

**FINAL EXPRESS TERMS
FOR
PROPOSED BUILDING STANDARDS
OF THE
CALIFORNIA BUILDING STANDARDS COMMISSION**

**REGARDING PROPOSED CHANGES TO
THE CALIFORNIA GREEN BUILDING STANDARDS CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11**

(The State agency shall draft the regulations in plain, straightforward language, avoiding technical terms as much as possible and using a coherent and easily readable style. The agency shall draft the regulation in plain English. A notation shall follow the express terms of each regulation listing the specific statutes authorizing the adoption and listing specific statutes being implemented, interpreted, or made specific. (PART 1 – ADMINISTRATIVE CODE)

LEGEND FOR FINAL EXPRESS TERMS (combination of 45-day and 15-day changes)

1. For 45-day and 15-Day changes, existing California amendments or code language being modified appears in *italics*, with modified language underlined.
2. For 45-day and 15-Day changes, repealed text appears in ~~strikeout~~.

The California Building Standards Commission (CBSC) proposes to amend the 2013 edition of the California Green Building Standards Code (CGBSC) for the 2013 Intervening Cycle. Amended text is as follows:

1. CBSC Proposes to amend Chapter 3, Section 301 General

**CHAPTER 3
GREEN BUILDING**

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301.3 Nonresidential additions and alterations [BSC]. The provisions of individual sections of Chapter 5 apply to newly constructed buildings, building additions of 1,000 square feet or greater, and/or building alterations with a permit valuation of \$200,000 or above (for occupancies within the authority of California Building Standards Commission). Code sections relevant to additions and alterations shall only apply to the portions of the building being added or altered within the scope of the permitted work. A code section will be designated by a banner to indicate where the code section only applies to newly constructed buildings [**N**] or to additions and /or alterations [**AA**]. When the code section applies to both, no banner will be used.

301.3.1 Nonresidential additions and alterations that cause updates to plumbing fixtures only:

Note: On and after January 1, 2014, certain commercial real property, as defined in Civil Code Section 1101.3, shall have its noncompliant plumbing fixtures replaced with appropriate water-conserving plumbing fixtures under specific circumstances. See Civil Code Section 1101.1 et seq. for definitions, types of commercial real property affected, effective dates, circumstances necessitating replacement of noncompliant plumbing fixtures, and duties and responsibilities for ensuring compliance.

...

Notation:

Authority – Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference – Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

2. CBSC Proposes to amend mandatory regulations in Chapter 2 Definitions and Division 5.1, Section 5.106 Site Development as related items

**SECTION 202
DEFINITIONS**

...

ELECTRIC VEHICLE (EV). An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, electric motorcycles, and the like, primarily powered by an electric motor that draws current from a rechargeable storage battery, fuel cell, photovoltaic array, or other source of electric current. Plug-in hybrid electric vehicles (PHEV) are considered electric vehicles. For purposes of the *California Electrical Code*, off-road, self-propelled electric vehicles, such as industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, boats, and the like, are not included.

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**SECTION 5.106
SITE DEVELOPMENT**

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5.106.5.3 Electric vehicle (EV) charging. [N] Construction shall comply with Section 5.106.5.3.1 or Section 5.106.5.3.2 to facilitate future installation of electric vehicle supply equipment (EVSE). When EVSE(s) is/are installed, it shall be in accordance with the *California Building Code*, the *California Electrical Code* and as follows:

5.106.5.3.1 Single charging space requirements. [N] When only a single charging space is required per Table 5.106.5.3.3, a raceway is required to be installed at the time of construction and shall be installed in accordance with the *California Electrical Code*. Construction plans and specifications shall include, but are not limited to, the following:

1. The type and location of the EVSE.
2. A listed raceway capable of accommodating a 208/240-volt dedicated branch circuit.
3. The raceway shall not be less than trade size 1”
4. The raceway shall originate at a service panel or a subpanel serving the area, and shall terminate in close proximity to the proposed location of the charging equipment and into a listed suitable cabinet, box, enclosure or equivalent.
5. The service panel or subpanel shall have sufficient capacity to accommodate a minimum 40-ampere dedicated branch circuit for the future installation of the EVSE.

5.106.5.3.2 Multiple charging space requirements. [N] When multiple charging spaces are required per Table 5.106.5.3.3 raceway(s) is/are required to be installed at the time of construction and shall be installed in accordance with the *California Electrical Code*. Construction plans and specifications shall include, but are not limited to, the following:

1. The type and location of the EVSE.
2. The raceway(s) shall originate at a service panel or a subpanel(s) serving the area, and shall terminate in close proximity to the proposed location of the charging equipment and into listed suitable cabinet(s), box(es), enclosure(s) or equivalent.
3. Plan design shall be based upon 40-ampere minimum branch circuits.
4. Electrical calculations shall substantiate the design of the electrical system, to include the rating of equipment and any on-site distribution transformers and have sufficient capacity to simultaneously charge all required EVs at its full rated amperage.
5. The service panel or subpanel(s) shall have sufficient capacity to accommodate the required number of dedicated branch circuit(s) for the future installation of the EVSE.

