



NONRESIDENTIAL – NEW CONSTRUCTION

2013 CALGreen+Tier 1 Checklist

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

Applies to building permit applications received on or after January 1, 2014, for newly constructed nonresidential buildings

Project Address: _____

Project Name: _____

Project Description: _____

Building Permit #: _____

Instructions:

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

Feature or Measure	Project Requirements		Verification
<u>Column 1</u>	<u>Column 2</u> <i>When checked, these items become a part of the approved plans and must be installed or incorporated into the project.</i>		<u>Column 3</u> <i>Complete after implementation and prior to final inspection approval</i>
<i>See Chapter 5 and Appendix A5 of the 2013 California Green Building Code and Cotati City Code Chapter 18 for complete descriptions of features or measures listed here.</i>	Mandatory & Tier 1 Prerequisites	Tier 1 electives <i>Applicant selects required elective measures</i>	Verification by a 3rd party CALGreen Special Inspector or by City staff as noted

<p style="text-align: center;">PLANNING AND DESIGN</p>	<p style="text-align: center;"><i>All checked items are required for the project</i></p>	<p style="text-align: center;"><i>Select at least one (1) elective measure from A5.1</i></p>	<p style="text-align: center;"><i>Select all measures verified in the completed project</i></p>
<p>SITE SELECTION</p>			
<p>A5.103.1 Community connectivity. Locate project on a previously developed site within a 1/2 mile radius of at least ten basic services, listed in Section A5.103.1. : (Support documentation required at application submittal)</p>		<input type="checkbox"/>	<p style="color: green;"><i>Special Inspector</i></p> <input type="checkbox"/>
<p>A5.103.2 Brownfield or greyfield site redevelopment or infill area development. Select for development a brownfield in accordance with Section A5.103.2.1 or on a greyfield or infill site as defined in Section A5.102.</p> <p>A5.103.3.1 Brownfield redevelopment. Develop a site documented as contaminated and fully remediated or on a site defined as a brownfield.</p>		<input type="checkbox"/> <input type="checkbox"/>	<p>City Plan Check staff <input type="checkbox"/></p> <input type="checkbox"/>
<p>SITE PRESERVATION</p>			
<p>A5.104.1.1 Local zoning requirement in place. Exceed the zoning's open space requirement for vegetated open space on the site by 25 percent.</p> <p>A5.104.1.2 No local zoning requirement in place. Provide vegetated open space area adjacent to the building equal to the building footprint area.</p> <p>A5.104.1.3 No open space required in zoning ordinance. Provide vegetated open space equal to 20 percent of the total project site area.</p>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p style="color: green;"><i>Special Inspector</i></p> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<p>DECONSTRUCTION AND REUSE OF EXISTING STRUCTURES</p>			
<p>A5.105.1.1 Existing building structure. Maintain at least 75percent of existing building structure (including structural floor and roof decking) and envelope (exterior skin and framing) based on surface area. (Support documentation required at application submittal)</p> <p>Exceptions:</p> <ol style="list-style-type: none"> 1. Window assemblies and non-structural roofing material. 2. Hazardous materials that are remediated as a part of the project. 3. A project with an addition of more than 2 times the square footage of the existing building. <p>A5.105.1.2 Existing non-structural elements. Reuse existing interior non-structural elements (interior walls, doors, floor coverings and ceiling systems) in at least 50 percent of the area of the completed building (including additions).</p> <p>Exception: A project with an addition of more than 2 times the square footage of the existing building.</p> <p>A5.105.1.3 Salvage. Salvage additional items in good condition such as light fixtures, plumbing fixtures, and doors for reuse on this project in an onsite storage area or for salvage in dedicated collection bins. Document the weight or number of the items salvaged.</p>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p style="color: green;"><i>Special Inspector</i></p> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<p>SITE DEVELOPMENT</p>			
<p>5.106.1 Storm water pollution prevention plan. Newly constructed projects which disturb less than one acre of land shall prevent the pollution of storm water runoff from the construction activities by complying with lawfully enacted storm water management and/or erosion control ordinances. See Cotati City Code Chapter 16.38.</p>	<input checked="" type="checkbox"/>		<p>City Plan Check staff <input type="checkbox"/></p>
<p><i>Description of proposed measures:</i></p>	<p><i>Sheet: Detail:</i></p>		

