

# Napa County Building Officials Coalition

*Striving to provide clear and consistent building code information and handouts for all Napa County jurisdictions. (Please check with each jurisdiction for any local amendments.)*

H/O No. 0517-06

Rev. 0717

## CALGREEN NON-RESIDENTIAL CHECKLIST- MANDATORY ITEMS

**PURPOSE:**

The non-residential provisions of the 2016 CalGreen Code outline planning, design and development methods that include environmentally responsible site selection, building design, building siting and development to protect, restore and enhance the environmental quality of the site and respect the integrity of adjacent properties; establishes the means of conserving water used indoors, outdoors and in wastewater conveyance; outlines means of achieving material conservation and resource efficiency; and outlines means of reducing the quantity of air contaminants.

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

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

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

**Instructions:**

1. The Owner or the Owner's agent shall employ a licensed professional experienced with the 2016 California Green Building Standards Codes to verify and assure that all required work described herein is properly planned and implemented in the project.
2. The licensed professional, in collaboration with the owner and the design professional shall initial **Column 2** of this checklist, sign and date **Section 1 - Design Verification** at the end of this checklist and have the checklist printed on the approved plans for the project.
3. Prior to final inspection by the Building Department, the licensed professional shall complete **Column 3** and sign and date **Section 2 - Implementation Verification** at the end of this checklist and submit the completed form to the Building Inspector.

MANDATORY FEATURE OR MEASURE	Column 2 Project Requirements	Column 3 Verification
<b>CHAPTER 5 – NONRESIDENTIAL MANDATORY MEASURES</b>		
<b>General Requirements</b>		
The project meets all the requirements of Divisions 5.101 through 5.508.	<input type="checkbox"/>	<input type="checkbox"/>



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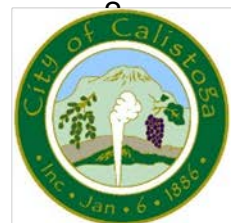
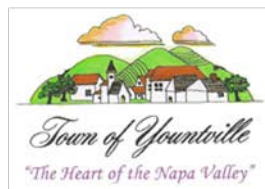
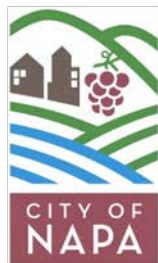
## Division 5.1 PLANNING AND DESIGN

### Planning and Design - Site Development

<p><b>5.106.1 Storm water pollution prevention.</b> For projects of one acre or less, develop a Storm Water Pollution Prevention Plan (SWPPP) that has been designed, specific to its site, conforming to the State Storm water NPDES Construction Permit or local ordinance, whichever is stricter, as is required for projects over one acre. The plan should cover prevention of soil loss by storm water run-off and/or wind erosion, of sedimentation and/or of dust/particulate matter air pollution.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.106.4 Bicycle parking.</b> Comply with Sections 5.106.4.1 and 5.106.4.2; or meet local ordinance, whichever is stricter.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.106.4.1.1 Short-Term bicycle parking.</b> If the qualified project 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 visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.106.4.1.2 Long-Term bicycle parking.</b> For qualified buildings with over 10 tenant-occupants or for additions or alterations that add 10 or more tenant vehicular parking spaces, provide secure bicycle parking for 5 percent of tenant vehicle parking spaces being added, with a minimum of one space.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.106.5.2 Designated parking for clean air vehicles.</b> Provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.106.5.3 Electric vehicle (EV) charging.</b> 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).</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.106.5.3.1 Single charging space requirements.</b> When only a single charging space is required per Table 5.106.5.3.3, a raceway is required to be installed at the construction and shall be installed in accordance with the <i>California Electrical Cod</i>.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.106.5.3.2 Multiple charging spaces requirements.</b> When multiple charging spaces are required per Table 5.106.5.3.3, raceway(s) is/are required to be installed at the time of construction and shall be installed in accordance with the <i>California Electrical Code</i>.</p>	<input type="checkbox"/>	<input type="checkbox"/>



