



City of Larkspur

400 Magnolia Avenue, Larkspur, California 94939
Telephone: (415) 927-5110 Fax: (415) 927-5022
Website: www.cityoflarkspur.org

City of Larkspur 2013 CALGreen Checklist Residential New Construction

This checklist applies to building permit applications received on or after January 1, 2014, for newly constructed hotels, motels, lodging houses, dwellings, dormitories, condominiums, shelters, congregate residences, employee housing, factory-built housing and other types of dwellings containing sleeping accommodations with or without a common toilet or cooking facilities including accessory buildings, facilities and uses thereto.

Additions and alterations to existing structures¹ are also subject to the requirements of CALGreen but are not included in this checklist. See City of Larkspur website for a residential addition and alteration checklist. Repairs to existing structures are not subject to CALGreen. Existing site and landscaping improvements that are not otherwise disturbed are not subject to CALGreen.

Project Address: _____

Project Name: _____

Project Description: _____

1. The owner/owner's agent and the design professional, as required, shall initially complete **Columns 1 and 2** of this checklist, sign and date the **Design Verification** section at the end of this checklist for submission of permit application. City of Larkspur plans examiners shall review checklist for compliance. The approved checklist shall be printed on the project plans as a prerequisite for plan approval.
2. Prior to final inspection by the Building Department, the building inspector shall complete **Column 3** and sign and initial, and date the **Implementation Verification** section at the end of this checklist.

Note: All mandatory Tier 1 requirements are placed in the Mandatory column. Optional Tier 1 features have not been checked, and require selection by the owner/ agent or design professional.

¹ Where more than seventy-five percent (75%) of all existing walls of an existing structure are demolished or deconstructed the structure shall be treated as a new building.

<p align="center">Column 1 Feature or Measure</p>	<p align="center">Column 2 Project Requirements</p> <p align="center"><i>When checked, these items become part of the approved plans and must be installed or incorporated into the project.</i></p>		<p align="center">Column 3 Verification</p> <p align="center"><i>Complete when Column 2 checked items verified prior to final inspection approval</i></p>
<p align="center"><i>See Chapter 4 and Appendix A4 of the 2013 California Green Building Code and the local jurisdiction for complete descriptions of features or measures listed here.</i></p>	<p align="center">Mandatory Requirements</p>	<p align="center">Tier 1 electives <i>Applicant selects elective measure(s)</i></p>	<p align="center">Verification by Building Inspector</p>
<p align="center">PLANNING AND DESIGN</p>	<p align="center"><i>All checked items are required for the project</i></p>	<p align="center"><i>Select at least two (2) elective measures from A4.1</i></p>	<p align="center"><i>Select all measures verified in the completed project</i></p>
<p>SITE SELECTION</p>			
<p>A4.103.1 Selection. A site which complies with at least one of the following characteristics is selected:</p> <ol style="list-style-type: none"> 1. An infill site is selected. 2. A greyfield site is selected. 3. An EPA-recognized and remediated Brownfield site is selected. <p>A4.103.2 Community Connectivity. Facilitate community connectivity by one of the following methods:</p> <ol style="list-style-type: none"> 1. Locate project within a 1/4-mile true walking distance of at least four (4) basic services, readily accessible by pedestrians. 2. Locate project within a 1/2-mile true walking distance of at least seven (7) basic services, readily accessible by pedestrians. 3. Other methods increasing access to additional resources. <p>Note: Examples of services include, but are not limited to, bank, place of worship, convenience grocery, day care, cleaners, fire station, barber shop, beauty shop, hardware store, laundry, library, medical clinic, dental clinic, senior care facility, park, pharmacy, post office, restaurant, school, supermarket.</p>		<p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p>	<p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p>
<p>SITE PRESERVATION</p>			
<p>A4.104.1 Supervision and education. An individual with oversight responsibility has participated in an educational program promoting environmentally friendly design or development and has provided training or instruction to appropriate entities.</p>		<p align="center"><input type="checkbox"/></p>	<p align="center"><input type="checkbox"/></p>
<p>DECONSTRUCTION AND REUSE OF EXISTING MATERIALS</p>			
<p>A4.105.2 Existing buildings are disassembled for reuse or recycling of materials. The project utilizes at least 1 of the following materials for reuse:</p> <ol style="list-style-type: none"> 1. Light fixtures 2. Plumbing fixtures 3. Doors and trim 4. Masonry 5. Electrical devices 6. Appliances 7. Foundations or portions of foundations 		<p align="center"><input type="checkbox"/></p>	<p align="center"><input type="checkbox"/></p>

