

RESIDENTIAL 2013 CALGreen+Tier 1 Checklist

(Based on CALGreen + Tier 1)

Annlies to building normit annlications received on or after Januari

Applies to building permit applications received on or after January 1, 2016, for newly constructed hotels, motels, lodging houses, dwellings, dormitories, condominiums, shelters, congregate 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 or alterations that increase conditioned space are subject to CALGreen. See separate checklist) 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 Cal Green Inspector, listed by the City of Santa Rosa Building Division, to perform Green Building Cal Green 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 Cal Green 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 Cal Green 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 Cal Green Inspector, except where verification by City is noted, shall complete **Column 3** and provide verification of completion prior to final inspection by City staff.

Column 1 Feature or Measure	Column 2 Project Requirements When checked, these items become a part of the approved plans and must be installed or incorporated into the project.		Column 3 Verification Complete after installation & prior to final inspection approval
See Chapter 4 and Appendix A4 of the 2013 California Green Building Code and the local jurisdiction for complete descriptions of features or measures listed here.	Mandatory & Tier 1 Prerequisites	Tier 1 electives Applicant selects required elective measures	Verification by a 3rd party Cal Green Inspector or by local jurisdiction staff as noted below

A4.1 PLANNING AND DESIGN A4.1 PLANNING AND DESIGN Select at least two (2) elective required for the project measures from A4.1 Site Selection

Feature or Measure	Required	Electives	Verification by
A4.103.1 Selection. A site which complies with at least one of the following characteristics is selected: (Support documentation required at application submittal) 1. An infill site is selected. 2. A greyfield site is selected. 3. An EPA-recognized and remediated Brownfield site is selected. A4.103.2 Facilitate community connectivity by one of the following methods: 1. Locate project within a 1/4-mile true walking distance of at least 4 basic services; 2. Locate project within 1/2-mile true walking distance of at least 7 basic services; 3. Other methods increasing access to additional resources.			City Plan Check staff
Site Preservation			
A4.104.1 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. 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.			Cal Green Inspector
Deconstruction and Reuse of Existing Materials			
A4.105.1 Existing buildings on the site are deconstructed and the salvaged materials (which must comply with current building standards) are reused. A4.105.2 Materials which can be easily reused include but are not limited			Cal Green Inspector Verify at least one
to the following: 1. Light fixtures 2. Plumbing fixtures 3. Doors and trim 4. Masonry 5. Electrical devices 6. Appliances 7. Foundations or portions of foundations			
Site Development			
4.106.2 Storm water drainage and retention during construction. 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.			City Building Inspector
Description of proposed measures:		Sheet: L	Detail:

Feature or Measure	Required	Electives	Verification by
A4.106.2 Soil analysis and protection. The soils at the building site are analyzed and protected as specified in this section.			City Plan Check staff
A4.106.2.1 Soil analysis. Soil analysis is performed by a licensed design professional and the findings utilized in the structural design of the building. (Support documentation required at application submittal)			
A4.106.2.2 Soil protection. The effect of development on the building sites is evaluated and the soil is protected by one or more of the following:			City Building Inspector
 Natural drainage evaluation and erosion controls implemented to minimize erosion. Site access is accomplished by minimizing the amount of cut and fill to install access roads/driveways. Underground construction activities are coordinated to utilize the same trench, minimize disturbed soil, and soil is replaced using accepted compaction methods. 			City Building Inspector
A4.106.2.3 Displaced topsoil is stockpiled for reuse in designated area and covered or protected from erosion. (Tier 1)			
Description of proposed measures:		Sheet:	Detail:
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. Examples of methods to manage surface water include swales, water collection and disposal systems, French drains, water retention gardens or other measures which keep surface water away from buildings and aid in groundwater recharge.			City Building Inspector
Description of proposed measures:		Sheet:	Detail:
A4.106.3 Landscape design. Post construction landscape designs accomplish one or more of the following:			City Water Efficient Landscape Ordinance Staff
 Areas disrupted during construction are restored to be consistent with native vegetation Limit turf areas to not more than 50 percent (Tier 1). Utilize at least 75 percent native Californian or drought tolerant plant and tree species appropriate for the climate zone region. Hydrozoning irrigation techniques are incorporated into the landscape design. 			
Description of proposed measures:		Sheet:	Detail:
A4.106.4 Water permeable surfaces. Permeable paving is utilized for not less than 20 percent of the total parking, walking, or patio surfaces. (Tier 1) Exception: Primary driveway, entry walkway and porch/landing or required accessible routes for persons with disabilities.			Cal Green Inspector
Description of proposed measures:		Sheet:	Detail:
A4.106.6 Vegetated roof. Install a vegetated roof for at least 50% of the roof area.			Cal Green Inspector
A4.106.7 Reduction of heat island effect for nonroof areas. Reduce nonroof heat islands for 50% of sidewalks, patios, driveways or other paved areas by using one or more of the methods listed in #1 – 5.			Cal Green Inspector