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<p><b>5.106.5.3.3 EV charging space calculation.</b> Table 5.106.5.3.3 shall be used to determine if single or multiple charging space requirements apply for the future installation of EVSE.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.106.5.3.4 Identification.</b> The service panel or subpanel(s) circuit directory shall identify the reserved overcurrent protective device space(s) for future EV charging as “EV CAPABLE”.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.106.5.3.5 Future EV spaces count as designated parking.</b> Future charging spaces qualify as designated parking as described in Section 5.106.5.2 Designated parking for clean air vehicles.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.106.8 Light pollution reduction.</b> Outdoor lighting systems shall be designed and installed to comply with the following:</p> <ol style="list-style-type: none"> <li>1. The minimum requirements in the <i>California Energy Code</i> for lighting zones 1 – 4 as defined in Chapter 10 of the <i>California Administrative Code</i>; and</li> <li>2. Backlight, Uplight and Glare (BUG) ratings as defined in IES TM-15-11; and</li> <li>3. Allowable BUG rating not exceeding those shown in Table 5.106.8, or</li> </ol> <p>Comply with a local ordinance lawfully enacted pursuant to Section 101.7, whichever is more stringent.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.106.10 Grading and paving.</b> The site shall be planned and developed to keep surface water away from buildings. Construction plans shall indicate how site grading or a drainage system will manage all surface water flows.</p>	<input type="checkbox"/>	<input type="checkbox"/>

## Division 5.2 ENERGY EFFICIENCY

### Performance Requirements

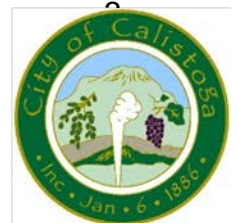
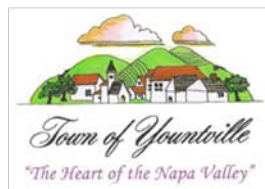
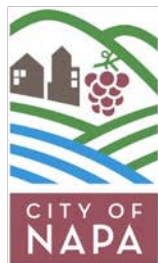
<p><b>5.201.1 Scope.</b> The California Energy Commission will continue to adopt mandatory building standards.</p>	<input type="checkbox"/>	<input type="checkbox"/>
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## Division 5.3 WATER EFFICIENCY AND CONSERVATION

### Indoor Water Use



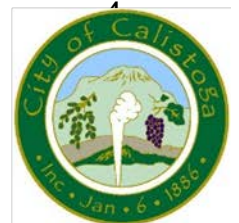
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<p><b>5.303.1 Meters.</b> Separate meters shall be installed for the uses described in Sections 503.1.1 and 503.1.2.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.303.1.1 New building or additions in excess of 50,000 square feet.</b> Separate submeters shall be installed as follows:</p> <ol style="list-style-type: none"> <li>1. For each individual leased, rented or other tenant space within the building projected to consume more than 100 gal/day.</li> <li>2. Where separate submeters are unfeasible, for water supplied to the following systems: <ol style="list-style-type: none"> <li>a. Makeup water for cooling towers where flow through is greater than 500 gpm.</li> <li>b. Makeup water for evaporative coolers greater than 6 gpm.</li> <li>c. Steam and hot-water boilers with energy input &gt; 500,000 Btu/h.</li> </ol> </li> </ol>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.303.1.2 Excess consumption.</b> A separate submeter shall be provided for any tenant within a new building or within an addition that is projected to consume &gt; 1,000 gal/day.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.303.3 Water conserving plumbing fixtures and fittings.</b> Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.303.3.1. Water closets.</b> 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.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.303.3.2 Urinals.</b></p> <p><b>5.303.3.2.1 Wall-mounted urinals.</b> The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.303.3.2.2 Floor-mounted urinals.</b> The effective flush volume of floor-mounted or other urinal shall not exceed .05 gallons per flush.</p>	<input type="checkbox"/>	<input type="checkbox"/>



