

**2019 CALGREEN RESIDENTIAL CORRECTION LIST
(Effective Jan 1, 2020)**

Plan Check No.	Review No:	Plan Check Expiration Date: 1 year from submittal
Site Address:		Number of Story:
Project Description:		Area square feet:
Type of Occupancy:		
Type of Construction:	Sprinklered:	Part 150 area:

Applicant:	Phone:
Owner:	Phone:
Architect/Engineer/Draftsman:	Phone:

Reviewed by:	Date:	Ph: (909)395-	, e-mail:	@ontarioca.gov
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INSTRUCTIONS:

- ⇒ Numbers in bracket [] refer to code sections of 2019 California Green Buildings Standards Code (*CALGreen*) effective Jan 1, 2020.
- ⇒ Correct original drawings. Reprint and submit 2 new sets together with the “marked-up” set. Return this corrections list with corrected plans.
- ⇒ In the Respond column, please indicate the sheet number and detail or note number on the plan where the corrections are made.
- ⇒ Itemize any changes, revisions, or additions made to drawings that are not a direct answer to a correction on a separate sheet.
- ⇒ Additional plan check fee will be required after third review on hourly rate basis.

Item #	Sheet #	Correction Requested	Respond
1		Show the correct address of building on plans.	
2		Show the name and address of the owner and person preparing the plan.	
3		Indicate on plan the applicable current codes: <ul style="list-style-type: none"> • 2019 California Green Building Standards Code (<i>CALGreen</i>) • 2019 California Energy Code 	
4		Provide an index of drawings on the cover sheet of plans.	
5		Every newly constructed low-rise residential building (3 stories or less Occupancy Group R) or high-rise residential building (4 stories or greater Occupancy Group R) must show compliance with 2019 <i>CALGreen</i> [101.3, 301.2, and 202]. Additions or alterations of existing residential buildings also must comply with the mandatory provisions of chapter 4. The requirements shall apply only to and/or within the specific area of the addition or alteration [301.1.1]. Print on plan the required mandatory measures.	
6		Residential buildings undergoing permitted alterations, additions, or improvement shall replace noncompliance plumbing fixtures with water-conserving plumbing fixtures [4.303.1 note]	
7		Because of special conditions, the City may require the construction documents to be prepared by a licensed design professional. [102.1]	
8		The construction documents shall provide sufficient clarity to indicate the location, nature, and scope of the proposed green building features. [102.2]	

9		Plans shall indicate method of verification of compliance with all <i>CALGreen</i> requirements [102.3]. Third party or other methods shall demonstrate satisfactory conformance with mandatory measures. Include City's Mandatory Measures Checklist copied onto plans.	
10		In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy [302.1]. Exceptions: a) Accessory structures and accessory occupancies serving residential buildings shall comply with Chapter 4 as applicable. b) Live/work units shall comply with Chapter 4 as applicable.	
11		Storm Water Drainage and Retention during construction [4.106.2]: Submit storm water drainage plans for projects < 1 acre and not part of a larger common plan of development which in total disturbs ≥ 1 acre. Plans shall indicate how to manage storm water drainage during construction utilizing one or more of the following measures: a) Use of retention basins of sufficient size to retain storm water on-site. b) By filtering storm water with a barrier system, wattle, or other approved method when storm water is conveyed to a public drainage system, collection point, gutter, or similar disposal method. c) By complying with a lawfully enacted storm water management ordinance.	
12		Surface drainage [4.106.3]: Submit surface drainage plans to indicate how surface water shall not enter buildings. Examples of methods to manage surface water include: a) Swales b) Water collection and disposal systems c) French Drains d) Water retention gardens e) Other water measures which keep surface water away from buildings and aid in groundwater recharge. <i>Exception:</i> Additions and alterations not altering the drainage path.	
13		Provide documentation to indicate the project meets the requirements of State mandatory energy efficiency standards. [4.201.1]	
14		Provide capability for electric vehicle (EV) charging for new one- and two-family dwellings and in townhouses with attached private garages [4.106.4.1]: a) Install a 1" dia. minimum listed raceway for dedicated 208/240-volt branch circuit for each dwelling unit. The raceway shall originate at the main service or subpanel and terminate into a listed cabinet, box or other enclosure in close proximity to the proposed EV charger location. b) The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit over-current protective device. c) The service panel or subpanel shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE". [4.106.4.1.1]	
15		For new multifamily dwellings , if residential parking is available provide 10% of the total number of parking spaces on a building site for electric vehicle charging spaces (EV spaces) capable of supporting future EVSE. (Note: there is no requirement for EV spaces to be constructed or available until EV chargers are installed for use). [4.106.4.2] EV space location: Show on site plan location of proposed EV spaces. Where common use parking is provided, at least one EV space shall be located in common use parking area and available for use by all residents. [4.106.4.2.1] When EV Chargers are installed: EV spaces required shall comply with at least one of the following options [4.106.4.2.1.1]: a) The EV space shall be located adjacent to an accessible parking spaces to allow use of the EV charger from the accessible parking. b) The EV space shall be located on accessible route to the building.	

