>			
<p><b>A4.104.1</b> Individuals with oversight authority on the project who have been trained in areas related to environmentally friendly development can teach green concepts to other members of the development staff and ensure that training is provided to all parties associated with the project.</p> <p>Prior to beginning the construction activities, all parties involved with the development process shall receive a written guideline and instruction specifying the green goals of the project.</p>		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<b>Deconstruction and Reuse of Existing Materials</b>			
<p><b>A4.105.1</b> Existing buildings on the site are deconstructed and the salvaged materials (which must comply with current building standards) are reused.</p> <p><b>A4.105.2</b> Materials which can be easily reused include but are not limited to the following:</p> <ol style="list-style-type: none"> <li>1. Light fixtures</li> <li>2. Plumbing fixtures</li> <li>3. Doors and trim</li> <li>4. Masonry</li> <li>5. Electrical devices</li> <li>6. Appliances</li> <li>7. Foundations or portions of foundations</li> </ol>		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/> Verify at least one <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>Site Development</b>			
<p><b>A4.106.1 Building Orientation.</b> Orient building(s) to optimize the use of solar energy with the long side of the house oriented within 30° of south.</p>		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<p><b>4.106.2 Storm water drainage and retention during construction.</b> Newly constructed projects which disturb less than one acre of land shall prevent the pollution of storm water runoff from the construction activities by complying with lawfully enacted storm water management and/or erosion control ordinances. See Santa Rosa City Code Chapter 17-12.</p>	<input checked="" type="checkbox"/>		City Building Inspector <input type="checkbox"/>
<p><i>Description of proposed measures:</i></p>	<p style="text-align: right;"><i>Sheet:      Detail:</i></p>		



Feature or Measure	Required	Electives	Verification by
<p><b>A4.106.6 Electric vehicle (EV) charging.</b> Dwellings shall comply with the following requirements for the future installation of electric vehicle supply equipment (EVSE)</p> <p><b>A4.106.6.1 One- and two-family dwellings.</b> Install a listed continuous raceway (minimum size trade size 1, fastened at the main service or subpanel, terminating in close proximity to the proposed location of the charging system into a listed cabinet/box/enclosure) to accommodate a dedicated branch circuit.</p> <p><b>A4.106.6.1.1 Labeling requirement.</b> A label stating “EV CAPABLE” shall be posted in a conspicuous place at the service panel or subpanel and next to the raceway termination point.</p> <p><b>A4.106.6.2 Multifamily dwellings.</b> At least 3% of the total parking spaces, but not less than one, shall be capable of supporting future electric vehicle supply equipment (EVSE)</p> <p><b>A4.106.6.2.1 Single charging space required.</b> When only a single charging space is required, install listed raceway per A4.106.6</p> <p><b>A4.106.6.2.2 Multiple charging spaces required.</b> When multiple charging spaces are required, plans shall include the location(s) and type of the EVSE, raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to simultaneously charge all the electrical vehicles at all designed EV charging spaces at their full rated amperage. Plan design shall be based upon Level 2 EVSE at its maximum operating ampacity. Only underground raceways and related underground equipment are required to be installed at the time of construction. <b>(Support documentation required at application submittal)</b></p> <p><b>A4.106.6.2.3 Labeling requirement.</b> A label stating “EV CAPABLE” shall be posted in a conspicuous place at the service panel or subpanel and next to the raceway termination point.</p>		<input type="checkbox"/> As applicable <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	<b>Special Inspector</b> <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>
<i>Description of proposed measures:</i>	<i>Sheet:      Detail:</i>		
<b>Innovative Concepts and Local Environmental Conditions</b>			
<p><b>A4.107.1</b> Items in this section are necessary to address innovative concepts or local environmental conditions. These items must be approved by the Building Department prior to listing here.</p>			Chief Building Official
Item 1:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>A4.2</b> <b>ENERGY EFFICIENCY</b></p>	<i>All checked items are required</i>	<i>Select at least four (4) elective measures from A4.2</i>	<i>Select all measures verified in the completed project</i>
<b>Performance Approach General</b>			
<p><b>A4.203.1. Energy Performance.</b> Using an Alternative Calculation Method (ACM) approved by the California Energy Commission, calculate the annual Time Dependent Valuation (TDV) energy for each proposed building and compare it to the TDV energy budget (standard building) to exceed the 2010 California Energy Code requirement by 15%. (Tier 1)</p>	<input checked="" type="checkbox"/>		City Building Inspector (May Require HERS Rater Verification) <input type="checkbox"/>
<b>Building Envelope</b>			

