



2016 CALGreen Checklist Nonresidential New Construction

This checklist is effective January 1, 2017, and applies to new nonresidential projects without sleeping accommodations.

For more information on CALGreen, review Chapters 5 and Appendix 5 here:
<https://codes.iccsafe.org/public/public/chapter/content/2058/>

For more information on the County's Green Building requirements, please visit
www.marinegreenbuilding.org or contact Alice Zanmiller at azanmiller@marincounty.org

Project Address:	
Permit Number:	
Applicant Name:	

MANDATORY AND ELECTIVE MEASURE CHECKLIST

Measure	Plan Sheet Reference	Completed? (Yes or N/A)
Mandatory Measures		
5.106.1.1 Newly constructed projects and additions which disturb less than one acre of land shall prevent the pollution of stormwater runoff from the construction activities through compliance with the County of Marin's stormwater management ordinance .		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.106.4.1.1 Short-term bicycle parking. If the new project or an addition or alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack. Exception: Additions or alterations which add nine or less visitor vehicular parking spaces		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.106.4.1.2 Long-term bicycle parking. For new buildings with 10 or more tenant-occupants or for additions or alterations that add 10 or more tenant vehicular parking spaces, provide secure bicycle parking for 5 percent of the tenant vehicular parking spaces being added, with a minimum of one space. Acceptable parking facilities shall be convenient from the street and shall meet one of the following: 1. Covered, lockable enclosures with permanently anchored racks for bicycles; 2. Lockable bicycle rooms with permanently anchored racks; or 3. Lockable, permanently anchored bicycle lockers		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A

Measure	Plan Sheet Reference	Completed? (Yes or N/A)
5.106.5.2 In new projects or additions or alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles to levels outlined in Table 5.106.5.2		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
A5.106.5.1.1 Provide 10 percent of total designated parking spaces for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as follows:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.106.5.2.1 Paint, in the paint used for stall striping, the following characters such that the lower edge of the last word aligns with the end of the stall striping and is visible beneath a parked vehicle: CLEAN AIR/ VANPOOL/ EV		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.106.5.3 Construction shall comply with Section A5.106.5.3.1 and A5.106.5.3.2 to facilitate future installation of electric vehicle supply equipment (EVSE). When EVSE(s) is/are installed, it shall be in accordance with the California Building Code and the California Electrical Code, and as outlined by the County of Marin Green Building Standards.		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
A5.106.5.3.3 Identification. The service panel or subpanel circuit directory shall identify the reserved overcurrent protective device space(s) for future EV charging as “EV CAPABLE.” The raceway termination location shall be permanently and visibly marked as “EV CAPABLE.”		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.106.5.3 Construction shall comply with Section 5.106.5.3.1 or Section 5.106.5.3.2 to facilitate future installation of electric vehicle supply equipment (EVSE). When EVSE(s) is/are installed, it shall be in accordance with the California Building Code, the California Electrical Code		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.106.5.3.5 Future charging spaces qualify as designated parking as described in Section 5.106.5.2 Designated parking for clean air vehicles.		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.106.8 Outdoor lighting systems shall be designed and installed to comply with the following: 1. The minimum requirements in the California Energy Code for Lighting Zones 1-4 as defined in Chapter 10 of the California Administrative Code; and 2. Backlight, Uplight and Glare (BUG) ratings as defined in IES TM-15-11; and 3. Allowable BUG ratings not exceeding those shown in Table 5.106.8		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.106.10 Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A