Feature or Measure	Required	Electives	Verification by
4.106.4 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. Install a listed raceway to accommodate a dedicated 208/240 branch circuit.			City Plan Check staff
A4.106.8 Electric vehicle (EV) charging. Dwellings shall comply with the following requirements for the future installation of electric vehicle supply equipment (EVSE) A4.106.8.1 Tier 1 for one- and two-family dwellings and townhouses with attached private garages. Install a dedicated 208/240 volt branch circuit, including an overcurrent protective device rated at 40 amperes	As applicable		Cal Green Inspector
minimum per dwelling unit. A4.106.8.2 Tier 1 for multifamily dwellings. Provide capability for future electric vehicle charging in 5 percent of total parking spaces, as specified (if 17 or more multifamily dwelling units).			
Description of proposed measures:		Sheet: L	Detail:
A4.106.9 Bicycle parking. Comply with Sections A4.106.9.1 through A4.106.9.3 or meet local ordinance, whichever is more stringent.			
Exception: Spaces may be reduced as approved by enforcing agency, due to building site characteristics, including but not limited to, isolation from other development.			
A4.106.9.1 Short-term bicycle parking. Provide permanently anchored bicycle racks within 100 ft. of the visitor's entrance for 5% of visitor motorized vehicle parking capacity with a minimum of one 2-bike capacity.			
A4.106.9.2 Long-term bicycle parking for multifamily buildings. Provide on-site conveniently reached bicycle parking facilities for at least one bicycle per every 2 dwelling units			
A4.106.9.3 Long-term bicycle parking for hotel and motel buildings. Provide one on-site conveniently reached bicycle parking facilities for every 25,000 sq. ft., but not less than 2.			
Description of proposed measures:		Sheet: L	Detail:

Feature or Measure	Required	Electives	Verification by
A4.106.10 Light pollution reduction. Outdoor lighting systems shall be designed and installed to comply with the following:			
 The minimum requirements in the California Energy Code for Lighting Zones 1-4 as defined in Chapter 10 of California Administrative Code; and 			
Backlight, Uplight and Glare (BUG) ratings as defined in IES TM- 15-11; and			
 Allow BUG ratings not exceeding those shown in Table A4.106.10 			
Exceptions:			
 Luminaires that qualify as exceptions in the California Energy Code, 			
2. Emergency lighting			
3. One and two family dwellings			
Description of proposed measures:		Sheet:	Detail:
Innovative Concepts and Local Environmental Conditions			
A4.108.1 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.			Chief Building Official
Item 1:			
A4.2 ENERGY EFFICIENCY	All checked items are required		Select all measures verified in the completed project
Performance Approach General			
4.20.1. Energy Performance. Comply with minimum requirements of 2013 California Energy Code	\boxtimes		City Building Inspector