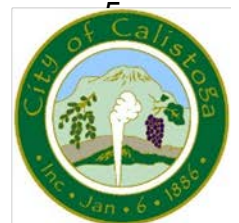
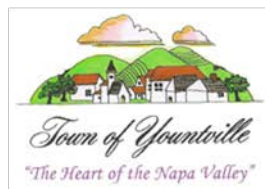
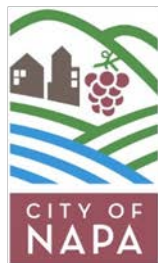
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<p><b>5.303.3.3 Showerheads.</b></p> <p><b>5.303.3.3.1 Single showerhead.</b> Showerheads shall have a maximum flow rate of not more than 2.0 gallons per minute at 80 psi showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for showerheads.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.303.3.3.2 Multiple showerheads serving one shower.</b> When a shower is served by more than one showerhead, the combined flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 2.0 gallons per minute at 80 psi, or the shower shall be designed to allow only one shower outlet to be in operation at a time.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.303.3.4 Faucets and fountains.</b></p> <p><b>5.303.3.4.1 Nonresidential lavatory faucets.</b> Lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minutes at 60 psi.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.303.3.4.2 Kitchen faucets.</b> Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute at 60 psi. Kitchen faucet may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minutes at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minutes at 60 psi.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.303.3.4.3 Wash fountains.</b> Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minutes/20 [rim space (inches) at 60 psi.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.303.3.4.4 Metering faucets.</b> Metering faucets shall not deliver more than 0.20 gallons per cycle.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.303.3.4.5 Metering faucets for wash fountains.</b> 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.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.303.4.1 Food waste disposers.</b> 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.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.303.5 Areas of additions or alteration.</b> For those occupancies within the authority of the California Building Standards Commission as specified in Section 103, the provisions of Section 5.303.3 and 5.303.4 shall apply to new fixtures in additions or areas of alterations to the building.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.303.6 Standards for plumbing fixtures and fittings.</b> Plumbing fixtures and fittings shall be installed in accordance with the California Plumbing Code (CPC), and shall meet the applicable standards referenced in CPC Table 1401.1 and CalGreen Chapter 6.</p>	<input type="checkbox"/>	<input type="checkbox"/>



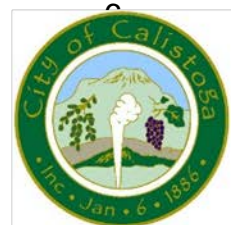
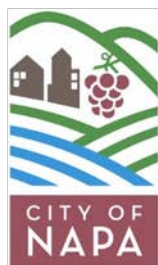
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Outdoor Water Use		
<p><b>5.304.2 Outdoor use in landscape areas equal to or greater than 500 sq.ft.</b> When water is used for outdoor irrigation for new construction projects, one of the following shall apply:</p> <p><input type="checkbox"/> 1. A 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)</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><input type="checkbox"/> 2. The California Department of Water Resource Model Water Efficient Landscape Ordinance (MWELO) commencing with Section 490 of Chapter 2.7, Division 2, Title 23, California Code of Regulation.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.304.3 Outdoor water use in rehabilitated landscape projects equal to or greater than 2,500 sq. ft.</b> Rehabilitated landscape projects shall comply with Section 5.304.2, Item 1 or 2.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.304.4 Outdoor water use in landscape areas of 2,500 sq.ft. or less.</b> Any project with an aggregate landscape area of 2,500 sq.ft. or less may comply with the performance requirements of MWELO or conform to the prescriptive compliance measure contained in MWELO's Appendix D.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.304.5 Graywater or rainwater use in landscape areas.</b> For projects using treated or untreated graywater or rainwater captured on site, any lot or parcel within the projects that has less than 2,500 sq.ft. of landscape and meters 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).</p>	<input type="checkbox"/>	<input type="checkbox"/>
Weather Resistance and Moisture Management		
<p><b>5.407.1 Weather protection.</b> Provide a weather-resistant exterior wall and foundation envelope as required by <i>California Building Code</i> Section 1403.2 and <i>California Energy Code</i> Section 150, manufacturer's installation instructions or local ordinance, whichever is more stringent.<sup>1</sup></p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.407.2 Moisture control.</b> Employ moisture control measures by the following methods;</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.407.2.1 Sprinklers.</b> Prevent irrigation spray on structures.</p>	<input type="checkbox"/>	<input type="checkbox"/>