Measure	Plan Sheet Reference	Completed? (Yes or N/A)
<p>A5.106.11.2 Use roofing materials having a minimum aged solar reflectance and thermal emittance complying with Sections A5.106.11.2.1 and A5.106.11.2.2 or a minimum aged Solar Reflectance Index (SRI) complying with Section A5.106.11.2.3 and as shown in Table A5.106.11.2.2</p> <p>Exceptions:</p> <ol style="list-style-type: none"> 1. Roof constructions that have a thermal mass over the roof membrane, including areas of vegetated (green) roofs, weighing at least 25 pounds per square foot. 2. Roof area covered by building integrated solar photovoltaic and building integrated solar thermal panels. 		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.201.1 For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory building standards.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>A5.203.1.1.1 Newly installed outdoor lighting power shall be no greater than 90 percent of the Allowed Outdoor Lighting Power. The Allowed Outdoor Lighting power calculation is specified in Title 24, Part 6, Section 140.7 “Requirements for Outdoor Lighting.”</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>A5.203.1.1.2 Newly constructed restaurants 8,000 square feet of greater and with service water heaters rated 75,000 Btu/h or greater shall install a solar water-heating system with a minimum solar savings fraction of 0.15.</p> <p>Exceptions:</p> <ol style="list-style-type: none"> 1. Buildings with a natural gas service water heater with a minimum of 95-percent thermal efficiency. 2. Buildings where greater than 75 percent of the total roof area has annual solar access that is less than 70 percent. Solar access is the ratio of solar insolation, including shade, to the solar insolation without shade. Shading from obstructions located on the roof or any other part of the building shall not be included in the determination of annual solar access. 		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>A5.203.1.2.1 Achieve no greater than 90 percent of the Title 24, Part 6 Energy Budget for the Standard Design Building as calculated by compliance software certified by the Energy Commission, or build the project to be all-electric.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A

Measure	Plan Sheet Reference	Completed? (Yes or N/A)
<p>5.303.1.1 Separate submeters shall be installed as follows:</p> <ol style="list-style-type: none"> 1. For each individual leased, rented, or other tenant space within the building projected to consume more than 100 gal/day (380 L/day), including, but not limited to, spaces used for laundry or cleaners, restaurant or food service, medical or dental office, laboratory, or beauty salon or barber shop. 2. Where separate submeters for individual building tenants are unfeasible, for water supplied to the following subsystems: <ol style="list-style-type: none"> a. Makeup water for cooling towers where flow through is greater than 500 gpm (30 L/s). b. Makeup water for evaporative coolers greater than 6 gpm (0.04 L/s). c. Steam and hot-water boilers with energy input more than 500,000 Btu/h (147 kW). 		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.303.1.2 A separate submeter or metering device shall be provided for any tenant within a new building or within an addition that is projected to consume more than 1,000 gal/ day</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>A5.303.2.3.1 A schedule of plumbing fixtures and fixture fittings that will reduce the overall use of potable water within the building by 12 percent shall be provided. The reduction shall be based on the maximum allowable water use per plumbing fixture and fitting as required by the <i>California Building Standards Code</i>. The 12-percent reduction in potable water use shall be demonstrated by one of the following methods:</p> <ol style="list-style-type: none"> 1. Prescriptive method. Each plumbing fixture and fitting shall not exceed the maximum flow rate at greater than or equal to 12-percent reduction as specified in Table A5.303.2.3.1; or 2. Performance method. A calculation demonstrating a 12-percent reduction in the building “water use baseline” as established in Table A5.303.2.2 shall be provided. 		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.303.3.1 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 U.S. EPA WaterSense Specification for Tank-Type Toilets. Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.303.3.2.1 The effective flush volume of wall-mounted urinals shall not exceed 0.5 gallons per flush.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.303.3.2.2 The effective flush volume of floor-mounted urinals shall not exceed 0.5 gallons per flush.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.303.3.3.1 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 U.S. EPA WaterSense Specification for Showerheads</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A