<p>5.106.5.2.1 Parking stall marking. 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:</p> <p style="text-align: center;">CLEAN AIR/ VANPOOL/EV</p>	☒		☐
<p><i>Description of proposed measures:</i></p>	<p><i>Sheet: Detail:</i></p>		
<p>A5.106.5.3 Electric vehicle supply wiring. Provide facilities meeting Section 406.9 (Electric Vehicle) of the California Building code and as follows:</p> <p>A5.106.5.3.1 Single charging space requirements. When only a single charging space is required, install a listed raceway capable of accommodating a dedicated branch circuit. The raceway shall not be less than trade size 1. The raceway shall be securely fastened at the main service or subpanel and shall terminate in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure.</p> <p>Exception: Other pre-installation methods approved by the local enforcing agency that provide sufficient conductor sizing and service capacity to install Level 2 REVSE.</p> <p>A5.106.5.3.2 Multiple charging spaces required. When multiple charging spaces are provided or required, plans shall include the locations(s) and type of the EVSA, raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to charge simultaneously all the electrical vehicles (EV) at all designated EV charging spaces at their full rated amperage. Provide raceways from the electrical service panel to the designated parking areas which are required to be installed at the time of construction.</p> <p>Note: Utilities and local enforcing agencies may have additional requirements for metering and EVSE installation, and should be consulted during the project design and installation.</p> <p>A5.106.5.3.3 Tier 1. At least 3% of the total parking spaces, but not less than 2, shall be capable of supporting installation of future electric vehicle supply equipment (EVSEW).</p> <p>A5.106.5.3.5 Labeling requirement. A label stating “EV CHARGE CAPABLE” shall be posted in a conspicuous place at the service panel or subpanel and the EV charging station space.</p>		<p>☐</p> <p>☐</p> <p>☐</p> <p>☐</p>	<p>Special Inspector</p> <p>☐</p> <p>☐</p> <p>☐</p> <p>☐</p>
<p>A5.106.6 Parking capacity. Design parking capacity to meet but not exceed minimum local zoning requirements. : (Support documentation required at application submittal)</p> <p>A5.106.6.1 Reduce parking capacity. With the approval of the enforcement authority, employ strategies to reduce on site parking area by</p> <ol style="list-style-type: none"> 1. Use of on street parking or compact spaces, illustrated on the site plan, or 2. Implementation and documentation of programs that encourage occupants to carpool, ride share, or use alternate transportation. 		<p>☐</p>	<p>Special Inspector</p> <p>☐</p>
<p>A5.106.7 Exterior walls. Meet requirements in the current edition of the California Energy Code and with either A5.106.7.1 or A5.106.7.2 select one of the following for wall surfaces:</p> <p>A5.106.7.1 Fenestration. Provide vegetative or man-made shading devices for all fenestration on east-, south- and west-facing walls.</p> <p>A5.106.7.1.1 East and west walls. Shading devices shall have 30% coverage to a height of 20 feet or to the top of the exterior wall, whichever is less.</p> <p>A5.106.7.1.2 South walls. Shading devices shall have 60% coverage to a height of 20 feet or to the top of the exterior wall, whichever is less.</p> <p>A5.106.7.2 Opaque wall areas. Use wall surfacing with SRI 25 (aged), for</p>		<p>☐</p> <p>☐</p>	<p>Special Inspector</p> <p>☐</p> <p>☐</p>