5.106.5.3.3 EV charging space calculation. [N] Table 5.106.5.3.3 shall be used to determine if single or multiple charging space requirements apply for the future installation of EVSE.

Exceptions: On a case-by-case basis where the local enforcing agency has determined EV charging and infrastructure is not feasible based upon one or more of the following conditions:

1. Where there is insufficient electrical supply.
2. Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may adversely impact the construction cost of the project.

Table 5.106.5.3.3

Total number of parking spaces	Number of required EV charging spaces
<u>0-50</u>	<u>0</u>
<u>51-75</u>	<u>1</u>
<u>76-100</u>	<u>2</u>
<u>101-200</u>	<u>3</u>
<u>201 and over</u>	<u>3%¹</u>

1. Calculation for spaces shall be rounded up to the nearest whole number.

5.106.5.3.4 [N] Identification. The service panel or subpanel(s) circuit directory shall identify the reserved overcurrent protective device space(s) for future EV charging as “EV CAPABLE”. The raceway termination location shall be permanently and visibly marked as “EV CAPABLE.”

5.106.5.3.5 [N] Future charging spaces qualify as designated parking as described in Section 5.106.5.2 Designated parking.

Notes:

1. The California Department of Transportation adopts and publishes the California Manual on Uniform Traffic Control Devices (California MUTCD) to provide uniform standards and specifications for all official traffic control devices in California. Zero Emission Vehicle Signs and Pavement Markings can be found in the New Policies & Directives number 13-01. www.dot.ca.gov/hq/traffops/signtech/signdel/policy.htm
2. See Vehicle Code Section 22511 for EV charging spaces signage in off-street parking facilities and for use of EV charging spaces.
3. The Governor’s Office of Planning and Research published a Zero-Emission Vehicle Community Readiness Guidebook which provides helpful information for local governments, residents and businesses. http://opr.ca.gov/docs/ZEV_Guidebook.pdf

Notation:

Authority: Health and Safety Code Sections 18930.5, 18934.5, 18938 (b) and 18941.10.

Reference: Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

3. CBSC Proposes to amend mandatory regulations in Division 5.3 Water Efficiency and Conservation

**SECTION 5.303
INDOOR WATER USE**

5.303.2 Reserved Water Reduction. Plumbing fixtures shall meet the maximum flow rate values shown in table 5.303.2.3

Exception: buildings that demonstrate 20 percent overall water use reduction. In this case, a calculation demonstrating a 20% reduction in the building "water use baseline" as established in Table 5.303.2.2 shall be provided

[This section is being relocated to section 5.303.4 and renumbered with editorial amendments]

5.303.2.1 Areas of addition or alteration.

For those occupancies within the authority of the California Building Standards Commission as specified in Section 103, the provisions of Section 5.303.2 and Section 5.303.3 shall apply to new fixtures in additions or areas of alteration to the building.

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**TABLE 5.303.2.2
WATER USE BASELINE³**

Fixture Type	Baseline Flow-rate ²	Duration	Daily uses	Occupants ²
Showerheads	2.0-2.5 gpm @ 80 psi	5 min.	1	X ^{2a}
Lavatory faucets, residential	2.2 gpm @ 60 psi	.25 min.	3	X
Lavatory Faucets Nonresidential	0.5 gpm @ 60 psi	.25 min.	3	X ^{2b}
Kitchen Faucets	2.2 gpm @ 60 psi	4 min.	1	X
Replacement Aerators	2.2 gpm @ 60 psi			X
Wash Fountains	2.2 [rim space (in.) / 20 gpm @ 60 psi]			X
Metering Faucets	0.25 gallons/cycle	.25 min.	3	X
Metering Faucets for Wash Fountains	0.25 [rim space (in.) / 20 gpm @ 60 psi]	.25 min.		X
Gravity tank type Water Closets	1.28-1.6 gallons/flush	1 flush	1 male ¹ 3 female	X
Flushometer Tank Water Closets	1.28-1.6 gallons/flush	1 flush	1 male ¹ 3 female	X
Flushometer Valve Water Closets	1.28-1.6 gallons/flush	1 flush	1 male ¹ 3 female	X
Electromechanical Hydraulic Water Closets	1.28-1.6 gallons/flush	1 flush	1 male ¹ 3 female	X
Urinals	0.5-1.0 gallons/flush	1 flush	2 male	X

Fixture "Water Use" = Flow rate x Duration x Occupants x Daily uses

¹-The daily use number shall be increased to three if urinals are not installed in the room.