Measure	Plan Sheet Reference	Completed? (Yes or N/A)
<p>5.303.3.3.2 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. <i>Note: A hand-held shower shall be considered a showerhead.</i></p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.303.3.4.1 Lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.303.3.4.2 Kitchen faucets shall have a maximum flow rate of not more than 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>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.303.3.4.3 Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute/20 [rim space (inches) at 60 psi].</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.303.3.4.4 Metering faucets shall not deliver more than 0.20 gallons per cycle.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.303.3.4.5 Metering faucets for wash fountains shall have a maximum flow rate of not more than 0.20 gallons per cycle/20 [rim space (inches) at 60 psi]. <i>Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.</i></p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.303.4.1 Disposers shall either modulate the use of water to no more than 1 gpm when the disposer is not in use (not actively grinding food waste/no-load) or shall automatically shut off after no more than 10 minutes of inactivity. Disposers shall use no more than 8 gpm of water. <i>Note: This code section does not affect local jurisdiction authority to prohibit or require disposer installation.</i></p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.303.6 Plumbing fixtures and fittings shall be installed in accordance with the California Plumbing Code, and shall meet the applicable standards referenced in Table 1701.1 of the 2016 California Plumbing Code and in Chapter 6 of this code.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A

Measure	Plan Sheet Reference	Completed? (Yes or N/A)
<p>5.304.2 Outdoor water use in landscape areas equal to or greater than 500 square feet. When water is used for outdoor irrigation for new construction projects with an aggregate landscape area equal to or greater than 500 square feet requiring a building or landscape permit, plan check or design review, one of the following shall apply:</p> <ol style="list-style-type: none"> 1. A local water efficient landscape ordinance that is, based on evidence in the record, at least as effective in conserving water as the updated model ordinance adopted by the Department of Water Resources (DWR) per Government Code Section 65595 (c). See MMWD and NMWD for requirements if within those water districts. 2. The California Department of Water Resources Model Water Efficient Landscape Ordinance (MWELo) commencing with Section 490 of Chapter 2.7, Division 2, Title 23, California Code of Regulations. This applies to all projects outside of MMWD and NMWD territory. 		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.304.3 Outdoor water use in rehabilitated landscape projects equal to or greater than 2,500 square feet. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit, plan check, or design review shall comply with Section 5.304.2, items 1 or 2.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.304.4 Outdoor water use in landscape areas of 2,500 square feet or less. Any project with an aggregate landscape area of 2,500 square feet or less may comply with the performance requirements of MWELo or conform to the prescriptive compliance measures contained in MWELo's Appendix D.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.304.5 Graywater or rainwater use in landscape areas. For projects using treated or untreated graywater or rainwater captured on site, any lot or parcel within the project that has less than 2,500 square feet of landscape and meets the lot or parcel's landscape water requirement (Estimated Total Water Use) entirely with treated or untreated graywater or through stored rainwater captured on site is subject only to Appendix D section (5). Notes:</p> <ol style="list-style-type: none"> 1. DWR's Model Water Efficient Landscape Ordinance, definitions and supporting documents are available at the following link: http://water.ca.gov/wateruseefficiency/landscapeordinance/ 2. A water budget calculator is available at the following link: http://water.ca.gov/wateruseefficiency/landscapeordinance/ 3. The MWELo prescriptive compliance measure Appendix D may be found at the following link: http://water.ca.gov/wateruseefficiency/landscapeordinance/. In addition, a copy of MWELo Appendix D may be found in Chapter 8 of this code. 		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.407.1 Provide a weather-resistant exterior wall and foundation envelope as required by California Building Code Section 1403.2 (Weather Protection) and California Energy Code Section 150 (Mandatory Features and Devices), manufacturer's installation instructions or local ordinance, whichever is more stringent.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A