	<p>EV space dimensions: EV spaces shall comply with the following [4.106.4.2.2]:</p> <ol style="list-style-type: none"> a) Provide one in every 25 EV spaces, but not less than one EV space. b) The minimum dimension shall be 18' (length) X 9' (width) with 8' wide minimum aisle. A 5' wide minimum aisle is permitted provided the minimum width of the EV space is 12'. c) Surface slope and aisle slope of EV space is 2.083 % max. in any direction. <p>When single EV space required:</p> <ol style="list-style-type: none"> a) Install a 1" dia. minimum listed raceway for dedicated 208/240-volt branch circuit. The raceway shall originate at the main service or subpanel and terminate into a listed cabinet, box or other enclosure in close proximity to the proposed EV space location. b) The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit over-current protective device. <p>When multiple EV spaces required:</p> <ol style="list-style-type: none"> a) Plans shall indicate the raceway termination point and proposed location of future EV spaces and EV chargers. b) Plans shall also provide information on amperage of future EVSE, raceway method(s) wiring schematics and electrical load calculations to verify that the electrical panel service and electrical systems, including any on-site distribution transformers(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at the full rated amperage of the EVSE. Plan design shall be based upon a 40-ampere minimum branch circuit. c) Raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction. <p>EV space identification [4.106.4.2.5]: The service panel or subpanel shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE".</p>	
16	<p>For new hotels and motels provide EV spaces capable of supporting future installation of EVSE. Identify the location of the EV spaces on site plan. (Note: there is no requirement for EV spaces to be constructed or available until EV chargers are installed for use). [4.106.4.3]</p> <p>Number of required EV spaces: The number of required EV spaces shall be based on the total number of parking spaces provided for all types of parking facilities in accordance with Table 4.106.4.3.1.</p> <p>EV space dimensions [4.106.4.3.2]:</p> <ul style="list-style-type: none"> ▪ The minimum dimension shall be 18' (length) X 9' (width). <p>When single EV space required [4.106.4.3.3]:</p> <ol style="list-style-type: none"> a) Install a 1" dia. minimum listed raceway for dedicated 208/240-volt branch circuit. The raceway shall originate at the main service or subpanel and terminate into a listed cabinet, box or other enclosure in close proximity to the proposed EV space location. b) The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit over-current protective device. <p>When multiple EV spaces required [4.106.4.3.4]:</p> <ol style="list-style-type: none"> a) Plans shall indicate the raceway termination point and proposed location of future EV spaces and EV chargers. b) Plans shall also provide information on amperage of future EVSE, raceway method(s) wiring schematics and electrical load calculations to verify that the electrical panel service and electrical systems, including any on-site distribution transformers(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at the full rated amperage of the EVSE. Plan design shall be based upon a 40-ampere minimum branch circuit. 	