²-Refer to Table A, Chapter 4, California Plumbing Code, for occupant load factors.

(a) Shower use by occupants depends on the type of use of a building or portion of a building, e.g., total occupant load for a health club, but only a fraction of the occupants in an office building as determined by the anticipated number of users.

(b) Nonresidential kitchen faucet use is determined by the occupant load of the area served by the fixture.

³-Use Worksheet WS-1 to calculate base line water use.

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[Editorial changes: This table is being repealed and the fixture types are being moved out of the table and into individual code sections with minor amendments]

**TABLE 5.303.2.3
WATER REDUCTION FIXTURE FLOW RATES**

FIXTURE TYPE	MAXIMUM FLOW RATE
Kitchen faucets	1.8 gpm @ 60 psi
Wash fountains	1.8 [rim space (in.)/20 gpm @ 60 psi]
Metering faucets	0.20 gallons/cycle
Metering faucets for wash fountains	.20 [rim space (in.)/20 gpm @ 60 psi]

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5.303.3.4 Faucets and Fountains

5.303.3.4.1 Nonresidential Lavatory faucets. Lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi.

5.303.3.4.2 Kitchen faucets. Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.

5.303.3.4.3 Wash fountains. Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute/20 [rim space (inches) at 60 psi].

5.303.3.4.4 Metering faucets. Metering faucets shall not deliver more than 0.20 gallons per cycle.

5.303.3.4.5 Metering faucets for wash fountains. Metering faucets for wash fountains shall have a maximum flow rate of not more than 0.20 gallons per minute/20 [rim space (inches) at 60 psi].

Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

5.303.2.1 4 Areas of addition or alteration.

For those occupancies within the authority of the California Building Standards Commission as specified in Section 103, the provisions of ~~Section 5.303.2 and~~ Section 5.303.3 shall apply to new fixtures in additions or areas of alteration to the building.

5.303.4 Wastewater reduction. [N]

Each building shall reduce by 20 percent wastewater by one of the following methods:

1. ~~[BSC, DSA-SS] The installation of water conserving fixtures (water closets, urinals) meeting the criteria established in Section 5.303.2 or 5.303.3.~~
2. ~~[BSC] Utilizing nonpotable water systems [captured rainwater, graywater, and municipally treated wastewater (recycled water) complying with the current edition of the California Plumbing Code or other methods described in Section A5.304.8].~~

Notation:

Authority – Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference – Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

4. CBSC withdrew proposed amendment to mandatory regulations in Division 5.4 Material Conservation and Resource Efficiency, Section 5.408 Construction Waste Reduction, Disposal and Recycling

5. CBSC Proposes to amend mandatory regulations in Division 5.4 Material Conservation and Resource Efficiency, Section 5.410 Building Maintenance and Operation

**SECTION 5.410
BUILDING MAINTENANCE AND OPERATION**

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5.410.2 Commissioning. [N] For new buildings 10,000 square feet and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements. Commissioning shall be performed in accordance with this section by trained personnel with experience on projects of comparable size and complexity. Commissioning requirements shall include: *[Text shown for clarity. No change to text]*

1. Owner's or Owner representative's project requirements.
2. Basis of design.
3. Commissioning measures shown in the construction documents.
4. Commissioning plan.
5. Functional performance testing.
6. Documentation and training.
7. Commissioning report.

Exceptions:

1. ~~Dry storage warehouses~~ Unconditioned warehouses of any size.
2. Areas ~~under less than~~ 10,000 square feet used for offices or other conditioned accessory spaces within ~~dry storage warehouses~~ unconditioned warehouses.
3. Tenant improvements ~~under less than~~ 10,000 square feet as described in Section 303.1.1.
4. Commissioning requirements for energy systems covered by the ~~2013~~ California Energy Code.
5. Open parking garages of any size, or open parking garage areas, of any size, within a structure.

Note: For the purposes of this section, unconditioned shall mean a building, area, or room which does not provide heating and or air conditioning.

All building operating systems covered by Title 24, Part 6, as well as process equipment and controls, and renewable energy systems shall be included in the scope of the commissioning requirements. *[Text shown for clarity. No change to text]*

Informational Notes:

1. IAS AC 476 is an accreditation criteria for organizations providing training and/or certification of commissioning personnel. AC 476 is available to the Authority Having Jurisdiction as a reference for qualifications of commissioning personnel. AC 476 does not certify individuals to conduct functional performance tests or to adjust and balance systems.
2. Functional performance testing for heating, ventilation, air conditioning systems and lighting controls must be performed in compliance with the California Energy Code.