Feature or Measure	Required	Electives	Verification by
<b>A4.205.1 Radiant barrier.</b> Radiant roof barrier is installed in Climate Zones 2, 4, and 8 through 15.		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<i>Description of proposed measures:</i>	<i>Sheet:      Detail:</i>		
<b>A4.205.2 Window shading.</b> Exterior shading at least 18 inches in depth is provided on south and west windows.		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<i>Description of proposed measures:</i>	<i>Sheet:      Detail:</i>		
<b>Air Sealing Package</b>			
<b>A.4.206.1 Reduced infiltration.</b> Third party blower door test is conducted and passed to verify building envelope tightness.		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<b>HVAC Design, Equipment and Installation</b>			
<b>A4.207.1 Innovative systems.</b> Radiant, hydronic, ground source and other innovative space heating and cooling systems included in the proposed design shall be designed using generally accepted industry-approved guidelines and design criteria. <b>(Support documentation may be required at application submittal)</b>		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<b>A4.207.2 Commissioning.</b> A HVAC system commissioning plan is developed and the following items, as appropriate, pertaining to the heating and cooling systems are inspected and certified by an independent third party agency: <ol style="list-style-type: none"> <li>1. Verify compliance with the manufacturers recommended start-up procedures.</li> <li>2. Verify refrigerant charge by super-heat or other methods specified by the manufacturer.</li> <li>3. Burner is set to fire at the nameplate input rating.</li> <li>4. Temperature drop across the evaporator is within the manufacturers recommended range.</li> <li>5. Test and verify air flow to be within 10 percent of the initial design air flow.</li> <li>6. Static pressure within the duct system is within the manufacturers' acceptable range.</li> <li>7. Verify that the whole house and exhaust ventilation systems meet Title 24 requirements.</li> <li>8. Verify that the recommended maintenance procedures and schedules are documented and provided to the home owner.</li> </ol>		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>A4.207.2.3 Commissioning checklist.</b> Results of the commissioning inspection shall be included in the Operation and Maintenance Manual required in Section 4.4.10.1.		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<b>A4.207.4 Gas-fired heating equipment.</b> Install gas-fired (natural or propane) space heating equipment with an Annual Fuel Utilization Ratio (AFUE) of 0.90 or higher.		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<b>A4.207.5 Heat pumps.</b> If an electric heat pump must be used, select equipment with a Heating Seasonal Performance Factor (HSPF) of 8.0 or higher.		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>