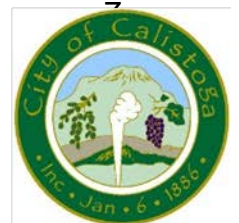
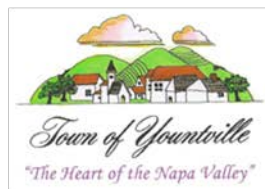
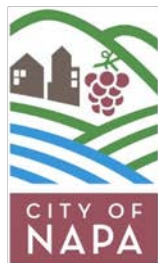
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<p><b>5.407.2.2 Entries and openings.</b> Design exterior entries and/or openings to prevent water intrusion into buildings.</p> <p><b>5.407.2.2.1 Exterior door protection.</b> Primary exterior entries shall be covered to prevent water intrusion by using nonabsorbent floor and wall finishes within at least 2 ft around and perpendicular to such openings plus at least one of the following:</p> <ol style="list-style-type: none"> <li>1. An installed awning at least 4 ft in depth.</li> <li>2. The door is protected by a roof overhang at least 4 ft in depth.</li> <li>3. The door is recessed at least 4 ft.</li> <li>4. Other methods which provide equivalent protection.</li> </ol> <p><b>5.407.2.2.2 Flashing.</b> Install flashings integrated with a drainage plane.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Construction Waste Reduction, Disposal and Recycling</b>		
<p><b>5.408.1 Construction waste management.</b> Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.408.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.408.1.1 Construction waste management plan.</b> Submit plan per this section to enforcement authority.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.408.1.2 Waste management company.</b> Utilize a waste management company that can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with CalGreen Section 5.408.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.408.1.3 Waste stream reduction alternative.</b> The combined weight of new construction disposal that does not exceed two pounds per square foot of building area may be deemed to meet the 65 percent minimum requirement as approved by the enforcing agency.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.408.1.4 Documentation.</b> Provide documentation of the waste management plan that meets the requirements listed in Section 5.408.1.1 through 5.408.1.3.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.408.2 Universal waste.</b> Addition and alteration to a building or tenant space that meet the scoping provision 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 material shall be included in the construction documents.</p>	<input type="checkbox"/>	<input type="checkbox"/>



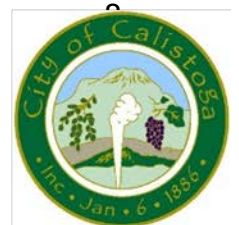
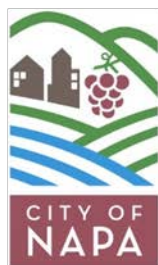
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<p><b>5.408.3 Excavated soil and land clearing debris.</b> 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>Building Maintenance and Operation</b></p>		
<p><b>5.410.1 Recycling by occupants.</b> Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of nonhazardous materials for recycling.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.410.2 Commissioning.</b> For new buildings 10,000 square feet and over, building commissioning shall be included in the design and construction processes of the building project. All occupancies projects other than I-occupancies and L-occupancies shall comply with the <i>California Energy Code</i> as prescribed in <i>California Energy Code</i> Section 120.8. For I-occupancies that are not regulated by OSHPD or for I-occupancies and L-occupancies that are not regulated by the <i>California Energy Code</i> Section 100.0 Scope, all requirements in Sections 5.410.2 through 5.410.2.6 shall apply. Commissioning requirements shall include items listed in Section 5.410.2.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.410.2.1 Owner's Project Requirements (OPR).</b> Documented before the design phase of the project begins the OPR shall include items listed in Section 5.410.4.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.410.2.2 Basis of Design (BOD).</b> 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 and updated periodically to cover the systems listed in Section 5.410.2.2.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.410.2.3 Commissioning plan.</b> A commissioning plan describing how the project will be commissioned shall be started during the design phase of the building project and shall include items listed in Section 5.410.2.3.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.410.2.4 Functional performance testing.</b> Functional performance testing shall demonstrate the correct installation and operation of each component, system and system-to-system interface in accordance with the approved plans and specifications.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.410.2.5 Documentation and training.</b> A Systems manual and systems operations training are required.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.410.2.5.1 Systems manual.</b> The systems manual shall be delivered to the building owner or representative and facilities operator and shall include the items listed in Section 5.410.2.5.1.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.410.2.5.2 Systems operations training.</b> The training of the appropriate maintenance staff for each equipment type and/or system shall include items listed in Section 5.410.2.5.2.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.410.2.6 Commissioning report.</b> A complete report of commissioning process activities undertaken through the design, construction and reporting recommendations for post-construction phases of the building project shall be completed and provided to the owner or representative.</p>	<input type="checkbox"/>	<input type="checkbox"/>