Notation

Authority: Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b). [This one is for 180 days?]

Reference: Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

Final Express Terms

CBC, Part 11 - 2013 Intervening Adoption Cycle
CBSC Amendments to the 2013 CGBC

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June 20, 2014
BSC-06-13-FET-Pt11

6. CBSC Proposes to amend mandatory regulations in Division 5.5 Environmental Quality, Section 5.504 Pollutant Control

**SECTION 5.504
POLLUTANT CONTROL**

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5.504.4.4 Carpet systems.

All carpet installed in the building interior shall meet at least one of the following testing and product requirements:

1. Carpet ...
2. Compliant ..
3. NSF/ANSI ..
4. Scientific ..
5. Compliant with the ~~California~~ Collaborative for High Performance Schools California (CA-CHPS) Criteria Interpretation for ~~EQ-2.2~~ EQ 7.0 and EQ 7.1 (formerly EQ 2.2) dated July 2012 and listed in the CHPS High Performance Product Database.

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5.504.4.6 Resilient flooring systems. For 80 percent of floor area receiving resilient flooring, install resilient flooring which meets one of the following:

1. Certified under ..;
2. Compliant with the VOC-emission ..;
3. Compliant with the ~~California~~ Collaborative for High Performance Schools California (CA-CHPS) Criteria Interpretation for ~~EQ-2.2~~ EQ 7.0 and EQ 7.1 (formerly EQ 2.2) dated July 2012 and listed in the CHPS High Performance Product Database;
4. ~~Products Compliant with CDPH criteria as~~ certified under UL GREENGUARD Gold (formerly the Greenguard Children's & Schools Program).

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Notation:

Authority – Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference – Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

7. CBSC Proposes to amend Chapter 8 Compliance Forms and Worksheets WS-1, WS-2, WS-3

**CHAPTER 8
COMPLIANCE FORMS AND WORKSHEETS**

[BSC] Sample forms...

[HCD 1] Sample forms found in “~~A Guide to the California Green Building Standards Code (Residential)~~” located at www.hcd.ca.gov/CALGreen.html may be used to assist in documenting compliance with *CALGreen*.

**WORKSHEET (WS-1)
BASELINE WATER USE**

BASELINE WATER USE CALCULATION TABLE							
FIXTURE TYPE	FLOW RATE		DURATION		DAILY USES	OCCUPANTS 1,2	GALLONS PER DAY
Showerheads	2.0	<input type="checkbox"/>	5 min.	<input type="checkbox"/>	1	Note 21a	=

20-PERCENT REDUCTION WATER USE CALCULATION TABLE							
FIXTURE TYPE	FLOW RATE ²		DURATION		DAILY USES	OCCUPANTS ^{2,3}	GALLONS PER DAY
Showerheads		<input type="checkbox"/>	5 min.	<input type="checkbox"/>	1	Note 3a	=
Showerheads residential		<input type="checkbox"/>	8 min.	<input type="checkbox"/>	1		=
Lavatory faucets residential		<input type="checkbox"/>	.25 min.	<input type="checkbox"/>	3		=
Lavatory faucets nonresidential ⁶		<input type="checkbox"/>	.25 min.	<input type="checkbox"/>	3		=
Kitchen faucets		<input type="checkbox"/>	4 min.	<input type="checkbox"/>	1	Note 3b	=
Replacement aerators		<input type="checkbox"/>		<input type="checkbox"/>			=
Wash fountains		<input type="checkbox"/>		<input type="checkbox"/>			=
Metering faucets		<input type="checkbox"/>	.25 min.	<input type="checkbox"/>	3		=
Metering faucets for wash fountains		<input type="checkbox"/>	.25 min.	<input type="checkbox"/>			=
Gravity tank-type water closets		<input type="checkbox"/>	1 flush	<input type="checkbox"/>	1 male 3 female ⁵		=
HET ⁴ High-efficiency toilet	1.28 gal/flush	<input type="checkbox"/>	1 flush	<input type="checkbox"/>	1 male 3 female ⁵		=
Flushometer tank water closets		<input type="checkbox"/>	1 flush	<input type="checkbox"/>	1 male 3 female ⁵		=
Flushometer valve water closets		<input type="checkbox"/>	1 flush	<input type="checkbox"/>	1 male 3 female ⁵		=
Electromechanical hydraulic water closets		<input type="checkbox"/>	1 flush	<input type="checkbox"/>	1 male 3 female ⁵		=
Urinals		<input type="checkbox"/>	1 flush	<input type="checkbox"/>	2 male		=
Urinals Nonwater-supplied	0.0 gal/flush	<input type="checkbox"/>	1 flush	<input type="checkbox"/>	2 male		=
Proposed water use							=
_____ (BWU from WS 1) <input type="checkbox"/> <input type="checkbox"/> .80 = _____ Allowable water use							