Feature or Measure	Required	Electives	Verification by
<b>A4.207.6 Cooling equipment.</b> When climatic conditions necessitate the installation of cooling equipment, select cooling equipment with a Seasonal Energy Efficiency Ratio (SEER) higher than 13.0 and an Energy Efficiency Ratio (EER) of at least 11.5.		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<b>A4.207.7 Duct location.</b> Install ductwork to comply with at least <u>one</u> of the following:  1. Install ducts within the conditioned envelope of the building. 2. Install ducts in an underfloor crawl space. 3. Use ducts with an R-6 insulation value or higher. 4. Install ductwork which is buried in the ceiling insulation.		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<b>A4.207.8 Duct leakage.</b> Perform duct leakage testing to verify a total leakage rate of less than 6 percent of the total fan flow.		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<b>A4.207.9 Whole house fans.</b> In climate zones <b>2</b> , 4, and 8 through 15 install a whole-house fan with insulated louvers or an insulated cover.		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<b>A4.207.10 Ceiling fans.</b> ENERGY STAR ceiling fans are installed in all bedrooms and living areas.		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<b>Water Heating Design, Equipment and Installation</b>			
<b>A4.208.1 Tank type water heater efficiency.</b> The Energy Factor (EF) for a gas fired storage water heater is higher than 0.60.		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<b>A4.208.2 Tankless water heater efficiency.</b> The Energy Factor (EF) for a gas fired tankless water heater is 0.80 or higher.		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<b>A4.208.3 Distribution systems.</b> Where the hot water source is more than 10 feet from a fixture, the potable water distribution system shall convey hot water using one of the methods 1 through 5 listed in Section A4.208.3 <b>(Support documentation or plan design required at application submittal)</b>		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<b>Lighting</b>			
<b>A4.209.1 Lighting.</b> Building lighting consists of at least 90 percent ENERGY STAR qualified hard-wired fixtures.		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<b>Appliances</b>			
<b>A4.210.1 Appliance rating.</b> Each appliance provided by the builder meets ENERGY STAR if an ENERGY STAR designation is applicable for that appliance.		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>

Feature or Measure	Required	Electives	Verification by
<b>Renewable Energy</b>			
<p><b>A4.211.1 New solar homes partnership.</b> Install a solar photovoltaic (PV) system in compliance with the California Energy Commission New Solar Homes Partnership (NSHP).<sup>1,3</sup></p> <p><sup>1</sup> In addition, for Tier 1, each appliance provided by the builder must be Energy Star if an Energy Star designation is applicable for that appliance.</p> <p><sup>3</sup> Information on NSHP incentives available through the California Energy Commission may be obtained at the "Go Solar California" website: <a href="http://www.GoSolarCalifornia.ca.gov/nshp/index.html">www.GoSolarCalifornia.ca.gov/nshp/index.html</a>.</p>		<input type="checkbox"/>	City Building Inspector <input type="checkbox"/>
<i>Description of proposed measures:</i>	<i>Sheet:      Detail:</i>		
<p><b>A4.211.2 Solar water heating system.</b> A Solar Rating and Certification Corporation (SRCC) OG 100 solar collector or OG 300 solar water heating system is installed. The SRCC Solar Energy Factor (SE) shall be used to determine the Solar Fraction (SF), which shall be at least 0.5 as determined using the California F-Chard available at the "gosolarcalifornia" website or through the California Energy Commission.</p>		<input type="checkbox"/>	City Building Inspector <input type="checkbox"/>
<i>Description of proposed measures:</i>	<i>Sheet:      Detail:</i>		
<p><b>A4.211.3 Space for future solar installation.</b> Provide min. 300 sq. ft. of unobstructed roof area facing within 30 degrees of south for future solar collector or photovoltaic panels. Provide rough-in penetrations through the roof surface within 24 inches of the boundary of the unobstructed roof area for electrical conduit and water piping.</p>		<input type="checkbox"/>	<b>Special Inspector</b> <input type="checkbox"/>
<i>Description of proposed measures:</i>	<i>Sheet:      Detail:</i>		
<p><b>A4.211.4 Future access for solar system.</b> Provide a minimum one inch conduit from the electrical service equipment to an accessible location in attic or other location approved by the enforcing agency.</p>		<input type="checkbox"/>	<b>Special Inspector</b> <input type="checkbox"/>
<b>Innovative Concepts and Local Environmental Conditions</b>			
<p><b>A4.213.1</b> Items in this section are necessary to address innovative concepts or local environmental conditions. These items must be approved by the Building Division prior to listing here.</p>			Chief Building Official
Item 1:		<input type="checkbox"/>	<input type="checkbox"/>