Measure	Plan Sheet Reference	Completed? (Yes or N/A)
5.407.2.1 Design and maintain landscape irrigation systems to prevent spray on structures.		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.407.2.2.1 Primary exterior entries shall be covered to prevent water intrusion by using nonabsorbent floor and wall finishes within at least 2 feet around and perpendicular to such openings plus at least one of the following: 1. An installed awning at least 4 feet in depth. 2. The door is protected by a roof overhang at least 4 feet in depth. 3. The door is recessed at least 4 feet. 4. Other methods which provide equivalent protection.		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.407.2.2.2 Install flashings integrated with a drainage plane.		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.408.1 Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with the reporting standards outlined by Zero Waste Marin .		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.408.2 Additions and alterations to a building or tenant space that meet the scoping provisions in Section 301.3 for nonresidential additions and alterations, shall require verification that Universal Waste items such as fluorescent lamps and ballast and mercury containing thermostats as well as other California prohibited Universal Waste materials are disposed of properly and are diverted from landfills. A list of prohibited Universal Waste materials shall be included in the construction documents. <i>Note:</i> Refer to the Universal Waste Rule link at: http://www.dtsc.ca.gov/LawsRegsPolicies/Regs/upload/OEARA_REGS_UWR_FinalText.pdf		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.408.3 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed. Exception: Reuse, either on-or off-site, of vegetation or soil contaminated by disease or pest infestation. Notes: 1. If contamination by disease or pest infestation is suspected, contact the County Agricultural Commissioner and follow its direction for recycling or disposal of the material. (www.cdfa.ca.gov/exec/county/county_contacts.html) 2. For a map of known pest and/or disease quarantine zones, consult with the California Department of Food and Agriculture. (http://www.cdfa.ca.gov)		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A

Measure	Plan Sheet Reference	Completed? (Yes or N/A)
<p>5.410.1 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.</p> <p>Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code 42649.82 (a)(2)(A) et seq. shall also be exempt from the organic waste portion of this section.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.410.1.1 All additions conducted within a 12-month period under single or multiple permits, resulting in an increase of 30-percent or more in floor area, shall provide recycling areas on site. Exception: Additions within a tenant space resulting in less than a 30-percent increase in the tenant space floor area.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.410.2 For new buildings 10,000 square feet and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner’s or owner representative’s project requirements. Commissioning shall be performed in accordance with this section by trained personnel with experience on projects of comparable size and complexity. All occupancies other than I-occupancies and L-occupancies shall comply with the California Energy Code as prescribed in California Energy Code Section 120.8. For I-occupancies which are not regulated by OSHPD or for I-occupancies and L-occupancies which are not regulated by the California Energy Code Section 100.0 Scope; all requirements in sections 5.410.2 through 5.410.2.6 shall apply. Commissioning requirements shall include:</p> <ol style="list-style-type: none"> 1. Owner’s or owner representative’s project requirements. 2. Basis of design. 3. Commissioning measures shown in the construction documents. 4. Commissioning plan. 5. Functional performance testing. 6. Documentation and training. 7. Commissioning report. <p>Exceptions:</p> <ol style="list-style-type: none"> 1. Unconditioned warehouses of any size. 2. Areas less than 10,000 square feet used for offices or other conditioned accessory spaces within unconditioned warehouses. 3. Tenant improvements less than 10,000 square feet as described in Section 303.1.1. 4. Open parking garages of any size, or open parking garage areas, of any size, within a structure. <p>Note: For the purposes of this section, unconditioned shall mean a building, area, or room which does not provide heating and/or air conditioning.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A