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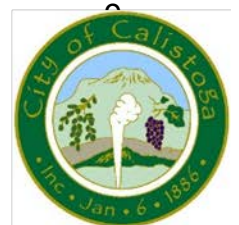
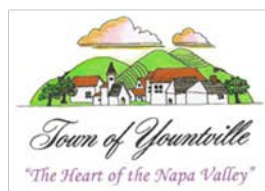




<b>5.410.4 Testing and adjusting.</b> Testing and adjusting of systems shall be required for buildings less than 10,000 square feet or new systems to serve an addition or alteration subject to Section 303.1.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.410.4.2 Systems.</b> Develop a written plan of procedures for testing and adjusting systems. Systems to be included for testing and adjusting shall include, as applicable to the project, the systems listed in Section 5.410.3.2.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.410.4.3 Procedures.</b> Perform testing and adjusting procedures in accordance with industry best practices and applicable national standards on each system.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.410.4.3.1 HVAC balancing.</b> Before a new space-conditioning system serving a building or space is operated for normal use, the system should be balanced in accordance with the procedures defined by national standards listed in Section 5.410.3.3.1.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.410.4.4 Reporting.</b> After completion of testing, adjusting and balancing, provide a final report of testing signed by the individual responsible for performing these services.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.410.4.5 Operation and maintenance manual.</b> Provide the building owner with detailed operating and maintenance instructions and copies of guaranties/warranties for each system prior to final inspection.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.410.4.5.1 Inspections and reports.</b> Include a copy of all inspection verifications and reports required by the enforcing agency.	<input type="checkbox"/>	<input type="checkbox"/>
<b>Fireplaces</b>		
<b>5.503.1</b> Install only a direct-vent sealed-combustion gas or sealed wood-burning fireplace or a sealed woodstove and refer to residential requirements in the <i>California Energy Code</i> , Title 24, Part 6, Subchapter 7, Section 150.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.503.1.1 Woodstoves.</b> Woodstoves shall comply with US 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 type="checkbox"/>	<input type="checkbox"/>
<b>Pollutant Control</b>		
<b>5.504.1 Temporary ventilation.</b> 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 type="checkbox"/>	<input type="checkbox"/>



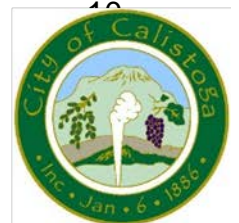
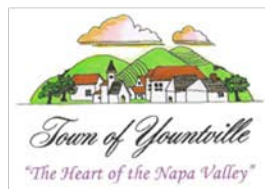
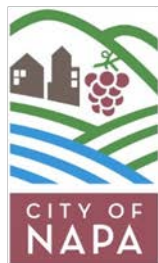
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<p><b>5.504.3 Covering of duct openings and protection of mechanical equipment during construction.</b> At the time of rough installation or during storage on the construction site and until final startup of the heating and cooling equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal or other methods acceptable to the enforcing agency to reduce the amount of dust or debris which may collect in the system.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.504.4 Finish material pollutant control.</b> Finish materials shall comply with Sections 5.504.4.1 through 5.504.4.6.</p> <p><b>5.504.4.1 Adhesives, sealants, caulks.</b> Adhesives and sealants used on the project shall meet the requirements of the following standards.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>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.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>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 <i>California Code of Regulations</i>, Title 17, commencing with Section 94507.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.504.4.3 Paints and coatings.</b> Architectural paints and coatings shall comply with Table 5.504.4.3 unless more stringent local limits apply.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.504.4.3.1 Aerosol paints and coatings.</b> Aerosol paints and coatings shall meet the Product-Weighted MIR Limits for ROC in Section 94522(a)(3) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances (CCR, Title 17, Section 94520 et seq).</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.504.4.3.2 Verification.</b> Verification of compliance with this section shall be provided at the request of the enforcing agency.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.504.4.4 Carpet systems.</b> All carpet installed in the building interior shall meet the testing and product requirements of at least one of the standards listed in Section 5.504.4.4.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.504.4.4.1 Carpet cushion.</b> All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute Green Label program.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.504.4.4.2 Carpet adhesive.</b> All carpet adhesive shall meet the requirements of Table 5.504.4.1.</p>	<input type="checkbox"/>	<input type="checkbox"/>