Feature or Measure	Required	Electives	Verification by
<b>A4.3</b> <b>WATER EFFICIENCY AND CONSERVATION</b>	<i>All checked items are required</i>	<i>Select at least one (1) elective measure from A4.3</i>	<i>Select all measures verified in the completed project</i>
<b>Indoor Water Use</b>			
<b>4.303.1 Twenty percent savings.</b> Indoor water use shall be reduced by at least 20 percent using <b>one</b> of the follow methods.  <b>Prescriptive Method:</b> Each plumbing fixture and fitting shall not exceed the Maximum Flow Rate at $\geq$ 20 Percent Reduction column in Table 4.303.2 or  <b>Performance Method:</b> A 20 percent reduction in baseline water use shall be demonstrated per Table 4.303.1. <b>(Support documentation required at application submittal)</b>	<input checked="" type="checkbox"/>  or  <input checked="" type="checkbox"/>		<i>Special Inspector</i>  <input type="checkbox"/>  <input type="checkbox"/>
<b>4.303.2 Multiple showerheads serving one shower.</b> When a shower is served by more than one showerhead, the combined flow rate of all the showerheads controlled by a single valve shall not exceed the maximum Flow Rates at $\geq$ 20 Percent Reductions column in Table 4.303.2 or the shower shall be designed to only allow one showerhead to be in operation at a time.  <b>Exception:</b> The maximum flow rate for showerheads when using the performance method specified in Section 4.303.1, Item 2, is 2.5 gpm @ 80 psi.	<input checked="" type="checkbox"/>		<i>Special Inspector</i>  <input type="checkbox"/>
<b>4.303.3 Plumbing fixtures and fitting.</b> Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with specified performance requirements.	<input checked="" type="checkbox"/>		<i>Special Inspector</i>  <input type="checkbox"/>
<b>A4.303.1 Kitchen faucets and dishwashers.</b> Kitchen faucets shall have a maximum flow rate not greater than 1.5 gallons per minute at 60 psi. (Tier 1)	<input checked="" type="checkbox"/>		<i>Special Inspector</i>  <input type="checkbox"/>
<b>A4.303.2 Nonwater supplied urinals and waterless toilets.</b> Non-water supplied urinals or waterless toilets are installed.  (Check with local jurisdiction for approval of these fixtures)		<input type="checkbox"/>	<i>Special Inspector</i>  <input type="checkbox"/>
<b>Outdoor Water Use</b>  <b>See Santa Rosa City Code Chapter 14-30, Water Efficient Landscape Ordinance</b>			<b>All Outdoor Water Use verified by City Water Efficient Landscape Ordinance Staff</b>
<b>4.304.1 Irrigation controllers.</b> Automatic irrigation systems installed at the time of final inspection shall be weather-based or soil based with rain sensor.	<input checked="" type="checkbox"/>		<input type="checkbox"/>
<b>A4.304.1 Low-water consumption irrigation system.</b> Install a low-water consumption irrigation system which minimizes the use of spray type heads. (See SRCC 14-30)		<input type="checkbox"/>	<input type="checkbox"/>
<i>Description of proposed measures:</i>	<i>Sheet:      Detail:</i>		
<b>A4.304.2 Rainwater systems.</b> A rainwater capture, storage and re-use system is designed and installed		<input type="checkbox"/>	<input type="checkbox"/>