1. The flow rate values shall not exceed the baseline flow rates from the *California Code of Regulations*, Title 20, 2010 Appliance Efficiency Regulations (See Table 4.303.2.)
2. For residential occupancies, the number of occupants shall be based on two persons for the first bedroom, plus one additional person for each additional bedroom.
3. For nonresidential occupancies, refer to Table A, Chapter 4, 2013 *California Plumbing Code*, for occupant load factors.
 - a. Shower use by occupants depends on the type of use of a building or portion of a building, e.g., total occupant load for a health club, but only a fraction of the occupants in an office building as determined by the anticipated number of users.
 - b. Nonresidential kitchen faucet use is determined by the occupant load of the area served by the fixture.
4. Includes single and dual flush water closets with an effective flush of 1.28 gallons or less.

Single flush toilets – The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is the average flush volume when tested in accordance with ASME A 112.19.2.

Dual flush toilets – The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is defined as the composite, average flush volume of two reduced flushes and one full flush. Flush volumes will be tested in accordance with ASME A 112.19.2 and ASME A 112.19.14.

5. The daily use number shall be increased to three if urinals are not installed in the room.

6. Where complying faucets are unavailable, aerators rated at .35 gpm or other means may be used to achieve reduction.

WORKSHEET (WS-3 2) WATER USE REDUCTION

30-12-, 35-20- OR 40-25-PERCENT REDUCTION WATER USE CALCULATION TABLE									
FIXTURE TYPE	FLOW RATE ²		DURATION		DAILY USES		OCCUPANT ^{2,31}		GALLONS PER DAY
Showerheads		<input type="checkbox"/>	5 min.	<input type="checkbox"/>	1	<input type="checkbox"/>	Note 31a	=	
Showerheads residential		<input type="checkbox"/>	8 min.	<input type="checkbox"/>	4	<input type="checkbox"/>		=	
Lavatory faucets residential		<input type="checkbox"/>	.25 min.	<input type="checkbox"/>	3	<input type="checkbox"/>		=	
Lavatory faucets nonresidential ⁶⁴		<input type="checkbox"/>	.25 min.	<input type="checkbox"/>	3	<input type="checkbox"/>		=	
Kitchen faucets		<input type="checkbox"/>	4 min.	<input type="checkbox"/>	1	<input type="checkbox"/>	Note 31b	=	
Replacement aerators		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		=	
Wash fountains		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		=	
Metering faucets		<input type="checkbox"/>	.25 min.	<input type="checkbox"/>	3	<input type="checkbox"/>		=	
Metering faucets for wash fountains		<input type="checkbox"/>	.25 min.	<input type="checkbox"/>		<input type="checkbox"/>		=	
Gravity tank type water closets		<input type="checkbox"/>	1 flush	<input type="checkbox"/>	1 male ⁵³ 3 female	<input type="checkbox"/>		=	
HETHigh efficiency toilet ⁴⁻²	1.12 gal/flush	<input type="checkbox"/>	1 flush	<input type="checkbox"/>	1 male ⁵³ 3 female	<input type="checkbox"/>		=	
Flushometer tank water closets		<input type="checkbox"/>	1 flush	<input type="checkbox"/>	1 male ⁵³ 3 female	<input type="checkbox"/>		=	
Flushometer valve water closets		<input type="checkbox"/>	1 flush	<input type="checkbox"/>	1 male ⁵³ 3 female	<input type="checkbox"/>		=	
Electromechanical hydraulic water closets		<input type="checkbox"/>	1 flush	<input type="checkbox"/>	1 male ⁵³ 3 female	<input type="checkbox"/>		=	
Urinals		<input type="checkbox"/>	1 flush	<input type="checkbox"/>	2 male	<input type="checkbox"/>		=	
Urinals Nonwater supplied	0.0 gal/flush	<input type="checkbox"/>	1 flush	<input type="checkbox"/>	2 male	<input type="checkbox"/>		=	
Proposed water use									=
30-12% Reduction			(BWU from WS-1) <input type="checkbox"/> <input type="checkbox"/> .70 .88=			Allowable water use			
35-20% Reduction			(BWU from WS-1) <input type="checkbox"/> .65 .80=			Allowable water use			
40-25% Reduction			(BWU from WS-1) <input type="checkbox"/> <input type="checkbox"/> .60 .75 =			Allowable water use			