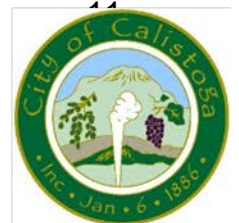
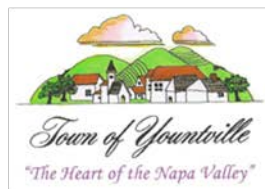
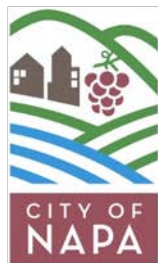
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<b>5.504.4.5 Composite wood products.</b> Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde as specified in Table 5.504.4.5.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.504.4.5.3 Documentation.</b> Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following standards listed in Section 5.504.5.3.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.504.4.6 Resilient flooring systems.</b> For 80 percent of floor area receiving resilient flooring, installed resilient flooring shall meet at least one of the following standards listed in Section 5.504.4.6.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.504.5.3 Filters.</b> In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air prior to occupancy that provides at least a MERV of 8.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.504.7 Environmental tobacco smoke (ETS) control.</b> Prohibit smoking within 25 feet of building entries, outdoor air intakes and operable windows where outdoor areas are provided for smoking and in buildings; 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.	<input type="checkbox"/>	<input type="checkbox"/>
<b>Indoor Moisture and Radon Control</b>		
<b>5.505.1 Indoor moisture control.</b> Buildings shall meet or exceed the provisions of <i>California Building Code</i> , CCR, Title 24, Part 2, Sections 1203 and Chapter 14.1.	<input type="checkbox"/>	<input type="checkbox"/>
<b>Air Quality and Exhaust</b>		
<b>5.506.1 Outside air delivery.</b> For mechanically or naturally ventilated spaces in buildings, meet the minimum requirements of Section 121 of the <i>California Energy Code</i> , CCR, Title 24, Part 6 and Chapter 4 of CCR, Title 8 or the applicable local code, whichever is more stringent. <sup>1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.506.2 Carbon dioxide (CO2) monitoring.</b> For buildings equipped with demand control ventilation, CO2 sensors and ventilation controls shall be specified and installed in accordance with the requirements of the latest edition of the <i>California Energy Code</i> , CCR, Title 24, Part 6, Section 121(c). <sup>1</sup>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Environmental Comfort</b>		
<b>5.507.4 Acoustical control.</b> Employ building assemblies and components with STC values determined in accordance with ASTM E 90 and ASTM E 413.	<input type="checkbox"/>	<input type="checkbox"/>