Feature or Measure	Required	Electives	Verification by
<i>Description of proposed measures:</i>		<i>Sheet:</i>	<i>Detail:</i>
<b>A4.304.3 Water budget.</b> A water budget shall be developed for landscape irrigation per Santa Rosa City Code Chapter 14-30. <b>(Support documentation required at application submittal)</b>		<input type="checkbox"/>	<input type="checkbox"/>
<b>A4.304.4 Potable water reduction.</b> Reduce the use of potable water to a quantity that does not exceed 65% of ETo times the landscape area.(Tier 1) <b>(Support documentation required at application submittal)</b> <b>Note: See Santa Rosa Water Efficient Landscape Ordinance.</b>	<input checked="" type="checkbox"/>		<input type="checkbox"/>
<b>A4.304.5 Potable water elimination.</b> A landscape design is installed which does not utilize potable water. <b>(Support documentation required at application submittal)</b>		<input type="checkbox"/>	<input type="checkbox"/>
<b>WATER REUSE SYTEMS</b>			
<b>A4.305.1 Graywater.</b> Alternate plumbing piping is installed to permit the discharge from the clothes washer or other fixtures to be used for an irrigation system in compliance with Chapter 16A of the 2010 California Plumbing Code.		<input type="checkbox"/>	<b>Special Inspector</b> <input type="checkbox"/>
<b>A4.305.2 Recycled water piping.</b> Based upon projected availability, dual water piping is installed for future use of recycled water at interior and exterior locations. Interior piping for use of recycled water for water closets, urinals and floor drains. Exterior piping to transport recycled water from the point of connection to the structure.		<input type="checkbox"/>	<b>Special Inspector</b> <input type="checkbox"/>
<b>A4.305.3 Recycled water for landscape irrigation.</b> Recycled water is used for landscape irrigation.		<input type="checkbox"/>	<b>Special Inspector</b> <input type="checkbox"/>
<b>Innovative Concepts and Local Environmental Conditions</b>			
<b>A4.306.1 Innovative concepts and local environmental conditions.</b> Items in this section are necessary to address innovative concepts or local environmental conditions. These items must be approved by the Building Division prior to listing here.			Chief Building Official
Item:		<input type="checkbox"/>	<input type="checkbox"/>
<b>A4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY</b>			
	<i>All checked items are required</i>	<i>Select at least two (2) elective measures from A4.4</i>	<i>Select all measures verified in the completed project</i>
<b>Foundation Systems</b>			
<b>A404.3.2 Reduction in cement use.</b> Cement use in foundation mix design is reduced by not less than a 20 percent. (Tier 1) <b>Note: As allowed by the enforcing agency, any design cement mix must be authorized and approved by Architect of Record.</b>	<input checked="" type="checkbox"/>		City Building Inspector <input type="checkbox"/>
<b>Efficient Framing Techniques</b>			

Feature or Measure	Required	Electives	Verification by
<b>A4.404.1 Lumber size.</b> Beams and headers and trimmers are the minimum size to adequately support the load.		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<b>A4.404.2 Building dimensions &amp; layouts.</b> Building dimensions and layouts are designed to minimize waste in at least 80% of the structure. <ol style="list-style-type: none"> <li>1. Building design dimensions in 2' increments</li> <li>2. Windows &amp; doors are located at regular 16" or 24" o.c. stud positions.</li> <li>3. Other methods acceptable by enforcing agency.</li> </ol>		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<b>A4.404.3 Building systems.</b> Use pre-manufactured building systems to eliminate solid sawn lumber whenever possible.		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<b>A4.404.4 Pre-cut materials and details.</b> Material lists are included in the plans which specify material quantity and provide direction for on-site cuts. <b>(Support documentation required at application submittal)</b>		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<b>Material Sources</b>			
<b>A4.405.1 Prefinished building materials.</b> <u>One</u> or more of the following building materials, that do not require additional resources for finishing are used: <ol style="list-style-type: none"> <li>1. Exterior trim not requiring paint or stain.</li> <li>2. Windows not requiring paint or stain.</li> <li>3. Siding or exterior wall coverings which do not require paint or stain.</li> </ol>		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
<b>A4.405.2 Concrete floors.</b> Floors that do not require additional coverings are used including but not limited to stained, natural, or stamped concrete floors.		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>