		<p>c) Raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.</p> <p>EV space identification [4.106.4.3.5]: The service panel or subpanel shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as “EV CAPABLE”.</p> <p>Accessible EV Spaces [4.106.4.2.6]: EV spaces for hotels/motels and all EVSE, <u>when installed</u>, shall comply with the accessibility provisions for EV charging in the CBC Chapter 11B.</p>																	
17		<p>Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) installed in residential buildings shall comply with requirements of Sections 4.303.1.1 through 4.303.1.4.4:</p> <table border="1"> <thead> <tr> <th>Plumbing fixtures & fittings</th> <th>Maximum Flow Rate</th> </tr> </thead> <tbody> <tr> <td>Water closets</td> <td>1.28 gallons/flush</td> </tr> <tr> <td>Showerheads</td> <td>1.8 gpm @ 80 psi</td> </tr> <tr> <td>Kitchen faucets</td> <td>1.8 gpm @ 60 psi</td> </tr> <tr> <td>Residential lavatory faucets</td> <td>1.2 gpm @ 60 psi max. and 0.8 gpm @ 20 psi min.</td> </tr> <tr> <td>Lavatory faucets in common & public use areas</td> <td>0.5 gpm @ 60 psi</td> </tr> <tr> <td>Metering faucets</td> <td>0.20 gallons/cycle</td> </tr> <tr> <td>Urinals</td> <td>0.125 gallons/flush for wall-mounted type, 0.5 gallons/flush for floor-mounted type or other type</td> </tr> </tbody> </table>	Plumbing fixtures & fittings	Maximum Flow Rate	Water closets	1.28 gallons/flush	Showerheads	1.8 gpm @ 80 psi	Kitchen faucets	1.8 gpm @ 60 psi	Residential lavatory faucets	1.2 gpm @ 60 psi max. and 0.8 gpm @ 20 psi min.	Lavatory faucets in common & public use areas	0.5 gpm @ 60 psi	Metering faucets	0.20 gallons/cycle	Urinals	0.125 gallons/flush for wall-mounted type, 0.5 gallons/flush for floor-mounted type or other type	
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18		<p>Plumbing fixtures and fittings required in Section 4.303.1 shall be installed in accordance with the 2019 California Plumbing Code, and shall meet the applicable referenced standards. [4.303.2]</p>																	
19		<p>Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of water Resources’ Model Water Efficient Landscape Ordinance (MWELO), whichever more stringent. [4.304.1]</p>																	
20		<p>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 a similar method acceptable to the enforcing agency. [4.406.1]</p>																	
21		<p>Reduce construction waste by recycling or salvaging for reuse a minimum of 65% of the nonhazardous construction and demolition waste, or meet the local construction and demolition waste management ordinance, whichever is more stringent. [4.408.1]</p>																	
22		<p>Submit a construction waste management plan in conformance with section 4.408.2 items 1 through 5:</p> <ol style="list-style-type: none"> 1) Identifies the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale. 2) Specifies if construction and demolition waste materials will be sorted on-site (source –separated) or bulk mixed (single stream). 3) Identifies diversion facilities where the construction and demolition waste material will be taken. 4) Identifies construction methods employed to reduce the amount of construction and demolition waste generated. 5) Specifies that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both. 																	
23		<p>Utilize a waste management company, approved by the enforcing agency, which can provide verifiable documentation that diverted construction and demolition waste materials meet the requirements in Section 4.408.1. [4.408.3]</p>																	
24		<p>Projects that generate a total combined weight of construction and demolition waste disposed in landfills, which do not exceed 3.4 lbs/sqft of the building area shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1. [4.408.4]</p>																	