SITE DEVELOPMENT			
<p>4.106.2 Storm water drainage and retention during construction. A plan is developed and implemented to manage storm water during construction in accordance with requirements prescribed in Sonoma County Code Chapter 11A.</p>	☒		
<p>A4.106.2 Soil analysis and protection. The soils at the building site are analyzed and protected as specified in this section.</p> <p>A4.106.2.1 Soil analysis. Soil analysis (geotechnical report) is performed by a licensed design professional and the findings utilized in the structural design of the building.</p> <p>A4.106.2.2 Soil protection. Soil disturbance and erosion are minimized by at least one of the following:</p> <ol style="list-style-type: none"> 1. Natural drainage patterns are evaluated and erosion controls implemented to minimize erosion during construction and after occupancy. 2. Site access is accomplished by minimizing the amount of cut and fill to install access roads/driveways. 3. Underground construction activities are coordinated to utilize the same trench, minimize the amount of time the disturbed soil is exposed and the soil is replaced using accepted compaction methods. <p>A4.106.2.3 Displaced topsoil is stockpiled for reuse in designated area and covered or protected from erosion.</p>	☒	☐ ☐	
<p>4.106.3 Grading and paving. Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include swales, water collection and disposal systems, French drains, water retention gardens or other measures which keep surface water away from buildings and aid in groundwater recharge.</p>	☒		
<p>A4.106.3 Landscape design. Post construction landscape designs accomplish one or more of the following:</p> <ol style="list-style-type: none"> 1. Areas disrupted during construction are restored to be consistent with native vegetation 2. Limit turf areas to not more than 50% (Tier 1). 3. Utilize at least 75% native Californian or drought tolerant plant and tree species appropriate for the climate zone region. 4. Hydrozoning irrigation techniques are incorporated into the landscape design. 		☐	
<p>A4.106.4 Water permeable surfaces. Permeable paving is utilized for not less than 20 percent of the total parking, walking, or patio surfaces.</p> <p>Exception: Primary driveway, primary entry walkway and entry porch/landing or required accessible routes for persons with disabilities shall not be included when calculating the area required to be a permeable surface.</p>	☒		
<p>A4.106.5 Cool Roof for reduction of heat island effect. Cool Roof designed and constructed as required by the <i>California Energy Code</i>.</p>	☒		Requirement plan checked and inspected as prescribed in the CEC.