Feature or Measure	Required	Electives	Verification by
A4.3 WATER EFFICIENCY AND CONSERVATION Indoor Water Use	All checked items are required	Select at least two (2) elective measure from A4.3	Select all measures verified in the completed project
4.303.1 Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following: from other development.			Cal Green Inspector
4.303.1.1 Water closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush.			
4.303.1.2 Urinals. The effective flush volume of urinals shall not exceed 0.5 gallons per flush.	\boxtimes		
4.303.1.3 Showerheads.			
4.303.1.3.1 Single Showerheads. Showerheads shall have a maximum flow rate of not more than 2.0 gallons per minute at 80 psi.	\boxtimes		
4.303.1.3.2 Multiple Showerheads. 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 2.0 gallons per minute at 80 psi., or the shower shall be designed to allow only one shower outlet to be in operations at a time.			
4.303.1.4 Faucets.			
4.303.1.4.1 Residential lavatory faucets. The maximum flow rate of residential lavatory faucets shall not exceed 1.5 gpm at 60 psi nor be less than 0.8 gpm at 20 psi.			
4.303.1.4.2 Lavatory faucets in common and public use areas. The maximum flow rate of lavatory faucets installed in common and public use areas (outside dwellings or sleeping units) in residential buildings shall not exceed 0.5 gpm at 60 psi.			
4.303.1.4.3 Metering faucets. Metering faucets when installed in residential buildings shall not deliver more than 0.25 gallons per cycle.	\boxtimes		
4.303.1.4.4 Kitchen faucets. The maximum flow rate of kitchen faucets may not exceed 1.8 gpm at 60 psi (May temporarily increase to 2.2 gpm). Note: Aerators OK if complying faucets not available.			
A4.303.1 Kitchen faucets and dishwashers. Kitchen faucets shall have a maximum flow rate not greater than 1.5 gallons per minute at 60 psi. (May temporarily increase to 2.2 gpm). Note: Aerators OK if complying faucets not available.			Cal Green Inspector
A4.303.2 Alternate water sources for nonpotable applications. Alternate nonpotable water sources are used for indoor potable water reduction. Alternate nonpotable water sources shall be installed in accordance with the California Plumbing Code.			Cal Green Inspector

Feature or Measure	Required	Electives	Verification by
A4.303.3 Appliances. Dishwashers and clothes washers in residential buildings shall comply with the following:			Cal Green Inspector
Install at least one qualified ENERGY STAR appliance with maximum water use as follows:			
 Standard Dishwashers – 4.25 gallons per cycle. 			
2. Compact Dishwashers – 3.5 gallons per cycle			
 Clothes washers – water factor of 6 gallons per cubic feet of drum capacity. 			
A4.303.4 Nonwater supplied urinals and waterless toilets. Nonwater supplied urinals or composting toilets are installed.			Cal Green Inspector
Note: Check with local jurisdiction on code requirements.			
Outdoor Water Use			All Outdoor Water Use verified by City Water
See Santa Rosa City Code Chapter 14-30, Water Efficient Landscape Ordinance			Efficient Landscape Ordinance Staff
4.304.1 Water budget. A water budget shall be developed for landscape irrigation per Santa Rosa City Code Chapter 14-30.			
Reduce the use of potable water to a quantity that does not exceed 0.55 of ETo times the landscape area. (Support documentation required at application submittal)			
Note: See Santa Rosa Water Efficient Landscape Ordinance			
A4.304.1 Rainwater systems. A rainwater capture, storage and re-use system is designed and installed to use rainwater generated by at least 65% of the available roof area (per Cal Plumbing Code)			
Description of proposed measures:		Sheet: L	Detail:
4.304.2 Irrigation controllers. Automatic irrigation systems installed at the time of final inspection shall be weather-based or soil-based with rain sensor.			
A4.304.2 Potable water elimination. A landscape design is installed which does not utilize potable water. (Support documentation required at application submittal)			
A4.304.3 Irrigation metering device . For new water service connections, landscaped irrigated areas more than 2,500 sq. ft. shall be provided with separate submeters or metering devices for outdoor potable water use.			
WATER REUSE SYSTEMS			
A4.305.1 Graywater. 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 the California Plumbing Code.			Cal Green Inspector