Measure	Plan Sheet Reference	Completed? (Yes or N/A)
<p>5.410.2.1 Owner’s or Owner representative’s Project Requirements (OPR). The expectations and requirements of the building appropriate to its phase shall be documented before the design phase of the project begins. This documentation shall include the following:</p> <ol style="list-style-type: none"> 1. Environmental and sustainability goals. 2. Energy efficiency goals. 3. Indoor environmental quality requirements. 4. Project program, including facility functions and hours of operation, and need for afterhours operation. 5. Equipment and systems expectations. 6. Building occupant and O&M personnel expectations 		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.410.2.2 A written explanation of how the design of the building systems meets the OPR shall be completed at the design phase of the building project. The Basis of Design document shall cover the following systems:</p> <ol style="list-style-type: none"> 1. Heating, ventilation, air conditioning [HVAC] systems and controls. 2. Indoor lighting system and controls. 3. Water heating system 4. Renewable energy systems. 5. Landscape irrigation systems. 6. Water reuse systems. 		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.410.2.3 Prior to permit issuance a commissioning plan shall be completed to document how the project will be commissioned. The commissioning plan shall include the following:</p> <ol style="list-style-type: none"> 1. General project information. 2. Commissioning goals. 3. Systems to be commissioned. Plans to test systems and components shall include: <ol style="list-style-type: none"> a. An explanation of the original design intent. b. Equipment and systems to be tested, including the extent of tests. c. Functions to be tested. d. Conditions under which the test shall be performed. e. Measurable criteria for acceptable performance. 4. Commissioning team information. 5. Commissioning process activities, schedules and responsibilities. Plans for the completion of commissioning shall be included. 		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.410.2.4 Functional performance tests shall demonstrate the correct installation and operation of each component, system and system-to-system interface in accordance with the approved plans and specifications. Functional performance testing reports shall contain information addressing each of the building components tested, the testing methods utilized, and include any readings and adjustments made.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A

Measure	Plan Sheet Reference	Completed? (Yes or N/A)
5.410.2.5 A systems manual and systems operations training are required, including Occupational Safety and Health Act (OSHA) requirements in California Code of Regulations (CCR), Title 8, Section 5142, and other related regulations.		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.410.2.5.1 Documentation of the operational aspects of the building shall be completed within the systems manual and delivered to the building owner or representative and facilities operator. The systems manual shall include the following: <ol style="list-style-type: none"> 1. Site information, including facility description, history and current requirements. 2. Site contact information. Basic operations and maintenance, including general site operating procedures, basic troubleshooting, recommended maintenance requirements, site events log. 3. Description of major systems. 4. Site equipment inventory and maintenance notes. 5. A copy of all special inspection verifications required by the enforcing agency or this code. 6. Other resources and documentation, if applicable. 		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.410.2.5.2 A program for training of the appropriate maintenance staff for each equipment type and/or system shall be documented in the commissioning report and shall include the following: <ol style="list-style-type: none"> 1. System/equipment overview (what it is, what it does and with what other systems and/or equipment it interfaces). 2. Review and demonstration of servicing/preventive maintenance. 3. Review of the information in the systems manual. 4. Review of the record drawings on the system/equipment. 		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.410.2.6 A report of commissioning process activities undertaken through the design and construction phases of the building project shall be completed and provided to the owner or representative.		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.410.4 Testing and adjusting of systems shall be required for new buildings less than 10,000 square feet or new systems to serve an addition or alteration subject to Section 303.1.		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.410.4.2 Develop a written plan of procedures for testing and adjusting systems. Systems to be included for testing and adjusting shall include, as applicable to the project: <ol style="list-style-type: none"> 1. HVAC systems and controls. 2. Indoor and outdoor lighting and controls. 3. Water heating systems. 4. Renewable energy systems. 5. Landscape irrigation systems. 6. Water reuse systems. 		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.410.4.3 Perform testing and adjusting procedures in accordance with applicable standards on each system as determined by the enforcing agency.		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A