<p>A4.106.6 Vegetated roof. Install a vegetated roof for at least 50% of the roof area in compliance with requirements for roof gardens and landscaped roofs set forth in the <i>California Building Code</i>, Chapters 15 & 16.</p>		<input type="checkbox"/>	<input type="checkbox"/>
<p>A4.106.7 Reduction of heat island effect for nonroof areas. Reduce nonroof heat islands for 50% of sidewalks, patios, driveways or other paved areas by using one or more of the following methods:</p> <ol style="list-style-type: none"> 1. Trees or other plantings to provide shade and that mature within 15 years of plantings. 2. Use of high albedo materials. 3. Use open grid pavement system or pervious or permeable pavement system. 4. Locate 50% of parking underground or use multi-level parking. 5. Other methods of reducing heat island effects acceptable to the enforcement agency. 		<input type="checkbox"/>	<input type="checkbox"/>
<p>A4.106.8 Electric vehicle (EV) charging. Provide capability for the installation of electrical vehicle supply equipment in single-family and multifamily structures.</p>		<input type="checkbox"/>	<input type="checkbox"/>
<p>A4.106.9 Bicycle parking. Provide bicycle parking facilities as noted below. Number of bicycle parking spaces may be reduced, as approved by the enforcing agency, due to building site characteristics, including but not limited to, isolation from other development.</p> <ol style="list-style-type: none"> 1. Provide short-term bicycle parking, per Section A4.106.9.1. 2. Provide long-term bicycle parking, per Section A4.106.9.2. 3. Provide long-term bicycle parking for hotel and motel buildings, per Section A4.106.9.3. 		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<p>A4.106.10 Light pollution reduction. Outdoor lighting systems for buildings four stories or more in height shall be designed and installed to comply with the following:</p> <ol style="list-style-type: none"> 1. The minimum requirements in the California Energy Code for Lighting Zones 1–4 as defined in Chapter 10 of California Administrative Code; and 2. Backlight, Uplight and Glare (BUG) ratings as defined in IES TM-15-11; and 3. Allow BUG ratings not exceeding those shown in Table A4.106.10. <p>Exceptions:</p> <ol style="list-style-type: none"> 1. Luminaires that qualify as exceptions in the California Energy Code. 2. Emergency lighting. 3. One- and two-family dwellings. 		<input type="checkbox"/>	<input type="checkbox"/>
INNOVATIVE CONCEPTS AND LOCAL ENVIRONMENTAL CONDITIONS			
<p>A4.107.1 Items in this section are necessary to address innovative concepts or local environmental conditions. These items must be approved by the Building Department <u>prior</u> to listing here.</p>			
<p>Item 1:</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Item 2:</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ENERGY EFFICIENCY	All checked items are required		Select all measures verified in the completed project
PERFORMANCE REQUIREMENTS			
4.201.1. Scope. Building meets or exceeds the requirements of the California Building Energy Efficiency Standards. ²	☒		☐
WATER EFFICIENCY AND CONSERVATION	All checked items are required	Select at least two (2) elective measure from A4.3	Select all measures verified in the completed project
INDOOR WATER USE			
<p>4.303.1 Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:</p> <p>4.303.1.1 Water closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush.</p> <p>4.303.1.2 Urinals. The effective flush volume of urinals shall not exceed 0.5 gallons per flush.</p> <p>4.303.1.3 Showerheads.</p> <p>4.303.1.3.1 Single Showerheads. Showerheads shall have a maximum flow rate of not more than 2.0 gallons per minute at 80 psi.</p> <p>4.303.1.3.2 Multiple Showerheads. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads controlled by a single valve shall not exceed 2.0 gallons per minute at 80 psi., or the shower shall be designed to allow only one shower outlet to be in operations at a time.</p>	<p style="text-align: center;">☒</p> <p style="text-align: center;">☒</p> <p style="text-align: center;">☒</p> <p style="text-align: center;">☒</p>		<p style="text-align: center;">☐</p> <p style="text-align: center;">☐</p> <p style="text-align: center;">☐</p> <p style="text-align: center;">☐</p>
<p>4.303.1.4 Faucets.</p> <p>4.303.1.4.1 Residential lavatory faucets. The maximum flow rate of residential lavatory faucets shall not exceed 1.5 gpm at 60 psi nor be less than 0.8 gpm at 20 psi.</p> <p>4.303.1.4.2 Lavatory faucets in common and public use areas. The maximum flow rate of lavatory faucets installed in common and public use areas (outside dwellings or sleeping units) in residential buildings shall not exceed 0.5 gpm at 60 psi.</p> <p>4.303.1.4.3 Metering faucets. Metering faucets when installed in residential buildings shall not deliver more than 0.25 gallons per cycle.</p> <p>4.303.1.4.4 Kitchen faucets. The maximum flow rate of kitchen faucets may not exceed 1.8 gpm at 60 psi (May temporarily increase to 2.2 gpm). Note: Aerators OK if complying faucets not available.</p>	<p style="text-align: center;">☒</p> <p style="text-align: center;">☒</p> <p style="text-align: center;">☒</p> <p style="text-align: center;">☒</p>		<p style="text-align: center;">☐</p> <p style="text-align: center;">☐</p> <p style="text-align: center;">☐</p> <p style="text-align: center;">☐</p>
<p>A4.303.1 Kitchen faucets and dishwashers. Kitchen faucets shall have a maximum flow rate not greater than 1.5 gallons per minute at 60 psi. (May temporarily increase to 2.2 gpm). Note: Aerators OK if complying faucets are not available.</p>		☐	☐