Feature or Measure	Required	Electives	Verification by
A4.305.2 Recycled water piping. 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.			Cal Green Inspector
A4.305.3 Recycled water for landscape irrigation. Recycled water is used for landscape irrigation.			Cal Green Inspector
Innovative Concepts and Local Environmental Conditions			
A4.306.1 Innovative concepts and local environmental conditions. 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:			

Feature or Measure	Required	Electives	Verification by
A4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY	All checked items are required	Select at least two (2) elective measures from A4.4	Select all measures verified in the completed project
Foundation Systems			
A4.403.2 Reduction in cement use. Cement use in foundation mix design is reduced by not less than a 20 percent. (Tier 1)			City Building Inspector
Note: As allowed by the enforcing agency, any design cement mix must be authorized and approved by Architect of Record.			
Efficient Framing Techniques			
A4.404.1 Lumber size. Beams and headers and trimmers are the minimum size to adequately support the load.			Cal Green Inspector
 A4.404.2 Building dimensions & layouts. Building dimensions and layouts are designed to minimize waste in at least 80% of the structure. Building design dimensions in 2' increments Windows & doors are located at regular 16" or 24" o.c. stud positions. Other methods acceptable by enforcing agency. 			Cal Green Inspector
A4.404.3 Building systems. Use pre-manufactured building systems to eliminate solid sawn lumber whenever possible.			Cal Green Inspector
A4.404.4 Pre-cut materials and details. Material lists are included in the plans which specify material quantity and provide direction for on-site cuts. (Support documentation required at application submittal)			Cal Green Inspector
Material Sources			
A4.405.1 Prefinished building materials. One or more of the following building materials, that do not require additional resources for finishing are used: 1. Exterior trim not requiring paint or stain. 2. Windows not requiring paint or stain. 3. Siding or exterior wall coverings which do not require paint or stain.			Cal Green Inspector
A4.405.2 Concrete floors. Floors that do not require additional coverings are used including but not limited to stained, natural, or stamped concrete floors.			Cal Green Inspector

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A4.405.3.1 Recycled content. Use materials, equivalent in performance to virgin materials, with total (combined) recycled content value (RCV) for not less than 10% of the total material cost of the project. (Tier 1)			Cal Green Inspector
NOTE: See local jurisdiction for alternatives due to unreasonable determination of this measure.			
For the purposes of this section, materials used as components of the structural frame shall not be used to calculate recycled content.			
A4.405.3.1.1 Total material costs: The total material cost is the total estimated or actual cost of materials and assembly products used in the project. The required total recycled content value for the project (in dollars) shall be determined by Equation A4.4-1 or A4.4-2			
Equation A4.4-1 Simplified method: To obtain the total cost of the project multiply the square footage of the structure by the square foot valuation established by the enforcing agency. The total material cost is 45% of the total cost of the project.	⊠ or		
Equation A4.4-2 Detailed method: To obtain the total cost of the project, add the estimated and/or actual costs of materials. The total estimated costs shall not include fees, labor and installation costs, overhead, appliances, equipment, furniture or furnishings.			
A4.405.3.1.2 Determination of total recycled content value (RCV). Total RCV may be determined either by dollars or percentage as noted below.			
Equation A4.4-4 Total RCV (in dollars): Total recycled content value of the materials (RCVm) and/or assemblies (RCVa) in dollars. The result may be directly compared to Equations 4.4-1 or A4.4-2 to determine compliance with Tier 1 prerequisite.	⊠ or		
Equation A4.4-5 Total RCV (by percentage): Total recycled content value (percent) = [Total Recycled Content Value (dollars) ÷ Total Material Costs (dollars)] x 100. The result of this calculation may be directly compared for compliance with Tier 1 prerequisite.			
A4.405.3.1.3 Determination of recycled content value of materials (RCVm). The recycled content value of each material (RCVm) is calculated by multiplying the cost of material, as defined by recycled content. See equations A4.4-6 and A4.4-7.			
Equation A4.4-6 RCVm (dollars) = Material costs (dollars) x RCm (percent)	⊠ or		
Equation A4.4-7 RCm (percent) = Postconsumer percentage + (1/2) preconsumer content percentage.	\boxtimes		
Note: If the manufacturer does not separately identify the pre- consumer and post-consumer recycled content of a material but reports it as a total single percentage, 1/2 of the total shall be considered preconsumer and 1/2 shall be considered postconsumer.			
A4.405.3.1.4 Determination of recycled content value of assemblies (RCVa). The recycled content value of assemblies (RCVa) is calculated by multiplying the total cost of assembly by the total recycled content of the assembly (RCa), and shall be determined by Equation A4.4-8			