25		Submit documentation demonstrating compliance with Section 4.408.2 Items 1 through 5, section 4.408.3, or Section 4.408.4. [4.408.5].	
26		Note on the drawings that an Operation and Maintenance Manual with content per 4.410.1 and in a format acceptable to the enforcing agency shall be placed in the building at the time of final inspection [4.410.1]. Refer to HCD residential guide for manual format and suggested content.	
27		Where 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible area(s) that serve all buildings on the site and is identified for depositing, storage and collection on non-hazardous materials for recycling including (at a minimum) paper, corrugated cardboard, glass plastics, organic waste, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive. [4.410.2]	
28		Gas fireplaces shall be direct-vent sealed-combustion type. Woodstoves or pellet stoves shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits [4.503.1]. Note: reference SCAQMD Rule 445.	
29		All duct openings and other air distribution component openings shall be protected during storage on the construction site until final start-up with tape, plastic, sheet metal, or other acceptable methods to reduce the amount of dust and debris which may collect in the system. [4.504.1]	
30		Finish materials shall comply with this section: 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 meet the requirement of SCAQMD Rule 1168 VOC limits, as shown in Table 4.405.1 or 4.405.2 and prohibition on the use of certain toxic compounds, except for aerosol products per subsection 2. [4.504.2.1, subsection 1]	
31		Note on the plans that aerosol adhesives, smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packing, which do not weigh more than 1 pound and do not consist of more than 16 fluid ounces shall comply with statewide VOC standards and other requirements, including prohibitions on the use of certain toxic compounds, of CCR, Title 17, commencing with Section 94507. [4.504.2.1, subsection 2]	
32		VOC Content Limits for Architectural Coatings (Architectural Paints) shall comply with Table 4.504.3. [4.504.2.2]	
33		Aerosol paints and coatings shall meet the requirements of Sections 94522(a)(2), 94522(e)(1), and (f)(1) of California Code of Regulations, Title 17 commencing with Section 94520. [4.504.2.3]	
34		Verification of compliance with finish materials shall be provided at the request of the enforcing agency. Documents may include, but not limited to the following [4.504.2.4]: a) Manufacturer’s product specification. b) Field verification of on-site product containers.	
35		Carpets shall meet one of the following [4.504.3]: a) Carpet and Rug Institute’s Green Label Plus Program. b) California Department of Public Health, “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers,” Version 1.1, February 2010 (also known as Specification 01350). c) NSF/ANSI 140 at the Gold Level. d) Scientific Certifications Systems Indoor Advantage™ Gold.	
36		Carpet cushion shall meet the requirements of the Carpet and Rug Institute Green Label Program [4.504.3.1]. Carpet adhesive shall meet the requirements of Table 4.504.1 [4.504.3.2].	
37		Where resilient flooring is installed, at least 80% of floor area receiving resilient flooring shall comply with one or more of the following [4.504.4]: a) Products compliance with the California Department of Public Health, “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers”, Version 1.1, February 2010. b) Products certified under UL GREENGUARD Gold (formerly the Greenguard Children & Schools program). c) Certification under the Resilient Floor Covering Institute (RFCI) FloorScore program.	

		d) Meet the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers", Version 1.1, February 2010 (also known as Specification 01350.)	
38		Composite wood products (hardwood plywood, particleboard, and medium density fiberboard) shall meet the requirements for Formaldehyde Limits in Table 4.504.5. [4.504.5]	
39		Verification of compliance with Section 4.504.5.1 shall be provided at the request of the enforcing agency. Documentation shall include at least one of the following: a) Product certifications and specifications. b) Chain of custody certifications. c) Products labeled and invoiced as meeting the Composite Wood products regulation (see CCR, Title 17, Section 93120, <i>et seq.</i>) d) Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269 or European 6363S standards, and Canadian CSA O121, CSA O151, CSA O153 and CSA O325 standards. e) Other methods acceptable to the enforcing agency.	
40		Concrete slab foundations or concrete slab-on-ground floors required to have a vapor retarder by CBC chapter 19 or CRC chapter 5 shall also comply with this section. Provide a Capillary Break installed in compliance with one of the following [4.505.2.1]: a) A 4-inch thick base of 1/2-inch or larger clean aggregate, with a vapor barrier in direct contact with concrete, and a concrete mix design which will address bleeding, shrinkage, and curling. Reference ACI 302.2R-06. b) Other equivalent methods approved by the enforcing agency. c) A slab design specified by a licensed design professional.	
41		Add a note to plans the 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. [4.505.3]	
42		Bathroom exhaust fans shall be ENERGY STAR compliant, ducted to terminate outside the building, and controlled by a humidstat capable of being adjusted between the relative humidity ranges of 50 to 80 percent. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e. built-in). [4.506.1]	
43		Heating and air conditioning systems shall be sized, designed, and equipment selected using the following methods [4.507.2]: a) The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J-2016 (Residential Load Calculation), ASHRAE handbooks or other equivalent design software or methods. b) Duct systems are sized according to ANSI/ACCA 1 Manual D-2016 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods. c) Select heating and cooling equipment according to ANSI/ACCA 3 Manual S-2014 (Residential Equipment Selection) or other equivalent design software or methods. <i>Exception:</i> Use of alternate design temperatures necessary to ensure the system functions are acceptable.	
44		HVAC system installers shall be trained and certified in the proper installation of HVAC systems and equipment by a recognized training or certification program. [702.1]	
45		Special inspection maybe required for certification of all <i>CALGreen</i> features in the plans and listed on Mandatory Measures Lists [702.2].	
46		Verification of compliance with this code may include construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which show substantial conformance. [703.1]	
		ADDITIONAL CORRECTIONS:	