² Provisions of the 2013 California Energy Code (CEC) and the 2013 Building Energy Efficiency Standards (BEES) become effective July 1, 2014. From January 1, 2014, to June 30, 2014, the 2010 CEC and 2008 BEES shall be used for Residential and Non-Residential portions of this code for Energy Efficiency, exclusive of Tier 1 requirements.

A4.303.2 Alternate water sources for nonpotable applications. Alternate nonpotable water sources are used for indoor potable water reduction. Alternate nonpotable water sources shall be installed in accordance with the <i>California Plumbing Code</i> .		<input type="checkbox"/>	<input type="checkbox"/>
A4.303.3 Appliances. Dishwashers and clothes washers in residential buildings shall comply with the following: Install at least one qualified ENERGY STAR appliance with maximum water use as follows: 1. Standard Dishwashers – 4.25 gallons per cycle. 2. Compact Dishwashers – 3.5 gallons per cycle 3. Clothes washers – water factor of 6 gallons per cubic feet of drum capacity.		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
A4.303.4 Nonwater supplied urinals and waterless toilets. Nonwater supplied urinals or incinerator toilets are installed.		<input type="checkbox"/>	<input type="checkbox"/>
OUTDOOR WATER USE³			
4.304.1 Irrigation controllers. Automatic irrigation systems installed at the time of final inspection shall be weather-based or soil based with rain sensor.	<input checked="" type="checkbox"/>		<input type="checkbox"/>
A4.304.1 Low-water consumption irrigation system. Install a low-water consumption irrigation system which minimizes the use of spray type heads.		<input type="checkbox"/>	<input type="checkbox"/>
A4.304.2 Rainwater systems. A rainwater capture, storage and re-use system is designed and installed to use rainwater generated by at least 65% of the available roof area in accordance with the <i>California Plumbing Code</i> .		<input type="checkbox"/>	<input type="checkbox"/>
A4.304.3 Water budget. A water budget shall be developed for landscape irrigation in accordance with Marin Municipal Water District Standards.		<input type="checkbox"/>	<input type="checkbox"/>
A4.304.4 Potable water reduction. Provide water efficient landscape irrigation design that reduces the use of potable water so it does not exceed 65% of ETo times the landscape area.	<input checked="" type="checkbox"/>		<input type="checkbox"/>
A4.304.5 Potable water elimination. A landscape design is installed which does not utilize potable water.		<input type="checkbox"/>	<input type="checkbox"/>
A4.304.6 Irrigation metering device. For new water service connections, landscaped irrigated areas more than 2,500 sq. ft. shall be provided with separate submeters or metering devices for outdoor potable water use.		<input type="checkbox"/>	<input type="checkbox"/>
WATER REUSE SYTEMS			
A4.305.1 Graywater. Alternate plumbing piping is installed to permit the discharge from the clothes washer or other fixtures to be used for an irrigation system in compliance with the <i>California Plumbing Code</i> .		<input type="checkbox"/>	<input type="checkbox"/>

³ Refer to SCC 7-D3 "Water Efficient Landscape" for other requirements, http://www.sonoma-county.org/prmd/docs/landscape_ord/index.htm