75% of opaque wall areas.		<input type="checkbox"/>	<input type="checkbox"/>
5.106.8 Light pollution reduction. Outdoor lighting systems shall be designed and installed to comply with the following: <ul style="list-style-type: none"> 1. The minimum requirements of the California Energy Code for Lighting Zone 2 as defined in Chapter 10 of the California Administrative Code; and 2. Backlight, Uplight and Glare (BUG) ratings as defined in IESNA TM-15-11; and 3. Allowable BUG ratings not exceeding those shown in Table 5106.8 Exceptions: <ul style="list-style-type: none"> 1. Luminaires that qualify as exceptions in the California Energy Code. 2. Emergency lighting. 	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Special Inspector <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<i>Description of proposed measures:</i>	<i>Sheet: Detail:</i>		
5.106.10 Grading and Paving. Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include swales, water collection and disposal systems, French drains, water retention gardens or other measures which keep surface water away from buildings and aid in groundwater recharge.	<input checked="" type="checkbox"/>		Special Inspector <input type="checkbox"/>
<i>Description of proposed measures:</i>	<i>Sheet: Detail:</i>		
A5.106.11 Heat island effect. Reduce non-roof heat islands, and roof heat islands as follows: <p>A5.106.11.1 Hardscape alternatives. Use <u>one</u> or a combination of strategies 1 through 2 for 50 percent of site hardscape <u>or</u> put 50 percent of parking underground.</p> <ul style="list-style-type: none"> 1. Use light colored materials with an initial solar reflectance value of at least .30 as determined in accordance with ASTM Standards E1918 or C1549. 2. Use open-grid pavement system or pervious or permeable pavement system. <p>A5.106.11.2 Cool Roof. Use roofing materials having a minimum 3-year 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) equal to or greater than the values shown in Table A5.106.11.2.2 - Tier 1. (Support documentation required at application submittal)</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Special Inspector <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
ENERGY EFFICIENCY	<i>All checked items are required for the project</i>	<i>No elective measures required from A5.2</i>	<i>Select all measures verified in the completed project</i>
PERFORMANCE REQUIREMENTS			
5.201.1 Scope. Building meets or exceeds the requirements of the California Building Energy Efficiency Standards.	<input checked="" type="checkbox"/>		City Bldg Inspector <input type="checkbox"/> May require HERS
<i>Description of proposed measures:</i>	<i>Sheet: Detail:</i>		

2. Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.			
A5.304.4.1 Potable water reduction. Provide water efficient landscape irrigation design that reduces by the use of potable water to a quantity that does not exceed 60 percent of ETo times the landscape area. (Tier 1) Methods used to accomplish the requirements of this section shall include, but not be limited to, the items listed in A5.304.4.	<input checked="" type="checkbox"/>		<input type="checkbox"/>
A5.304.4.3 Verification of compliance. A calculation demonstrating the applicable potable water use reduction required by this section shall be provided.	<input checked="" type="checkbox"/>		<input type="checkbox"/>
A5.304.5 Potable water elimination. Provide a water efficient landscape irrigation design that eliminates the use of potable water beyond the initial requirements for plant installation and establishment.		<input type="checkbox"/>	<input type="checkbox"/>
A5.304.6 Restoration of areas disturbed by construction. Restore all areas disturbed during construction by planting with local native and/or non-invasive vegetation.		<input type="checkbox"/>	<input type="checkbox"/>
A5.104.7 Previously developed sites. On previously developed or graded sites restore or protect at least 50percent of the site area with native and/or non-invasive vegetation.		<input type="checkbox"/>	<input type="checkbox"/>
A5.304.8 Graywater irrigation system. Install graywater collection system for onsite subsurface irrigation using graywater. See California Plumbing Code.		<input type="checkbox"/>	<input type="checkbox"/>
MATERIAL CONSERVATION AND RESOURCE EFFICIENCY	<i>All checked items are required for the project</i>	<i>Select at least one (1) elective measure from A5.4</i>	<i>Select all measures verified in the completed project</i>
EFFICIENT FRAMING SYSTEMS			
A5.404.1 Wood framing. Employ advanced wood framing techniques, or OVE, as permitted by the enforcing agency. See A5.404.1.2 for advanced framing techniques. A5.404.1.1 Structural or fire-resistance integrity. The OVE selected shall not conflict with structural framing methods or fire-rated assemblies required by the California Building code.		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
MATERIAL SOURCES			
A5.405.1 Regional materials. Select building materials or products for permanent installation on the project that have been harvested or manufactured in California or within 500 miles of the project site, meeting the criteria listed in A5.405.1.		<input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/>
A5.405.2 Bio-based materials. Select bio-based building materials and products made from solid wood, engineered wood, bamboo, wool, cotton, cork, straw, natural fibers, products made from crops (soy-based, corn-based) and other bio-based materials with a least 50% bio-based content. A5.405.2.1 Certified wood: Certified wood is an important component of green building strategies and the California Building Standards Commission will continue to develop a standard through the next code cycle. A5.405.2.2 Rapidly renewable materials: Use materials made from plants harvested within a ten-year cycle for at least 2.5% of the total materials value, based on estimated cost.		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<i>Special Inspector</i> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