A4.405.4 Use of building materials from rapidly renewable sources. One or more of the following materials manufactured from rapidly renewable sources or agricultural by-products is used. 1. Insulation 2. Bamboo or cork 3. Engineer products 4. Agricultural based products. 5. Other products acceptable to enforcing agency. (Support documentation required at application submittal)		Cal Green Inspector
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.		Cal Green Inspector
Water Resistance and Moisture Management		
A4.407.1 Drainage around foundation. Install foundation and landscape drains which discharge to a dry well, sump, bioswale or other approved location.		Cal Green Inspector
Description of proposed measures:	Sheet:	Detail:
A4.407.2 Roof drainage. 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.		Cal Green Inspector
Description of proposed measures:	Sheet:	Detail:
A4.407.3 Flashing details. Provide flashing details on the building plans and comply with accepted industry standards or manufacturers instructions.		City Plan Check staff
Description of proposed measures:	Sheet:	Detail:
A4.407.4 Material protection. Protect building materials delivered to the construction site from rain and other sources of moisture.		Cal Green Inspector
A4.407.6 Door protection. Exterior doors to the dwelling are protected by min. 4 ft. to prevent water intrusion.		Cal Green Inspector
Description of proposed measures:	Sheet:	Detail:
A4.407.7 Roof overhangs. A permanent overhang or awning at least 2 feet in depth is provided at all exterior walls.		Cal Green Inspector

Construction	n Waste Reduction, Disposal and Recycling		
4.408.1 Construction waste management. Recycle and/or salvage for reuse nonhazardous construction waste in accordance with Section 4.408.2 <u>or</u> 4.408.3			City Plan Check Staff
Support docum	mentation required at application submittal.		
Exceptions:			
1. Exca	avated soil and land-clearing debris		
2. Alter	rnate waste reduction methods		
3. Isola	ated job sites		
	struction waste management plan. Submit a construction ement plan that:		
disp	ntifies the construction waste materials to be diverted from posal by efficient usage, recycling, reuse on the project or program of rage for future use or sale.		
	ermines if construction waste materials will be sorted on-site oulk mixed.		
	ntifies diversion facilities where construction waste material ected will be taken.	or	or
of c	ntifies construction methods employed to reduce the amount onstruction and demolition waste generated.		
	ecifies that the amount of construction waste materials erted shall be calculated by weight or volume, but not by both.		
company that construction v	te management company. Utilize a waste management to can provide verifiable documentation that the percentage of waste material diverted from the landfill complies with 1 (see below).		
	vner or contractor shall make the determination if the waste material will be diverted by a waste management		
See 4.408.4 a	and 4.408.5 for additional information.		
A4.408.1 Enhanced construction waste reduction. At least 65% of nonhazardous construction and demolition debris generated at the site is diverted to recycle or salvage. (Tier 1)			Cal Green Inspector
enforcing ag	Documentation. Documentation shall be provided to the gency which demonstrates compliance with this section. tion shall be compliance with Section 4.408.5		