A4.305.2 Recycled water piping. Based upon projected availability, dual water piping is installed for future use of recycled water at interior and exterior locations. Interior piping for use of recycled water for water closets, urinals and floor drains. Exterior piping to transport recycled water from the point of connection to the structure.		<input type="checkbox"/>	<input type="checkbox"/>
A4.305.3 Recycled water for landscape irrigation. Recycled water is used for landscape irrigation.		<input type="checkbox"/>	<input type="checkbox"/>
INNOVATIVE CONCEPTS AND LOCAL ENVIRONMENTAL CONDITIONS			
A4.306.1 Innovative concepts and local environmental conditions. Items in this section are necessary to address innovative concepts or local environmental conditions. These items must be approved by the Building Division prior to listing here.			
Item 1:		<input type="checkbox"/>	<input type="checkbox"/>
Item 2:		<input type="checkbox"/>	<input type="checkbox"/>
Item 3:		<input type="checkbox"/>	<input type="checkbox"/>
A4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY	<i>All checked items are required</i>	<i>Select at least two (2) elective measures from A4.4</i>	<i>Select all measures verified in the completed project</i>
FOUNDATION SYSTEMS			
A4.403.2 Reduction in cement use. Cement use in foundation mix design is reduced by not less than a 20 percent by incorporating admixture products commonly used to replace cement such as fly ash, slag, silica fume, or rice hull ash.	<input checked="" type="checkbox"/>		<input type="checkbox"/>
EFFICIENT FRAMING TECHNIQUES			
A4.404.1 Lumber size. Beams and headers and trimmers are the minimum size to adequately support the load.		<input type="checkbox"/>	<input type="checkbox"/>
A4.404.2 Building dimensions & layouts. Building dimensions and layouts are designed to minimize waste by at least one of the following measures in at least 80% of the structure: 1. Building design dimensions in 2' increments 2. Windows & doors are located at regular 16" or 24" stud positions. 3. Other methods acceptable by enforcement agency.		<input type="checkbox"/>	<input type="checkbox"/>
A4.404.3 Building systems. Use pre-manufactured building systems to eliminate solid sawn lumber whenever possible.		<input type="checkbox"/>	<input type="checkbox"/>
A4.404.4 Pre-cut materials and details. Material lists are included in the plans which specify material quantity and provide direction for on-site cuts.		<input type="checkbox"/>	<input type="checkbox"/>

MATERIAL SOURCES			
<p>A4.405.1 Prefinished building materials. One or more of the following building materials, that do not require additional resources for finishing are used:</p> <ol style="list-style-type: none"> 1. Exterior trim not requiring paint or stain. 2. Windows not requiring paint or stain. 3. Siding or exterior wall coverings which do not require paint or stain. 		<input type="checkbox"/>	<input type="checkbox"/>
<p>A4.405.2 Concrete floors. Floors that do not require additional coverings are used including but not limited to stained, natural, or stamped concrete floors.</p>		<input type="checkbox"/>	<input type="checkbox"/>
<p>A4.405.3 Recycled content. Post- or pre-consumer recycled content value (RCV) materials with not less than a 10-percent RCV are used on the project.</p>	<input checked="" type="checkbox"/>		<input type="checkbox"/>
<p>A4.405.4 Use of building materials from rapidly renewable sources. One or more of the following materials manufactured from rapidly renewable sources or agricultural by-products is used.</p> <ol style="list-style-type: none"> 1. Insulation 2. Bamboo or cork 3. Engineer products 4. Agricultural based products. 5. Other products acceptable to enforcing agency. 		<input type="checkbox"/>	<input type="checkbox"/>
ENHANCED DURABILITY AND REDUCED MAINTENANCE			
<p>4.406.1 Rodent proofing. Annular spaces around pipes, electric cables, conduits, or other openings in plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or similar method acceptable to the enforcing agency.</p>	<input checked="" type="checkbox"/>		<input type="checkbox"/>
WATER RESISTANCE AND MOISTURE MANAGEMENT			
<p>A4.407.1 Drainage around foundation. Install foundation and landscape drains.</p>		<input type="checkbox"/>	<input type="checkbox"/>
<p>A4.407.2 Roof drainage. Install gutter and downspout systems to route water at least 5 feet away from the foundation or connect to landscape drains which discharge to a dry well, sump, bioswale, rainwater capture system or other approved on-site location.</p>		<input type="checkbox"/>	<input type="checkbox"/>
<p>A4.407.3 Flashing details. Provide flashing details on the building plans and comply with accepted industry standards or manufacturer's instructions.</p>		<input type="checkbox"/>	<input type="checkbox"/>
<p>A4.407.4 Material protection. Protect building materials delivered to the construction site from rain and other sources of moisture.</p>		<input type="checkbox"/>	<input type="checkbox"/>
<p>A4.407.6 Door protection. Exterior doors to the dwelling are protected by min. 4 ft. to prevent water intrusion.</p>		<input type="checkbox"/>	<input type="checkbox"/>
<p>A4.407.7 Roof overhangs. A permanent overhang or awning at least 2 feet in depth is provided at all exterior walls.</p>		<input type="checkbox"/>	<input type="checkbox"/>

CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING			
<p>4.408.1 Construction waste management. Recycle and/or salvage for reuse a minimum of 50% of the nonhazardous construction and demolition waste in accordance with one of the following:</p> <ol style="list-style-type: none"> 1. Submit a construction waste management plan, per Section 4.408.2; or 2. Utilize a waste management company, per Section 4.408.3. <p>Exceptions:</p> <ol style="list-style-type: none"> 1. Excavated soil and land-clearing debris 2. Alternate waste reduction methods 3. Isolated job sites <p>Note: The owner or contractor shall make the determination if the construction waste material will be diverted by a waste management</p>	<input checked="" type="checkbox"/>		<input type="checkbox"/>
<p>A4.408.1 Enhanced construction waste reduction. At least 65% of nonhazardous construction and demolition debris generated at the site is diverted to recycle or salvage.</p> <p>A4.408.1.1 Documentation. Documentation shall be provided to the enforcing agency which demonstrates compliance with this section. Documentation shall be in compliance with Section 4.408.5</p>	<input checked="" type="checkbox"/>		<input type="checkbox"/>
BUILDING MAINTENANCE AND OPERATION			
<p>4.410.1 Operation and maintenance manual. At the time of final inspection, a manual which includes all of the following shall be placed in the building:</p> <ol style="list-style-type: none"> 1. Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure. 2. Operation and maintenance instructions for equipment and appliances, roof and yard drainage, space conditioning systems, landscape irrigation systems, and water reuse systems. 3. Information on local recycling programs and locations. 4. Public transportation and/or carpool options available in the area. 5. Educational material on the positive impacts of interior relative humidity between 30–60%. 6. Information about water-conserving landscape and irrigation design and controllers which conserve water. 7. Instructions for maintaining gutters and downspouts and importance of diverting water at least 5 ft. away from the foundation. 8. Information on required routine maintenance measures including caulking, painting, grading around the house, etc. 9. Information about state solar energy and incentive programs available. <p>A copy of all special inspection verifications required by the enforcing agency or this code.</p>	<input checked="" type="checkbox"/>		<input type="checkbox"/>
INNOVATIVE CONCEPTS AND LOCAL ENVIRONMENTAL CONDITIONS			
<p>A4.411.1 Innovative concepts and local environmental conditions. Items in this section are necessary to address innovative concepts or local environmental conditions.</p> <p>Note: Pre-approval of plan by Chief Building Official required.</p>			