1. ~~The flow rate values shall not exceed the baseline flow rates from the 2013 California Code of Regulations, Title 20, Appliance Efficiency Regulations (See Table 4.303.2.)~~
2. ~~For residential occupancies, the number of occupants shall be based on two persons for the first bedroom, plus one additional person for each additional bedroom.~~
- 3.1 For ~~nonresidential~~ occupancies, refer to Table A, Chapter 4, 2013 *California Plumbing Code*, for occupant load factors.
 - a. Shower use by occupants depends on the type of use of a building or portion of a building, e.g., total occupant load for a health club, but only a fraction of the occupants in an office building as determined by the anticipated number of users.
 - b. ~~Nonresidential~~ Kitchen faucet use is determined by the occupant load of the area served by the fixture.
- 4.2 Includes single and dual flush water closets with an effective flush of 1.28 gallons or less.
 - Single flush toilets - The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is the average flush volume when tested in accordance with ASME A112.19.233.2.
 - Dual flush toilets - The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is defined as the composite, average flush volume of two reduced flushes and one full flush. Flush volumes will be tested in accordance with ASME A112.19.2 and ASME A112.19.14.
- 5.3 The daily use number shall be increased to three if urinals are not installed in the room.
- 6.4 Where complying faucets are unavailable, aerators rated at .35 gpm or other means may be used to achieve reduction.

...
Notation:

Authority – Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference – Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

8. CBSC Proposes to amend voluntary regulations in Division A5.1, Section A5.106 related to EV Charging

SECTION A5.106 SITE DEVELOPMENT

...
A5.106.5.3 Electric vehicle (EV) charging. ~~Provide facilities meeting~~ Construction shall comply with Section A5.106.5.3.1 and A5.106.5.3.2 to facilitate future installation of electric vehicle supply equipment (EVSE). When EVSE(s) is/are installed, it shall be in accordance with the *California Building Code* Section 406.9 (Electric Vehicle) of the *California Building Code*, the *California Electrical Code* and as follows:

~~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.~~

~~Exception:~~ ~~Other pre-installation methods approved by the local enforcing agency that provide sufficient conductor sizing and service capacity to install Level 2 electric vehicle supply equipment (EVSE).~~

~~A5.106.5.3.2 Multiple charging spaces required.~~ ~~When multiple charging spaces are required, plans shall include the location(s) and type of the EVSE, 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. Plan design shall be based upon Level 2 EVSE at its maximum operating ampacity. Provide raceways from the electrical service panel to the designated parking areas which are required to be installed at the time of construction.~~

~~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.~~

A5.106.5.3.31 Tier 1. ~~At least 3 percent of the total parking spaces, but not less than one, shall be capable of supporting installation of future EVSE. Table A5.106.5.3.1 shall be used to determine if single or multiple charging space requirements apply for future installation of EVSE. When a single charging space is required per Table A5.106.5.3.1, refer to Section 5.106.5.3.1 for design requirements. When multiple charging spaces are required, refer to Section 5.106.5.3.2 for design requirements.~~

Table A5.106.5.3.1

<u>Total number of parking spaces</u>	<u>TIER 1 Number of required EV charging spaces</u>
<u>0-50</u>	<u>1</u>
<u>51-75</u>	<u>2</u>
<u>76-100</u>	<u>3</u>
<u>101-200</u>	<u>5</u>
<u>201 and over</u>	<u>4%¹</u>

1. Calculation for spaces shall be rounded up to the nearest whole number.

A5.106.5.3.42 Tier 2. ~~At least 5 percent of the total parking spaces, but not less than two, shall be capable of supporting installation of future EVSE. Table A5.106.5.3.2 shall be used to determine the number of multiple charging spaces required for future installation of EVSE. Refer to Section 5.106.5.3.2 for design space requirements.~~

Table A5.106.5.3.2

<u>Total number of parking spaces</u>	<u>TIER 2 Number of required EV charging spaces</u>
<u>0-50</u>	<u>2</u>
<u>51-75</u>	<u>3</u>
<u>76-100</u>	<u>4</u>
<u>101-200</u>	<u>7</u>
<u>201 and over</u>	<u>6%¹</u>

1. Calculation for spaces shall be rounded up to the nearest whole number.

A5.106.5.3.3 Identification. The service panel or subpanel circuit directory shall identify the reserved overcurrent protective device space(s) for future EV charging as “EV CAPABLE”. The raceway termination location shall be permanently and visibly marked as “EV CAPABLE.”

A5.106.5.3.4 Future charging spaces qualify as designated parking as described in Section A5.106.5.1 Designated parking.