Measure	Plan Sheet Reference	Completed? (Yes or N/A)
5.410.4.3.1 In addition to testing and adjusting, before a new space-conditioning system serving a building or space is operated for normal use, balance the system in accordance with the procedures defined by the Testing Adjusting and Balancing Bureau National Standards; the National Environmental Balancing Bureau Procedural Standards; Associated Air Balance Council National Standards or as approved by the enforcing agency.		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.410.4.4 After completion of testing, adjusting and balancing, provide a final report of testing signed by the individual responsible for performing these services.		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.410.4.5 Provide the building owner or representative with detailed operating and maintenance instructions and copies of guaranties/warranties for each system. O & M instructions shall be consistent with OSHA requirements in CCR, Title 8, Section 5142, and other related regulations.		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.410.4.5.1 Include a copy of all inspection verifications and reports required by the enforcing agency		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.503.1 Install only a direct-vent sealed-combustion gas or sealed wood-burning fireplace, or a sealed woodstove or pellet stove, and refer to residential requirements in the California Energy Code, Title 24, Part 6, Subchapter 7, Section 150. Woodstoves, pellet stoves and fireplaces shall comply with applicable local ordinances		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.503.1.1 Woodstoves and pellet stoves 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.		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.504.1 The permanent HVAC system shall only be used during construction if necessary to condition the building or areas of addition or alteration within the required temperature range for material and equipment installation. If the HVAC system is used during construction, use return air filters with a Minimum Efficiency Reporting Value (MERV) of 8, based on ASHRAE 52.2 1999, or an average efficiency of 30 percent based on ASHRAE 52.1 1992. Replace all filters immediately prior to occupancy or, if the building is occupied during alteration, at the conclusion of construction.		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.504.3 At the time of rough installation and during storage on the construction site until final startup of the heating, cooling and ventilating 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 dust, water and debris which may enter the system.		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A

Measure	Plan Sheet Reference	Completed? (Yes or N/A)
<p>5.504.4.1 Adhesives, sealants and caulks used on the project shall meet the requirements of the following standards:</p> <ol style="list-style-type: none"> 1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable, or SCAQMD Rule 1168 VOC limits, as shown in Tables 5.504.4.1 and 5.504.4.2. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products as specified in subsection 2, below. 2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than one pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of California Code of Regulations, Title 17, commencing with Section 94507. 		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.504.4.3 Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Coatings Suggested Control Measure, as shown in Table 5.504.4.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 5.504.4.3 shall be determined by classifying the coating as a Flat, Nonflat, or Nonflat-High Gloss coating, based on its gloss, as defined in Subsections 4.21, 4.36, and 4.37 of the 2007 California Air Resources Board Suggested Control Measure, and the corresponding Flat, Nonflat, or Nonflat-High Gloss VOC limit in Table 5.504.4.3 shall apply.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.504.4.3.1 Aerosol paints and coatings shall meet the PWMIR Limits for ROC in Section 94522(a)(3) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(c)(2) and (d)(2) of California Code of Regulations, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8 Rule 49.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.504.4.3.2 Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:</p> <ol style="list-style-type: none"> 1. Manufacturer's product specification 2. Field verification of on-site product containers 		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A

Measure	Plan Sheet Reference	Completed? (Yes or N/A)
<p>5.504.4.4 All carpet installed in the building interior shall meet at least one of the following testing and product requirements:</p> <ol style="list-style-type: none"> 1. Carpet and Rug Institute’s Green Label Plus Program; 2. Compliant with the VOC-emission limits and testing requirements specified in the California Department of Public Health Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, Version 1.1, February 2010 (also known as CDPH Standard Method V1.1 or Specification 01350); 3. NSF/ANSI 140 at the Gold level or higher; 4. Scientific Certifications Systems Sustainable Choice; or 5. Compliant with the Collaborative for High Performance Schools California (CA-CHPS) Criteria Interpretation for EQ 7.0 and EQ 7.1 (formerly EQ 2.2) dated July 2012 and listed in the CHPS High Performance Product Database. 		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.504.4.4.1 All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute Green Label program</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.504.4.4.2 All carpet adhesive shall meet the requirements of Table 5.504.4.1.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.504.4.5 Hardwood plywood, particleboard, and medium density fiberboard composite wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde as specified in ARB’s Air Toxics Control Measure (ATCM) for Composite Wood (17 CCR 93120 et seq.). Those materials not exempted under the ATCM must meet the specified emission limits, as shown in Table 5.504.4.5.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.504.4.5.3 Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following:</p> <ol style="list-style-type: none"> 1. Product certifications and specifications. 2. Chain of custody certifications. 3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.). 4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269 or European 636 3S standards. 5. Other methods acceptable to the enforcing agency 		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A