Item 1.		<input type="checkbox"/>	<input type="checkbox"/>
Item 2.		<input type="checkbox"/>	<input type="checkbox"/>
A4.5 ENVIRONMENTAL QUALITY		<i>All checked items are required</i>	<i>Select at least one (1) elective measure from A4.5</i>
FIREPLACES			
<p>4.503.1 Fireplaces. Any installed gas fireplace shall be a direct-vent or sealed-combustion type. Any wood stove or wood heating appliance shall be certified by the United States Environmental Protection Agency and included in the US EPA's published List of EPA Certified Wood Stoves.</p> <p>Note: Refer to the following website for EPA's published list of certified products: www.epa.gov/compliance/resources/publications/monitoring/caa/woodstoves/certifiedwood.pdf</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
POLLUTANT CONTROL			
<p>4.504.1 Covering of duct openings and protection of mechanical equipment during construction. Duct openings and other related air distribution component openings shall be covered during construction.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<p>A4.504.1 Compliance with formaldehyde limits. Use composite wood products made with either California Air Resources Board approved no-added formaldehyde resins or ultra-low emitting formaldehyde resins.</p>		<input type="checkbox"/>	
<p>4.504.2 Finish material pollutant control. Finish materials shall comply with this section:</p> <p>4.504.2.1 Adhesives, sealants and caulks shall be compliant with VOC and other toxic compound limits in CALGreen Table 4.504.1 or 4.504.2 as applicable.</p> <p>4.504.2.2 Paints, stains and other coatings shall be compliant with VOC limits in CALGreen Table 4.504.3.</p> <p>4.504.2.3 Aerosol paints and other coatings shall be compliant with product weighted MIR Limits for ROC and other toxic compounds.</p> <p>4.504.2.4 Documentation shall be provided to verify that compliant VOC limit finish materials have been used.</p>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<p>A4.504.2 Resilient flooring systems. At least 90% of the resilient flooring systems installed in the building shall comply with the VOC-emission limits defined in at least one of the 4 listed criteria in Section A4.504.2 (Tier 1)</p> <p>Note: Documentation must be provided that verifies that finish materials are certified to meet the pollutant emission limits in this section.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<p>4.504.3 Carpet systems. Carpet and carpet systems shall meet the testing and product requirements of one of the listed items, 1–4 in Section 4.504.3.</p> <p>4.504.3.1 All carpet cushion installed shall meet the requirements of the Carpet and Rug Institute's Green Label program.</p> <p>4.504.3.2 All carpet adhesive shall meet the requirements of Table 4.504.1</p>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

<p>A4.504.3 Thermal insulation. Install thermal insulation in compliance with the VOC-emission limits defined in Collaborative for High Performance Schools (CHPS) Low-emitting Materials List.</p> <p>Note: Documentation must be provided that verifies that finish materials are certified to meet the pollutant emission limits in this section.</p>	☒		☐
<p>4.504.4 Resilient flooring systems. 80% of floor area receiving resilient flooring shall comply with the VOC-emission limits defined in the Collaborative for High Performance Schools (CHPS) High Performance Products Database or be certified under the Resilient Floor Covering Institute (RFCI) FloorScore program; or meet California Dept. of Public Health, "Standard Method for Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.1, February 2010 (also known as Specification 01350).</p>	☒		☐
<p>4.504.5 Composite wood products. Hardwood plywood, particleboard and medium density fiberboard (MDF) composite wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde as specified in the ARB's Air Toxics Control Measure for Composite Wood as shown in Table 4.504.5</p> <p>4.504.5.1 Documentation. Verification of compliance with this section shall be provided as requested by the enforcing agency.</p>	☒		☐
INTERIOR MOISTURE CONTROL			
<p>4.505.2 Concrete slab foundations. Vapor retarder and capillary break is installed at slab-on-grade foundations. Capillary break shall be installed in compliance with at least one of the following:</p> <ol style="list-style-type: none"> 1. A 4" thick base of 1/2" or larger clean aggregate w/vapor barrier in direct contact with concrete; 2. Other equivalent method approved by the enforcing agency; 3. A slab design specified by a licensed designed professional. 	☒		☐
<p>4.505.3 Moisture content of building materials. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19% moisture content. Moisture content shall be verified in compliance with the following:</p> <ol style="list-style-type: none"> 1. By a probe-type or contact-type moisture meter or other equivalent methods approved by the enforcing agency. 2. Readings shall be taken at a point 2 ft. to 4 ft. from the grade stamped end of each piece to be verified. 3. Minimum of 3 random reading shall be performed on wall and floor framing with documentation provided to enforcing agency. 	☒		☐
INDOOR AIR QUALITY AND EXHAUST			
<p>4.506.1 Bathroom exhaust fans. Each bathroom shall be mechanically ventilated and shall comply with the following:</p> <ol style="list-style-type: none"> 1. Fans shall be ENERGY STAR compliant and ducted to terminate outside the buildings. 2. Unless functioning as a whole house ventilation system, fans must be humidity controlled. Controls must be capable of a relative humidity adjustment from 50–80%. Humidity control may be a separate component to the exhaust fan and is not required to be integral or built-in. <p>Note: For the purpose of this section, a bathroom is a room which contains a bathtub, shower, or combination shower/tub.</p>	☒		☐