A5.106.5.3.5 Labeling requirement. ~~A label stating “EV CAPABLE” shall be posted in a conspicuous place at the service panel or subpanel and the EV charging space.~~

Notes:

1. The California Department of Transportation adopts and publishes the California Manual on Uniform Traffic Control Devices (California MUTCD) to provide uniform standards and

specifications for all official traffic control devices in California. Zero Emission Vehicle Signs and Pavement Markings can be found in the New Policies & Directives number 13-01. www.dot.ca.gov/hq/traffops/signtech/signdel/policy.htm

2. See Vehicle Code Section 22511 EV charging spaces signage in offstreet parking facilities and for use of EV charging spaces.
3. The Governor’s Office of Planning and Research published a Zero-Emission Vehicle Community Readiness Guidebook which provides helpful information for local governments, residents and businesses. http://opr.ca.gov/docs/ZEV_Guidebook.pdf

...

Notation:

Authority – Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference – Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

9. CBSC Proposes to amend voluntary regulations in Division A5.1, Section A5.106 related to Cool Roof

**SECTION A5.106
SITE DEVELOPMENT**

...

A5.106.11.2.3 Solar reflectance index alternative. Solar Reflectance Index (SRI) equal to or greater than the values specified in Table A5.106.11.2.2 for Tier 1 and Table A5.106.11.2.3 for Tier 2 ...

...

**TABLE A5.106.11.2.2 [BSC]
TIER 1**

Roof Slope		Climate Zone	Minimum Aged Solar Reflectance	Thermal Emittance	SRI
≤ 2 : 12		1 – 16	0.55 <u>0.63</u>	0.75	64 <u>75</u>
> 2 : 12					
		1 – 16	0.20	0.75	16

**TABLE A5.106.11.2.3 [BSC]
TIER 2**

Roof Slope		Climate Zone	Minimum Aged Solar Reflectance	Thermal Emittance	SRI
≤ 2 : 12		1 – 16	0.65 <u>0.68</u>	0.85	78 <u>82</u>
> 2 : 12					
		1 – 16	0.30 <u>0.28</u>	0.85	30 <u>27</u>

Notation:

Authority – Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference – Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

10. CBSC Proposes to amend voluntary regulations in Division A5.1, Section A5.303 related to Indoor Water Use

**SECTION A5.303
INDOOR WATER USE**

...

A5.303.2.3.1 Tier 1 – ~~30~~ 12 percent savings. [BSC] A schedule of plumbing fixtures and fixture fittings that will reduce the overall use of potable water within the building by ~~30~~ 12 percent shall be provided. The reduction shall be based on the maximum allowable water use per plumbing fixture and fitting as required by the *California Building Standards Code*. The ~~30~~ 12-percent reduction in potable water use shall be demonstrated by one of the following methods:

1. Prescriptive method. Each plumbing fixture and fitting shall not exceed the maximum flow rate at greater than or equal to ~~30~~ 12-percent reduction as specified in Table A5.303.2.1, ~~or A5.303.2.3.1; or~~
2. Performance method. A calculation demonstrating a ~~30~~ 12-percent reduction in the building “water use baseline” as established in Table A5.303.2.2 shall be provided.

A5.303.2.3.2 Tier 2 – ~~35~~ 20-percent savings.

A schedule of plumbing fixtures and fixture fittings that will reduce the overall use of potable water within the building by ~~35~~ 20 percent shall be provided. A calculation demonstrating a ~~35~~ 20-percent reduction in the building “water use baseline” as established in Table A5.303.2.2 shall be provided.

A5.303.2.3.3 ~~40~~ 25-percent savings.

A schedule of plumbing fixtures and fixture fittings that will reduce the overall use of potable water within the building by ~~40~~ 25 percent shall be provided. A calculation demonstrating a ~~40~~ 25 percent reduction in the building “water use baseline” as established in Table A5.303.2.2 shall be provided.

A5.303.2.3.4 Nonpotable water systems for indoor use.

Utilizing nonpotable water systems (such as captured rainwater, treated graywater and recycled water) intended to supply water closets, urinals, and other allowed uses, may be used in the calculations demonstrating the ~~30~~ 12, ~~35~~ 20 or ~~40~~ 25 percent reduction. The nonpotable water systems shall comply with the current edition of the *California Plumbing Code*.

TABLE A5.303.2.2

³

WATER USE BASELINE

FIXTURE TYPE	BASELINE FLOW RATE	DURATION	DAILY USES	OCCUPANTS ²
Showerheads	2.0 gpm @ 80 psi	5 min.	1	^{2a} X
Lavatory faucets nonresidential	0.5 gpm @ 60 psi	.25 min.	3	X
Kitchen faucets	2.6 1.8 gpm @ 60 psi	4 min.	1	^{2b} X
Replacement aerators	2.6 2 gpm @ 60 psi			X
Wash fountains	2.2 1.8 gpm/20 [rim space (in.) @ 60 psi]			X
Metering faucets	0.25 0.20 gallons/cycle	.25 min.	3	X
Metering faucets for wash fountains	.25 0.20 gpm/20 [rim space (in.) @ 60 psi]	.25 min.	1 male 3 female	X
Gravity tank type water closets	1.28 gallons/flush	1 flush	1 male 3 female	X
Flushometer tank water closets	1.28 gallons/flush	1 flush	1 male 3 female	X