OUTDOOR AIR QUALITY			
<p>5.508.1 Ozone depletion and global warming reductions. Installations of HVAC, refrigeration, and fire suppression equipment shall comply with Sections 5.508.1.1 and 5.508.1.2.</p> <p>5.508.1.1 CFCs. Install HVAC and refrigeration equipment that does not contain CFCs.</p> <p>5.508.1.2 Halons. Install fire suppression equipment that does not contain Halons.¹</p> <p>A5.508.1.3 Hydrochlorofluorocarbons (HCFCs). Install HVAC and refrigeration equipment that does not contain HCFCs.</p> <p>A5.508.1.4 Hydrofluorocarbons (HFCs). Install HVAC complying with either of the following:</p> <ol style="list-style-type: none"> 1. Install HVAC, refrigeration and fire suppression equipment that do not contain HFCs or that do not contain HFCs with a global warming potential greater than 150. 2. Install HVAC and refrigeration equipment that limit the use of HFC refrigerant through the use of a secondary heat transfer fluid with a global warming potential no greater than 1. 	As applicable		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<p>Supermarket refrigerant leak reduction. New commercial refrigeration systems shall comply with the provision of section 5.508.2 when installed in retail food stores of 8,000 sq. ft. or more of 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) include both new facilities and the replacement of existing refrigeration systems in existing facilities.</p> <p>Exception: Refrigeration systems containing low-global warming potential (low GWP) refrigerant with GWP value less than 150 are not subject to this section. Low-GWP refrigerants are nonozone-depleting refrigerants that include ammonia, carbon dioxide (CO2), and potentially other refrigerants.</p> <p>Note: See all requirements for refrigerant piping, valves, refrigerated service cases, refrigerant receivers, pressure testing and system evacuation contained under section 5.508.2</p>	<input checked="" type="checkbox"/>		<input type="checkbox"/>
ADDITIONAL ELECTIVE MEASURE			
<p>A5.601.2.4.5 Additional elective measure. Pursuant to Tier 1 requirements, select one additional Tier 1 elective measure from any division.</p>	<input checked="" type="checkbox"/>		<i>Special Inspector</i>

INSTALLER AND SPECIAL INSPECTOR QUALIFICATIONS			
Qualifications	All checked items are required for the project		Select all measures verified in the completed project
<p>702.1 HVAC system installers are trained and certified in the proper installation of HVAC systems.</p>	<input checked="" type="checkbox"/>		<i>Special Inspector</i> <input type="checkbox"/>
<p>702.2 The green building special inspector for this project <u>is listed by the City of Cotati</u> as an approved green building special inspector and is qualified and able to demonstrate competence in the discipline they inspect and verify.</p>	<input checked="" type="checkbox"/>		City Plan Check Staff <input type="checkbox"/>

Green Building Acknowledgments

Project Address: _____

Project Description: _____

Project Bldg Permit # _____

Section 1 - Design Verification

Complete all lines of Section 1- "Design Verification" and submit the completed checklist (Columns 1 and 2) with the plans and building permit application to the Building Division.

The owner, design professional and green building special inspector have reviewed the plans and certify that the items checked above are hereby incorporated into the project plans and will be implemented into the project in accordance with the requirements set forth in the 2013 California Green Building Standards Code as amended by Chapter 18 of the Cotati City Code.

Owner's Signature

Date

Owner Name (Please Print)

Design Professional's Signature

Date

Design Professional's Name (Please Print)

Signature of Listed Green Building Special Inspector

Date

Listed Green Building Special Inspector's Name (Please Print)

Phone

Green Building Special Inspector's E-mail Address

Section 2 - Implementation Verification

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

I have inspected the work have received sufficient documentation to verify and certify that the project identified above was constructed in accordance with this Green Building Checklist and in accordance with the requirements set forth in the 2013 California Green Building Standards Code as amended by Chapter 18 of the Cotati Code.

Listed City of Cotati Approved CALGreen Special Inspector Signature

Date

Green Building Special Inspector's Name (Please Print)

Phone (if different than above)

Green Building Special Inspector's E-mail Address (if different than above)