A4.506.1 Filters. Return air filters with a value greater than MERV 6 shall be installed on HVAC systems. Pressure drop across the filter shall not exceed 0.1 inches water column.		<input type="checkbox"/>	<input type="checkbox"/>
A4.506.2 Construction filter (HR⁴). Provide filters on return air openings rated at MERV 6 or higher during construction.		<input type="checkbox"/>	<input type="checkbox"/>
A4.506.3 Direct-vent appliances. Direct-vent heating and cooling equipment shall be utilized if the equipment is located in the conditioned space; or the equipment must be installed in an isolated mechanical room.		<input type="checkbox"/>	<input type="checkbox"/>
ENVIRONMENTAL COMFORT			
4.507.2. Heating and air-conditioning system design. Duct systems are sized, designed and have their equipment selected using the following methods: <ol style="list-style-type: none"> 1. Establish heat loss and heat gain values according to ANSI/ACCA 2 Manual J-2004, ASHRAE handbooks, or equivalent. 2. Size duct systems according to ANSI/ACCA 1 Manual D-2009, ASHRAE handbooks, or equivalent. 3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S-2004 or equivalent. Exception: Use of alternate design temperatures necessary to ensure the systems function are acceptable.	<input checked="" type="checkbox"/>		<input type="checkbox"/>
INNOVATIVE CONCEPTS AND LOCAL ENVIRONMENTAL CONDITIONS			
A4.509.1 Items in this section are necessary to address innovative concepts or local environmental conditions. Note: Pre-approval of plan by Chief Building Official required.			
Item 1.		<input type="checkbox"/>	<input type="checkbox"/>
Item 2.		<input type="checkbox"/>	<input type="checkbox"/>
INSTALLER AND SPECIAL INSPECTOR QUALIFICATIONS			<i>Select all measures verified in the completed project</i>
QUALIFICATIONS			
702.1 Installer training. HVAC system installers are trained and certified in the proper installation of HVAC systems.	<input checked="" type="checkbox"/>		<input type="checkbox"/>

4 For the purpose of CALGreen, any building that is of Occupancy Group R and is four stories or more in height is a high-rise residential building.

Green Building Acknowledgments

Project Address: _____

Project Description: _____

Section 1 – Design Verification

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

The owner/owner's agent, design professional and Larkspur Plans Examiner 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 the local jurisdiction.

Owner's Signature

Date

Owner Name *(Please Print)*

Design Professional's Signature

Date

Design Professional's Name *(Please Print)*

Signature of Plans Examiner

Date

Section 2 – Implementation Verification

Complete, sign and submit the completed checklist, including Column 3, together with all original signatures on Section 2 – "Implementation Verification" to the Building Department prior to Building 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 set forth in the *2013 California Green Building Standards Code* as amended by the local jurisdiction.

Inspector Signature

Date

Inspector's Name *(Please Print)*

Phone *(if different than above)*