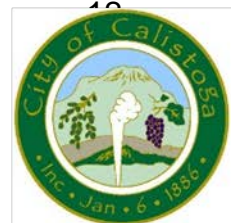
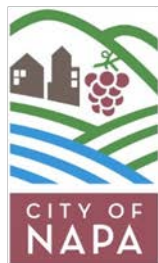
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<p><b>5.507.4.1. Exterior noise transmission, prescriptive method.</b> Wall and floor-ceiling assemblies exposed to the noise source making up the building envelope shall have exterior wall and roof ceiling assemblies meeting a composite STC rating 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 locations described in Items 1 and 2. Also applies to addition envelope or altered envelope.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.507.4.1.1 Noise exposure where noise contours are not readily available.</b> Buildings exposed to a noise level of 65 dB Leq-1Hr during any hour of operation shall have 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). Also applies to addition or alteration exterior wall.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.507.4.2 Performance method.</b> For buildings located as defined in Sections A5.507.4.1 or A5.507.4.1.1, wall and roof-ceiling assemblies making up the building 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 hour of operation. Also applies to addition envelope or altered envelope.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.507.4.2.1 Site features.</b> Exterior features such as sound walls or earth berms may be utilized as appropriate to the project to mitigate sound migration to the interior. Also applies to addition envelope or altered envelope.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.507.4.2.2 Documentation of compliance.</b> An acoustical analysis documenting complying interior sound levels shall be prepared by personnel approved by the architect or engineer of record.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.507.4.2 Interior sound.</b> Wall and floor-ceiling assemblies separating tenant spaces and tenant spaces and public places shall have an STC of at least 40.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>Outdoor Air Quality</b></p>		
<p><b>5.508.1 Ozone depletion and greenhouse gas reductions.</b> Installations of HVAC, refrigeration and fire suppression equipment shall comply with Sections 5.508.1.1 and 5.508.1.2.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.508.1.1 Chlorofluorocarbons (CFCs).</b> Install HVAC and refrigeration equipment that does not contain CFCs.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.508.1.2 Halons.</b> Install fire suppression equipment that does not contain Halons.</p>	<input type="checkbox"/>	<input type="checkbox"/>



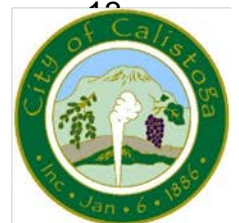
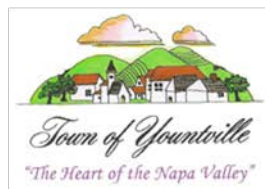
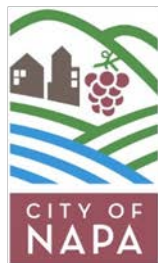
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<p><b>5.508.2 Supermarket refrigerant leak reduction.</b> New commercial refrigeration systems shall comply with the provisions of this section when installed in retail food stores 8,000 square feet or more conditioned area, and that utilize either 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 the replacement of existing refrigeration systems in existing facilities.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.508.2.1 Refrigerant piping.</b> Piping compliant with the California Mechanical Code shall be installed to be accessible for leak protection and repairs. Piping runs using threaded pipe, copper tubing with an outside diameter (OD) less than 1/4 inch, flared tubing connections and short radius elbows shall not be used in refrigerant systems except as noted below.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.508.2.1.1 Threaded pipe.</b> Threaded connections are permitted at the compressor rack.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.508.2.1.2 Copper pipe.</b> Copper tubing with an OD less than ¼ inch may be used in systems with a refrigerant charge of 5 pounds or less.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.508.2.1.2.1 Anchorage.</b> One-fourth-inch OD tubing shall be securely clamped to a rigid base to keep vibration levels below 8 mils.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.508.2.1.3 Flared tubing connections.</b> Double-flared tubing connections may be used for pressure controls, valve pilot lines and oil.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.508.2.1.4 Elbows.</b> Short radius elbows are only permitted where space limitations prohibited use of long radius elbows.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.508.2.2. Valves.</b> Valves and fittings shall comply with the <i>California Mechanical Code</i> and as follows.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.508.2.2.1.1 Pressure action.</b> A pressure gauge, pressure transducer or other device shall be installed in the space between the rupture disc and the relief valve inlet to indicate a disc rupture or discharge of the relief valve.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.508.2.2.2 Access valve.</b> Only Schrader access valves with a brass or steel body are permitted for use.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.508.2.2.2.1 Valves caps.</b> For system with a refrigerant charge of 5 pounds or more, valve caps shall be brass or steel and not plastic.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5.508.2.2.2.2 Seal caps.</b> If designed for it, the cap shall have a neoprene O-ring in place.</p>	<input type="checkbox"/>	<input type="checkbox"/>