Measure	Plan Sheet Reference	Completed? (Yes or N/A)
<p>5.504.4.6 For 80 percent of floor area receiving resilient flooring, installed resilient flooring shall meet at least one of the following:</p> <ol style="list-style-type: none"> 1. Certified under the Resilient Floor Covering Institute (RFCI) FloorScore program; 2. Compliant with the VOC-emission limits and testing requirements specified in the California Department of Public Health’s 2010 Standard Method for the Testing and Evaluation Chambers, Version 1.1, February 2010; 3. Compliant with the Collaborative for High Performance Schools California (CA-CHPS) Criteria Interpretation for EQ 7.0 and EQ 7.1 (formerly EQ 2.2) dated July 2012 and listed in the CHPS High Performance Product Database; or 4. Products certified under UL GREENGUARD Gold (formerly the Greenguard Children’s & Schools Program). 		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.504.4.6.1 Documentation shall be provided verifying that resilient flooring materials meet the pollutant emission limits.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>A5.504.4.7 For 90 percent of floor area receiving resilient flooring, install resilient flooring that is:</p> <ol style="list-style-type: none"> 1. Certified under the Resilient Floor Covering Institute (RFCI) FloorScore program; 2. Compliant with the VOC-emission limits and testing requirements specified in the California Department of Public Health’s 2010 Standard Method for the Testing and Evaluation Chambers, Version 1.1, February 2010; 3. Compliant with the Collaborative for High Performance Schools California (CA-CHPS) Criteria Interpretation for EQ 7.0 and EQ 7.1 (formerly EQ 2.2) dated July 2012 and listed in the CHPS High Performance Product Database; or 4. Products certified under UL GREENGUARD Gold (formerly the Greenguard Children’s & Schools Program). 		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>A5.504.4.7.2 Documentation shall be provided verifying that resilient flooring materials meet the pollutant emission limits.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>A5.504.4.8 Comply with the following standards:</p> <ol style="list-style-type: none"> 1. Chapters 12-13 (Standards for Insulating Material) in Title 24, Part 12, the <i>California Referenced Standards Code</i>, 2. The VOC-emission limits defined in 2009 CHPS criteria and listed on its High Performance Products Database. 3. California Department of Public Health 2010 Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, Version 1.1, February 2010 		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A

Measure	Plan Sheet Reference	Completed? (Yes or N/A)
<p>5.504.5.3 In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air that provides at least a Minimum Efficiency Reporting Value (MERV) of 8. Specified filters shall be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.</p> <p>Exceptions:</p> <ol style="list-style-type: none"> 1. An ASHRAE 10-percent to 15-percent efficiency filter shall be permitted for an HVAC unit meeting the 2016 California Energy Code having 60,000 Btu/h or less capacity per fan coil, if the energy use of the air delivery system is 0.4 W/cfm or less at design air flow. 2. Existing mechanical equipment 		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.504.5.3.1 Installed filters shall be clearly labeled by the manufacturer indicating the MERV rating.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.504.7 Where outdoor areas are provided for smoking, prohibit smoking within 25 feet of building entries, outdoor air intakes and operable windows and within the building as already prohibited by other laws or regulations; or as enforced by ordinances, regulations or policies of any city, county, city and county, California Community College, campus of the California State University, or campus of the University of California, whichever are more stringent. When ordinances, regulations or policies are not in place, post signage to inform building occupants of the prohibitions</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.505.1 Indoor moisture control. Buildings shall meet or exceed the provisions of the California Building Code, CCR, Title 24, Part 2, Section 1203 (Ventilation) and Chapter 14 (Exterior Walls). For additional measures not applicable to low-rise residential occupancies, see Section 5.407.2 of this code.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.506.1 Outside air delivery. For mechanically or naturally ventilated spaces in buildings, meet the minimum requirements of Section 120.1 (Requirements for Ventilation) of the 2016 California Energy Code or the applicable local code, whichever is more stringent, and Division 1, Chapter 4 of CCR, Title 8.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.506.2 For buildings or additions equipped with demand control ventilation, CO2 sensors and ventilation controls shall be specified and installed in accordance with the requirements of the 2016 California Energy Code, Section 120.1(c)4.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A