Building Maintenance and Operation			
 4.410.1 Operation and maintenance manual. At the time of final inspection, a manual which includes all of the following shall be placed in the building: Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure. Operation and maintenance instructions for; equipment and appliances, roof and yard drainage, space conditioning systems, landscape irrigation systems, and water reuse systems. Information on local recycle programs and locations. Public transportation and/or carpool options available in the area. Educational material on the positive impacts of interior relative humidity between 30-60%. Information about water-conserving landscape and irrigation design and controllers which conserve water. Instructions for maintaining gutters and downspouts and importance of diverting water at least 5ft. away from the foundation. Information on required routine maintenance measures including caulking, painting, grading around the house, etc. Information about state solar energy and incentive programs available. 			Cal Green Inspector
10. A copy of all special inspection verifications required by the enforcing agency or this code.			
Innovative Concepts and Local Environmental Conditions			
A4.411.1 Innovative concepts and local environmental conditions. Items in this section are necessary to address innovative concepts or local environmental conditions.			Chief Building Official
Item:			
A4.5 ENVIRONMENTAL QUALITY	All checked items are required	Select t at least one (1) elective measure from A4.5	Select all measures verified in the completed project
Fireplaces			
4.503.1 Fireplaces. Install only a direct-vent or sealed-combustion gas ireplace. Wood-pellet stove shall comply with EPA Phase II or local prdinances. (Support documentation may be required at application submittal)			Cal Green Inspector
Pollutant Control			*All by Cal Green Inspector
4.504.1 Covering of duct openings and protection of mechanical equipment during construction. 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.			*□

A4.504.1 Compliance with formaldehyde limits. Use composite wood products made with either California Air Resources Board approved no-		П	Cal Green Inspector
added formaldehyde resins or ultra-low emitting formaldehyde resins.			
4.504.2 Finish material pollutant control. Finish materials shall comply with this section:			
4.504.2.1 Adhesives, sealants and caulks shall be compliant with VOC and other toxic compound limits in <i>CALGreen</i> Table 4.504.1 or 4.504.2 as applicable.			*□
4.504.2.2 Paints, stains and other coatings shall be compliant with VOC limits in <i>CALGreen</i> Table 4.504.3.	\boxtimes		*□
4.504.2.3 Aerosol paints and other coatings shall be compliant with product weighted MIR Limits for ROC and other toxic compounds	\boxtimes		*□
4.504.2.4 If requested by enforcing agency, documentation shall be provided to verify that compliant VOC limit finish materials have been used.	\boxtimes		*□
A4.504.2 Resilient flooring systems. At least 90% of the resilient flooring systems installed in the building shall comply with the VOC-emission limits defined in at least one of the 4 listed criteria in Section A4.504.2 (Tier 1)	×		*□
Note: Documentation must be provided that verifies that finish materials are certified to meet the pollutant emission limits in this section.			
4.504.3 Carpet systems. Carpet and carpet systems shall meet the testing and product requirements of one of the listed items, $1-4$ in Section 4.504.3.	\boxtimes		*□
4.504.3.1 All carpet cushion installed shall meet the requirements of the Carpet and Rug Institute's Green Label program.	\boxtimes		*□
4.504.3.2 All carpet adhesive shall meet the requirements of Table 4.504.1	\boxtimes		*□
A4.504.3 Thermal insulation. Install thermal insulation in compliance with the VOC-emission limits defined in Collaborative for High Performance Schools (CHPS) Low-emitting Materials List. (Tier 1)			*□
Note: Documentation must be provided that verifies that finish materials are certified to meet the pollutant emission limits in this section.			
4.504.5 Composite wood products. Hardwood plywood, particleboard and medium density fiberboard (MDF) products use on the interior or exterior shall meet the requirements for formaldehyde as specified in the ARB's Air Toxics Control Measure for Composite Wood as shown in Table 4.504.5			*
4.504.5.1 Documentation. Verification of compliance with this section shall be provided as requested by the enforcing agency.			