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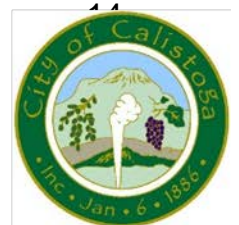
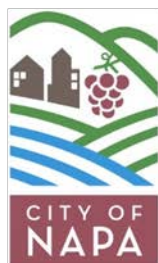
<b>5.508.2.2.2.1 Chain tethers.</b> Chain tethers to fit over the stem are required for valves designed to have seal caps.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.508.2.3 Refrigerated service cases.</b> Refrigerated service cases holding food products containing vinegar and salt shall have evaporator coils of corrosion-resistant material, such as stainless steel; or be coated to prevent corrosion from these substances.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.508.2.3.1 Coil coating.</b> Consideration shall be given to the heat transfer efficiency of coil coating to maximize energy efficiency.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.508.2.4 Refrigerated receivers.</b> Refrigerant receivers with capacities greater than 200 pounds shall be fitted with a device that indicates the level of refrigerant in the receiver.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.508.2.5. Pressure testing.</b> The system shall be pressure tested during installation prior to evacuation and charging.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.508.2.5.1 Minimum pressure.</b> The system shall be charged with regulated dry nitrogen and appropriate tracer gas to bring system pressure up to 300 psig minimum.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.508.2.5.2 Leaks.</b> Check the system for leaks, repair any leaks, and retest for pressure using the same gauge.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.508.2.5.3 Allowable pressure change.</b> The system shall stand, unaltered, for 24 hours with no more than a +/- one pound pressure change from 300 psig, measured with the same gauge.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.508.2.6 Evacuation.</b> The system shall be evacuated after pressure testing and prior to charging.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.508.2.6.1 First vacuum.</b> Pull a system vacuum down to at least 1000 microns (+/- 50 microns), and hold for 30 minutes.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.508.2.6.2 Second vacuum.</b> Pull second system vacuum to a minimum of 500 microns and hold for 30 minutes.	<input type="checkbox"/>	<input type="checkbox"/>
<b>5.508.2.6.3 Third vacuum.</b> Pull a third vacuum down to a minimum of 300 microns, and hold for 24 hours with a maximum drift of 100 microns over a 24-hour period.	<input type="checkbox"/>	<input type="checkbox"/>

**CALGREEN SIGNATURE DECLARATIONS**

Project Name:	
Project Address:	



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Project Description:	
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**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 Department.

The owner and design professional responsible for compliance with CalGreen Standards have revised 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 2016 California Green Building Standards Code as adopted by the County of Napa.

Owner's Signature		Date
Owner's Name (Please Print)		
Design Professional's Signature		Date
Design Professional's Name (Please Print)		
Signature of License Professional responsible for CalGreen compliance		Date
Name of License Professional responsible for CalGreen compliance (Please Print)		Phone
Email Address for License Professional responsible for CalGreen compliance		

**SECTION 2 – IMPLEMENTATION VERIFICATION**

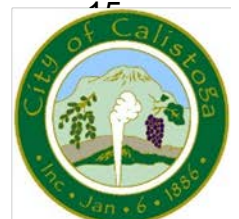
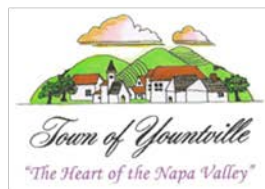
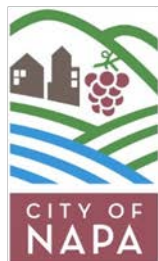
Complete, sign and submit the completed checklist, including column 3, together with all original signatures on Section 2 to the Building Department prior to Building Department final inspection.

I have inspected the work and 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 of the 2016 California Green Building Standards Code as adopted by the County of Napa.

Signature of License Professional responsible for CalGreen compliance		Date



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Name of License Professional responsible for CalGreen compliance (Please Print)	Phone
Email Address for License Professional responsible for CalGreen compliance	



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