Feature or Measure	Required	Electives	Verification by
<p><b>A4.405.4 Use of building materials from rapidly renewable sources.</b> One or more of the following materials manufactured from rapidly renewable sources or agricultural by-products is used.</p> <ol style="list-style-type: none"> <li>1. Insulation</li> <li>2. Bamboo or cork</li> <li>3. Engineer products</li> <li>4. Agricultural based products.</li> <li>5. Other products acceptable to enforcing agency..</li> </ol> <p><b>(Support documentation required at application submittal)</b></p>		<input type="checkbox"/>	<p><i>Special Inspector</i></p> <input type="checkbox"/>
<b>Enhanced Durability and Reduced Maintenance</b>			
<p><b>4.406.1 Rodent proofing.</b> 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>	<input checked="" type="checkbox"/>		<p><i>Special Inspector</i></p> <input type="checkbox"/>
<b>Water Resistance and Moisture Management</b>			
<p><b>A4.407.1 Drainage around foundation.</b> Install foundation and landscape drains which discharge to a dry well, sump, bioswale or other approved location.</p>		<input type="checkbox"/>	<p><i>Special Inspector</i></p> <input type="checkbox"/>
<p><i>Description of proposed measures:</i></p>	<p><i>Sheet:      Detail:</i></p>		
<p><b>A4.407.2 Roof drainage.</b> Install gutter and downspout systems to route water at least 5 feet away from the foundation or connect to landscape drains which discharge to a dry well, sump, bioswale, rainwater capture system or other approved on-site location.</p>		<input type="checkbox"/>	<p><i>Special Inspector</i></p> <input type="checkbox"/>
<p><i>Description of proposed measures:</i></p>	<p><i>Sheet:      Detail:</i></p>		
<p><b>A4.407.3 Flashing details.</b> Provide flashing details on the building plans and comply with accepted industry standards or manufacturers instructions.</p>		<input type="checkbox"/>	<p>City Plan Check staff</p> <input type="checkbox"/>
<p><i>Description of proposed measures:</i></p>	<p><i>Sheet:      Detail:</i></p>		
<p><b>A4.407.4 Material protection.</b> Protect building materials delivered to the construction site from rain and other sources of moisture.</p>		<input type="checkbox"/>	<p><i>Special Inspector</i></p> <input type="checkbox"/>
<p><b>A4.407.6 Door protection.</b> Exterior doors to the dwelling are protected by min. 4 ft. to prevent water intrusion.</p>		<input type="checkbox"/>	<p><i>Special Inspector</i></p> <input type="checkbox"/>
<p><i>Description of proposed measures:</i></p>	<p><i>Sheet:      Detail:</i></p>		
<p><b>A4.407.7 Roof overhangs.</b> A permanent overhang or awning at least 2 feet in depth is provided at all exterior walls.</p>		<input type="checkbox"/>	<p><i>Special Inspector</i></p> <input type="checkbox"/>



Feature or Measure	Required	Electives	Verification by
<p><b>4.410.1 Operation and maintenance manual.</b> At the time of final inspection, a manual which includes all of the following shall be placed in the building:</p> <ol style="list-style-type: none"> <li>1. Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.</li> <li>2. Operation and maintenance instructions for; equipment and appliances, roof and yard drainage, space conditioning systems, landscape irrigation systems, and water reuse systems.</li> <li>3. Information on local recycle programs and locations.</li> <li>4. Public transportation and/or carpool options available in the area.</li> <li>5. Educational material on the positive impacts of interior relative humidity between 30-60%.</li> <li>6. Information about water-conserving landscape and irrigation design and controllers which conserve water.</li> <li>7. Instructions for maintaining gutters and downspouts and importance of diverting water at least 5ft. away from the foundation.</li> <li>8. Information on required routine maintenance measures including caulking, painting, grading around the house, etc.</li> <li>9. Information about state solar energy and incentive programs available.</li> <li>10. A copy of all special inspection verifications required by the enforcing agency or this code.</li> </ol>	☒		<i>Special Inspector</i> <input type="checkbox"/>
<b>Innovative Concepts and Local Environmental Conditions</b>			
<p><b>A4.411.1 Innovative concepts and local environmental conditions.</b> Items in this section are necessary to address innovative concepts or local environmental conditions.</p>			Chief Building Official
Item:		<input type="checkbox"/>	<input type="checkbox"/>
<b>A4.5 ENVIRONMENTAL QUALITY</b>	<i>All checked items are required</i>	<i>Select at least one (1) elective measure from A4.5</i>	<i>Select all measures verified in the completed project</i>
<b>Fireplaces</b>			
<p><b>4.503.1 Fireplaces.</b> Install only a direct-vent or sealed-combustion gas fireplace. Wood-pellet stove shall comply with EPA Phase II or local ordinances. <b>(Support documentation may be required at application submittal)</b></p>	☒		<i>Special Inspector</i> <input type="checkbox"/>
<b>Pollutant Control</b>			<i>*All by Special Inspector</i>
<p><b>4.504.1 Covering of duct openings and protection of mechanical equipment during construction.</b> At the time of rough installation, during storage on the site and until final startup of the HVAC equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of water, dust and debris, which may enter the system.</p>	☒		* <input type="checkbox"/>



