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| BUILDING  | COO Logo_No Department | DEPARTMENT |
| 303 East B Street, Civic Center, Ontario, CA 91764 | Phone (909)395-2023, Fax (909)395-2180 |

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| **2022 *CALGREEN* RESIDENTIAL CORRECTION LIST** **(Effective January 1, 2023)** |
|  |  |
| **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: YES / NO |
|  |  |
| Applicant:  | Phone: , e-mail:  |
| Owner: | Phone: , e-mail:  |
| Architect/Engineer/Draftsman: | Phone: , e-mail:  |
|  |  |
| Reviewed by:  | Date: | Ph: (909)395- , e-mail: @ontarioca.gov |
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**INSTRUCTIONS:**

### Numbers in bracket [ ] refer to code sections of 2022 California Green Buildings Standards Code (*CALGreen*).

### Correct original drawings. Cloud any changes, revisions, or additions. Resubmit corrected plans/calculations/reports along with this correction sheets in digital format. Go to City of Ontario Building Department web site for “Digital Submittals Instructions” under Applications/Forms –

<https://www.ontarioca.gov/Building/Applications>.

### In the Respond column, please indicate the sheet number and detail or note number on the plan where the corrections are made or provide a separate response sheet.

### Itemize any changes, revisions, or additions made to drawings that are not a direct answer to a correction on a separate sheet.

* **Plans will not be allowed to be resubmitted until all reviewing departments have completed their review and address all their corrections.**

#### Additional plan check fee will be required after 3rd review on hourly rate basis.

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| **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:* 2022 California Green Building Standards Code (*CALGreen*)
* 2022 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 2022 *CALGreen* [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 completed 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 *CALGree*n 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:1. Accessory structures and accessory occupancies serving residential buildings shall comply with Chapter 4 as applicable.
2. 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: 1. Use of retention basins of sufficient size to retain storm water on-site.
2. 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.
3. By complying with a lawfully enacted storm water management ordinance.
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| 12 |  | **Grading and Paving** [4.106.3]**:**Submit surface drainage plans to indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include:1. Swales
2. Water collection and disposal systems
3. French Drains
4. Water retention gardens
5. Other water measures which keep surface water away from buildings and aid in groundwater recharge.

*Exception*: 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]:1. 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.
2. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit over-current protective device.

*Exception:*A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the proposed location of an EV charger at the time of original construction.1. 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 Multifamily Development Projects With Less Than 20 Dwelling Units; And Hotels and Motels With Less Than 20 Sleeping Units or Guest Rooms** [4.106.4.2.1]**:**The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to this section. (Note: there is no requirement for EV spaces to be constructed or available until EV chargers are installed for use). 1. **EV Capable**. Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.**Exceptions:**When EV chargers (Level 2 EVSE) are installed in a number equal to or greater than the required number of EV capable spaces.When EV chargers (Level 2 EVSE) are installed in a number less than the required number of EV capable spaces, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed.1. **EV Ready.** Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.

**Exception:** Areas of parking facilities served by parking lifts. |  |
| 16 |  | **For Multifamily Development Projects With 20 or More Dwelling Units, Hotels and Motels With 20 or More Sleeping Units or Guest Rooms** [4.106.4.3]:The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to this section. (Note: there is no requirement for EV spaces to be constructed or available until EV chargers are installed for use). 1. **EV Capable**. Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.**Exception:** When EV chargers (Level 2 EVSE) are installed in a number greater than five (5) percent of parking spaces required by Section 4.106.4.2.2, Item 3, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed over the five (5) percent required.1. **EV Ready.** Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.

**Exception:** Areas of parking facilities served by parking lifts.1. **EV Chargers.** Five (5) percent of the total number of parking spaces shall be equipped with Level 2 EVSE. Where common use parking is provided, at least one EV charger shall be located in the common use parking area and shall be available for use by all residents or guests.

When low power Level 2 EV charging receptacles or Level 2 EVSE are installed beyond the minimum required, an automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS. The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes and installed EVSE shall have a capacity of not less than 30 amperes. ALMS shall not be used to reduce the minimum required electrical capacity to the required EV capable spaces. |  |
| 17 |  | **Electric Vehicle Charging Stations (EVCS) [4.106.4.2.2.1]:** Electric vehicle charging stations required by Section 4.106.4.2.2, Item 3, shall comply with the following:**Exception:** Electric vehicle charging stations serving public accommodations, public housing, motels and hotels shall not be required to comply with this section. See California Building Code, Chapter 11B, for applicable requirements.**EVCS Location [4.106.4.2.2.1.1]:**EVCS shall comply with at least one of the following options:1. The charging space shall be located adjacent to an accessible parking space meeting the requirements of the California Building Code, Chapter 11A, to allow use of the EV charger from the accessible parking space.
2. The charging space shall be located on an accessible route, as defined in the California Building Code, Chapter 2, to the building.

**Exception:** Electric vehicle charging stations designed and constructed in compliance with the California Building Code, Chapter 11B, are not required to comply with Section 4.106.4.2.2.1.1 and Section 4.106.4.2.2.1.2, Item 3.**EVCS Dimensions [4.106.4.2.2.1.2]:**The charging spaces shall be designed to comply with the following:1. The minimum length of each EV space shall be 18 feet.
2. The minimum width of each EV space shall be 9 feet.
3. One in every 25 charging spaces, but not less than one, shall also have an 8-foot wide minimum aisle. A 5-foot wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet.

Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.**Accessible EV Spaces [4.106.4.2.2.1.3]:**In addition to the requirements in Sections 4.106.4.2.2.1.1 and 4.106.4.2.2.1.2, all EVSE, when installed, shall comply with the accessibility provisions for EV chargers in the California Building Code, Chapter 11B. EV ready spaces and EVCS in multifamily developments shall comply with California Building Code, Chapter 11A, Section 1109A. |  |
| 18 |  | **EV Space Requirements** **[4.106.4.2.3]:**1. **Single EV space required.** Install a listed raceway capable of accommodating a 208/240-volt dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the location or the proposed location of the EV space. Construction documents shall identify the raceway termination point, receptacle or charger location, as applicable. The service panel and/ or subpanel shall have a 40-ampere minimum dedicated branch circuit, including branch circuit overcurrent protective device installed, or space(s) reserved to permit installation of a branch circuit overcurrent protective device.

**Exception:** A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the location or the proposed location of the EV space, at the time of original construction in accordance with the California Electrical Code.1. **Multiple EV spaces required.** Construction documents shall indicate the raceway termination point and the location of installed or future EV spaces, receptacles or EV chargers. Construction documents shall also provide information on amperage of installed or future receptacles or EVSE, raceway method(s), wiring schematics and electrical load calculations. Plan design shall be based upon a 40-ampere minimum branch circuit. Required 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.

**Exception:** A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the location or the proposed location of the EV space at the time of original construction in accordance with the California Electrical Code. |  |
| 19 |  | **Identification [4.106.4.2.4]:**The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code. |  |
| 20 |  | **Electric Vehicle Ready Space Signage [4.106.4.2.5]:**Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s). |  |
| 21 |  | **Electric Vehicle Charging for Additions and Alterations of Parking Facilities Serving Existing Multifamily Buildings [4.106.4.3]:**When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or altered shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE.**Notes:** 1. Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.
2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.
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| 21 |  | 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 4.303.1.4.5:

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| **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. and0.8 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 |
| Pre-rinse spray valve (with an integral automatic shutoff) | 1.00 gpm for Product Class 1 (≤ 5.0 ozf)1.20 gpm for Product Class 2 (>5.0 ozf and ≤8.0 ozf)1.28 gpm for Product Class 3 (>8.0 ozf) |

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| 22 |  | **Submeters** shall be installed for multifamily buildings and dwelling units in mixed-use residential/commercial buildings to measure water usage of individual rental dwelling units in accordance with 2022 California Plumbing Code. [4.303.2] |  |
| 23 |  | Plumbing fixtures and fittings required in Section 4.303.1 shall be installed in accordance with the 2022 California Plumbing Code and shall meet the applicable referenced standards. [4.303.3] |  |
| 24 |  | 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] |  |
| 25 |  | 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] |  |
| 26 |  | 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] |  |
| 27 |  | Submit a **construction waste management plan** in conformance with section 4.408.2 items 1 through 5: 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.
 |  |
| 28 |  | 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] |  |
| 29 |  | 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] |  |
| 30 |  | 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].  |  |
| 31 |  | 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. |  |
| 32 |  | 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] |  |
| 33 |  | 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. |  |
| 34 |  | 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] |  |
| 35 |  | 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] |  |
| 36 |  | 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] |  |
| 37 |  | **VOC Content Limits** for Architectural Coatings (Architectural Paints) shall comply with Table 4.504.3. [4.504.2.2] |  |
| 38 |  | **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] |  |
| 39 |  | **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]:1. Manufacturer’s product specification.
2. Field verification of on-site product containers.
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| 40 |  | **Carpet** and **Carpet cushion** installed in the building interior shall meet the requirements of 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 1.2, January 2017 (also known as Specification 01350). [4.504.3]**Carpet adhesive** shall meet the requirements of Table 4.504.1 [4.504.3.2]. |  |
| 41 |  | Where **resilient flooring** is installed, at least 80% of floor area receiving resilient flooring shall meet the requirements of 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 1.2, January 2017 (also known as Specification 01350). [4.504.3] |  |
| 42 |  | **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] |  |
| 43 |  | 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:1. Product certifications and specifications.
2. Chain of custody certifications.
3. Products labeled and invoiced as meeting the Composite Wood products regulation (see CCR, Title 17, Section 93120, *et seq*.)
4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269 or European 6363S standards, and Canadian CSA O121, CSA O151, CSA O153 and CSA O325 standards.
5. Other methods acceptable to the enforcing agency.
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| 44 |  | **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]:* 1. 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.
	2. Other equivalent methods approved by the enforcing agency.
	3. A slab design specified by a licensed design professional.
 |  |
| 45 |  | 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] |  |
| 46 |  | **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] |  |
| 47 |  | **Heating and air conditioning systems** shall be sized, designed, and equipment selected using the following methods [4.507.2]: 1. 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.
2. Duct systems are sized according to ANSI/ACCA 1 Manual D-2016 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods.
3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S-2014 (Residential Equipment Selection) or other equivalent design software or methods.

*Exception*: Use of alternate design temperatures necessary to ensure the system functions are acceptable. |  |
| 48 |  | 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] |  |
| 49 |  | Special inspection maybe required for certification of all *CALGreen* features in the plans and listed on Mandatory Measures Lists [702.2]. |  |
| 50 |  | 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] |  |
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|  | **ADDITIONAL CORRECTIONS:** |  |
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