Measure	Plan Sheet Reference	Completed? (Yes or N/A)
<p>5.507.4 Acoustical control. Employ building assemblies and components with Sound Transmission Class (STC) values determined in accordance with ASTM E90 and ASTM E413 or Outdoor-Indoor Sound Transmission Class (OITC) determined in accordance with ASTM E1332, using either the prescriptive or performance method in Section 5.507.4.1 or 5.507.4.2. Exception: Buildings with few or no occupants or where occupants are not likely to be affected by exterior noise, as determined by the enforcement authority, such as factories, stadiums, storage, enclosed parking structures and utility buildings.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.507.4.1 Wall and roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall meet a composite STC rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 in the following locations:</p> <ol style="list-style-type: none"> 1. Within the 65 CNEL noise contour of an airport <p>Exceptions:</p> <ol style="list-style-type: none"> 1. Ldn or CNEL for military airports shall be determined by the facility Air Installation Compatible Land Use Zone (AICUZ) plan. 2. Ldn or CNEL for other airports and heliports for which a land use plan that has not been developed shall be determined by the local general plan noise element. 3. Within the 65 CNEL or Ldn noise contour of a freeway or expressway, railroad, industrial source or fixed-guideway noise source as determined by the Noise Element of the General Plan. 		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.507.4.1.1 Buildings exposed to a noise level of 65 dB Leq-1-hr during any hour of operation shall have building, addition or alteration exterior wall and roof-ceiling assemblies exposed to the noise source meeting a composite STC rating of at least 45 (or OITC 35), with exterior windows of a minimum STC of 40 (or OITC 30).</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.507.4.2 For buildings located as defined in Section 5.507.4.1 or 5.507.4.1.1, wall and roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly equivalent noise level (Leq -1Hr) of 50 dBA in occupied areas during any hours of operations</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.507.4.2.1 Exterior features such as sound walls or earth berms may be utilized as appropriate to the building, addition or alteration project to mitigate sound migration to the interior.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.507.4.2.2 An acoustical analysis documenting complying interior sound levels shall be prepared by personnel approved by the architect or engineer of record.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
<p>5.507.4.3 Wall and floor-ceiling assemblies separating tenant spaces and tenant spaces and public places shall have an STC of at least 40.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A

Measure	Plan Sheet Reference	Completed? (Yes or N/A)
5.508.1 Ozone depletion and greenhouse gas reductions. Installations of HVAC, refrigeration and fire suppression equipment shall comply with Sections 5.508.1.1 and 5.508.1.2.		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.508.1.1 Install HVAC, refrigeration and fire suppression equipment that do not contain Chlorofluorocarbons (CFCs.)		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.508.1.2 Install HVAC, refrigeration and fire suppression equipment that do not contain Halons.		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
5.508.2 New commercial refrigeration systems shall comply with the provisions of this section when installed in retail food stores 8,000 square feet or more conditioned area, and that utilize either refrigerated display cases, or walk-in coolers or freezers connected to remote compressor units or condensing units. The leak reduction measures apply to refrigeration systems containing high-global-warming potential (high-GWP) refrigerants with a GWP of 150 or greater. New refrigeration systems include both new facilities and replacement of existing refrigeration systems in existing facilities.		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
Elective Measures (Enter CALGreen Measure Number – See CALGreen Appendix A5 for options)		
A5.1 Elective:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
A5.3 Elective:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
A5.4 Elective:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
A5.5 Elective:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A

Statement of Conformance

The CALGreen Special Inspector, listed below, has reviewed the plans and certifies that the mandatory and elective measures listed above are hereby incorporated into the project plans and will be implemented into the project in accordance with the requirements set forth in the 2016 California Green Building Standards Code as amended by the County of Marin.

Signature

Date

Name (Please Print)