Feature or Measure	Required	Electives	Verification by
<b>Interior Moisture Control</b>			
<p><b>4.505.2 Concrete slab foundations.</b> Concrete slab foundations required to have a vapor retarder by the California Building Code, Chapter 19, or the California Residential Code, Chapter 5, shall comply with this section.</p> <p><b>4.505.2.1 Capillary break.</b> A capillary break shall be installed in compliance with at least one of the following:</p> <ol style="list-style-type: none"> <li>1. A 4" thick base of 1/2" or larger clean aggregate w/vapor barrier in direct contact with concrete</li> <li>2. Other methods approved by the enforcing agency.</li> <li>3. A slab design specified by a licensed designed professional.</li> </ol>	<input checked="" type="checkbox"/>		<p>City Building Inspector</p> <p style="text-align: center;"><input type="checkbox"/></p>
<i>Description of proposed measures:</i>	<i>Sheet:      Detail:</i>		
<p><b>4.505.3 Moisture content of building materials.</b> Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19% moisture content. Moisture content shall be verified in compliance with the following:</p> <ol style="list-style-type: none"> <li>1. By a probe-type or contact-type moisture meter or other equivalent methods approved by the enforcing agency.</li> <li>2. Readings shall be taken at a point 2 ft. to 4 ft. from the grade stamped end of each piece to be verified.</li> <li>3. Minimum 3 random reading shall be performed on wall and floor framing with documentation provided to enforcing agency.</li> </ol>	<input checked="" type="checkbox"/>		<p style="text-align: center;"><b>Special Inspector</b></p> <p style="text-align: center;"><input type="checkbox"/></p>
<b>Indoor Air Quality and Exhaust</b>			
<p><b>4.506.1 Bathroom exhaust fans.</b> 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 ducted to terminate outside the buildings.</li> <li>2. Unless functioning as a whole house ventilation system, fans must be humidity controlled. Controls must be capable of adjustment between 50-80% humidity range. Humidity control may be a separate component to the exhaust fan and is not required to be integral or built-in.</li> </ol> <p>Note: A bathroom is a room which contains a bathtub, shower, or combination shower/tub.</p>	<input checked="" type="checkbox"/>		<p style="text-align: center;"><b>Special Inspector</b></p> <p style="text-align: center;"><input type="checkbox"/></p>
<p><b>A4.506.1 Filters.</b> Higher than MERV 6 filters are installed on central air or ventilation systems.</p>		<input type="checkbox"/>	<p style="text-align: center;"><b>Special Inspector</b></p> <p style="text-align: center;"><input type="checkbox"/></p>
<p><b>A4.506.2 Direct vent appliances.</b> Direct vent heating and cooling equipment is utilized if the equipment is located in the conditioned space or install the space heating and water heating equipment in an isolated mechanical room.</p>		<input type="checkbox"/>	<p style="text-align: center;"><b>Special Inspector</b></p> <p style="text-align: center;"><input type="checkbox"/></p>
<b>Environmental Comfort</b>			
<p><b>4.507.1 Openings.</b> Whole house exhaust fans shall have insulated louvers or covers which close when the fan is off. Covers or louvers shall have a minimum insulation value of R-4.2.</p>	<input checked="" type="checkbox"/>		<p style="text-align: center;"><b>Special Inspector</b></p> <p style="text-align: center;"><input type="checkbox"/></p>