Interior Moisture Control		
4.505.2 Concrete slab foundations. 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.		City Building Inspector
4.505.2.1 Capillary break. A capillary break shall be installed in compliance with at least one of the following:		
 A 4" thick base of ½" or larger clean aggregate w/vapor barrier in direct contact with concrete Other methods approved by the enforcing agency. A slab design specified by a licensed designed professional. 		
Description of proposed measures:	Sheet: I	Detail:
4.505.3 Moisture content of building materials. 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:		Cal Green Inspector
 By a probe-type or contact-type moisture meter or other equivalent methods approved by the enforcing agency. Readings shall be taken at a point 2 ft. to 4 ft. from the grade stamped end of each piece to be verified. Minimum 3 random reading shall be performed on wall and floor framing with documentation provided to enforcing agency. 		
Indoor Air Quality and Exhaust		
 4.506.1 Bathroom exhaust fans. Each bathroom shall be mechanically ventilated and shall comply with the following: Fans shall be ENERGY STAR compliant and ducted to terminate outside the buildings. 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. Note: A bathroom is a room which contains a bathtub, shower, or 		Cal Green Inspector
combination shower/tub.		
A4.506.1 Filters. Return air filters with a value greater than MERV 6 shall be installed on HVAC systems. Pressure drop across the filter shall not exceed 0.1 inches water column.		Cal Green Inspector
A4.506.2 Construction filter. Provide filters on return air openings rated at MERV 6 or higher during construction.		Cal Green Inspector
A4.506.3 Direct-vent appliances. Direct-vent heating and cooling equipment shall be utilized if the equipment will be located in the conditioned space or install the space heating and water heating equipment in an isolated mechanical room.		Cal Green Inspector
Environmental Comfort		

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4.507.2. Heating and air-conditioning system design. Heating and air-conditioning systems shall be sized, designed and have their equipment selected using the following methods: (Support documentation required at application submittal)			City Plan Check staff
 Establish heat loss and heat gain values according to ANSI/ACCA Manual J-2004, ASHRAE handbooks or other equivalent methods. 			
 Size duct systems according to ANSI/ACCA 1 Manual D – 2009, ASHRAE handbooks or other equivalent methods. 			
 Select heating and cooling equipment according to ANSI/ACCA Manual S – 2004 or other equivalent methods. 			
Exception: Use of alternate design temperatures necessary to ensure the systems function are acceptable.			
Description of proposed measures:		Sheet: L	Detail:
Innovative Concepts and Local Environmental Conditions			
A4.509.1 Items in this section are necessary to address innovative concepts or local environmental conditions.			Chief Building Official
Item:			
INSTALLER AND CAL GREEN INSPECTOR QUALIFICATIONS			Select all measures verified in the completed project
Qualifications			
702.1 Installer training. HVAC system installers are trained and certified in the proper installation of HVAC systems.	\boxtimes		Cal Green Inspector
702.2 Special inspection. The green building Cal Green Inspector for this project is listed by the local jurisdiction as an Approved CALGreen Cal Green Inspector and is qualified and able to demonstrate competence in the discipline they inspect and verify.			City Plan Check staff
Verifications			
703.1 Verification. 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.			Cal Green Inspector

CALGreen Building Acknowledgments

Project Address:	
Project Description:	
Section 1 - Design Verification Complete all lines of Section 1- "Design Verification" and submit the complete building permit application to the Building Division.	ted checklist (Columns 1 and 2) with the plans and
The owner, design professional and the local CALGreen Cal Green Inspector have reviewed items checked above are hereby incorporated be implemented into the project in accordance forth in the 2013 California Green Building Stathe local jurisdiction.	I the plans and certify that the I into the project plans and will e with the requirements set
Owner's Signature	Date
Owner Name (Please Print)	
Design Professional's Signature	Date
Design Professional's Name (Please Print)	
Signature of Listed Green Building Cal Green Inspector	Date
Listed CALGreen Cal Green Inspector's Name (Please Print)	Phone
CALGreen Cal Green Inspector's E-mail Address	
Section 2 - Implementation Verification Complete, sign and submit the completed checklist, including Column 3, tog "Implementation Verification" to the Building Department prior to Building Div I have inspected the work have received sufficient documentation to was constructed in accordance with this Green Building Checklist an in the 2013 California Green Building Standards Code as amended by	vision final inspection. verify and certify that the project identified above d in accordance with the requirements set forth
Listed Approved CALGreen Cal Green Inspector Signature	Date
Green Building Cal Green Inspector's Name (Please Print)	Phone (if different than above)
Green Building Cal Green Inspector's E-mail Address (if different than above)	