Feature or Measure	Required	Electives	Verification by
<p><b>4.507.2. Heating and air-conditioning system design.</b> Heating and air-conditioning systems shall be sized, designed and have their equipment selected using the following methods: <b>(Support documentation required at application submittal)</b></p> <ol style="list-style-type: none"> <li>1. Establish heat loss and heat gain values according to ANSI/ACCA Manual J-2004, ASHRAE handbooks or other equivalent methods.</li> <li>2. Size duct systems according to ANSI/ACCA 1 Manual D – 2009, ASHRAE handbooks or other equivalent methods.</li> <li>3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S – 2004 or other equivalent methods.</li> </ol> <p><b>Exception:</b> Use of alternate design temperatures necessary to ensure the systems function are acceptable.</p>	<input checked="" type="checkbox"/>   <input checked="" type="checkbox"/>   <input checked="" type="checkbox"/>		<p>City Plan Check staff</p> <p style="text-align: center;"> <input type="checkbox"/>   <input type="checkbox"/>   <input type="checkbox"/> </p>
<i>Description of proposed measures:</i>	<i>Sheet:      Detail:</i>		
<b>Innovative Concepts and Local Environmental Conditions</b>			
<p><b>A4.509.1</b> Items in this section are necessary to address innovative concepts or local environmental conditions.</p>			Chief Building Official
Item:		<input type="checkbox"/>	<input type="checkbox"/>
<b>INSTALLER AND SPECIAL INSPECTOR QUALIFICATIONS</b>			<i>Select all measures verified in the completed project</i>
<b>Qualifications</b>			
<p><b>702.1 Installer training.</b> HVAC system installers are trained and certified in the proper installation of HVAC systems.</p>	<input checked="" type="checkbox"/>		<p><b>Special Inspector</b></p> <input type="checkbox"/>
<p><b>702.2 Special inspection.</b> The green building special inspector for this project is listed by the local jurisdiction as an Approved CALGreen Special Inspector and is qualified and able to demonstrate competence in the discipline they inspect and verify.</p>	<input checked="" type="checkbox"/>		<p>City Plan Check staff</p> <input type="checkbox"/>

# CALGreen Building Acknowledgments

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 Division.

**The owner, design professional and the local jurisdiction Approved CALGreen Special Inspector have reviewed 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 2010 California Green Building Standards Code as amended by the local jurisdiction.**

_____ Owner's Signature	_____ Date
_____ Owner Name (Please Print)	
_____ Design Professional's Signature	_____ Date
_____ Design Professional's Name (Please Print)	
_____ Signature of Listed Green Building Special Inspector	_____ Date
_____ Listed CALGreen Special Inspector's Name (Please Print)	_____ Phone
_____ CALGreen Special Inspector's E-mail Address	

## Section 2 - Implementation Verification

Complete, sign and submit the completed checklist, including Column 3, together with all original signatures on Section 2 – "Implementation Verification" to the Building Department prior to Building Division final inspection.

I have inspected the work 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 set forth in the 2010 California Green Building Standards Code as amended by the local jurisdiction.

_____ Listed Approved CALGreen Special Inspector Signature	_____ Date
_____ Green Building Special Inspector's Name (Please Print)	_____ Phone (if different than above)
_____ Green Building Special Inspector's E-mail Address (if different than above)	