Flushometer valve water closets	1.28 gallons/flush	1 flush	1 male 3 female	X
Electromechanical hydraulic water closets	1.28 gallons/flush	1 flush	1 male 3 female	X
Urinals	0.5 gallons/flush	1 flush	2 male	X

- The daily use number shall be increased to three if urinals are not installed in the room.
- Refer to Table A, Chapter 4, 2013 *California Plumbing Code*, for occupant load factors.
 - Show use by occupants depends on the type of use of a building or portion of a building, e.g., total occupant load for a health club, but only a fraction of the occupants in an office building as determined by the anticipated number of users.
 - ~~Nonresidential~~ kitchen faucet use is determined by the occupant load of the area served by the fixture.
- Use worksheet WS-1 to calculate baseline water use.

**TABLE A5.303.2.3.1
FIXTURE FLOW RATES**

FIXTURE TYPE	BASELINE FLOW- ² RATE	MAXIMUM FLOW RATE AT 30 ¹² PERCENT REDUCTION
Showerheads	2.0 gpm @ 80 psi	1.8 gpm @ 80 psi
Lavatory faucets nonresidential ³	0.5 gpm @ 60 psi	0.35 gpm @ 60 psi
Kitchen faucets ³	2-2 1.8 gpm @ 60 psi	1.6 gpm @ 60 psi
Wash fountains	2-2 1.8gpm/20 [rim space(in.) @ 60 psi]	1.6 [rim space(in.)/20 gpm @ 60 psi]
Metering faucets	0-25 0.20 gallon/cycle	0.18 gallons/cycle
Metering faucets for wash fountains	0-25 0.20gpm/20 [rim space(in.)/ @ 60 psi]	0.18 [rim space(in.)/20 gpm @ 60 psi]
Gravity tank type water closets	1.28 gallons/flush	1.12 gallons/flush ¹
Flushometer tank water closets	1.28 gallons/flush	1.12 gallons/flush ¹
Flushometer valve water closets	1.28 gallons/flush	1.12 gallons/flush ¹
Electromechanical hydraulic water closets	1.28 gallons/flush	1.12 gallons/flush ¹
Urinals	0.5 gallons/flush	0-5 0.44 gallons/flush

- Includes water closets with an effective flush rate of 1.12 gallons or less when tested per ASME A 112.19.2 and ASME A 112.19.14.
- See Table **A5.503.2.3.2** for additional notes and references.
- Where complying faucets are unavailable, aerators rated at 0.35 gpm or other means may be used to achieve reduction.

Notation:

Authority – Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference – Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

11. CBSC, withdrew Section A5.408 related to Construction Waste Reduction, Disposal and Recycling

12. CBSC Proposes to amend voluntary regulations in Division A5.1, Section A5.504 related to Pollutant Control

**SECTION A5.504
POLLUTANT CONTROL**

...

A5.504.4.7 Resilient flooring systems, Tier 1. [BSC] For 90 percent of floor area receiving resilient flooring, install resilient flooring that is

1. Certified under ...;
2. Compliant with the VOC...;
3. ~~Defined in the 2009 Collaborative for High Performance Schools (CHPS) criteria and listed on is High Performance Database~~ Compliant with the Collaborative for High Performance Schools California (CA-CHPS) Criteria Interpretation for EQ 7.0 and EQ 7.1 (formerly EQ 2.2) dated July 2012 and listed in the CHPS High Performance Product Database ;or
4. ~~Products Compliant with CDPH criteria as~~ certified under UL GREENGUARD Gold (formerly the Greenguard Children's & Schools Program).

A5.504.4.7.1 Resilient flooring systems, Tier 2. [BSC] For 100 percent of floor area receiving resilient flooring, install resilient flooring that is

1. Certified under the Resilient Floor Covering Institute (RFCI) FloorScore program;
2. Compliant with the VOC-emission limits and testing requirements specified in the California Department of Public Health's 2010 Standard Method for the Testing and Evaluation Chambers, Version 1.1, February 2010;
3. ~~Defined in the 2009 Collaborative for High Performance Schools (CHPS) criteria and listed on is High Performance Database~~ Compliant with the Collaborative for High Performance Schools California (CA-CHPS) Criteria Interpretation for EQ 7.0 and EQ 7.1 (formerly EQ2.2) dated July 2012 and listed in the CHPS High Performance Product Database ;or
4. ~~Products Compliant with CDPH criteria as~~ certified under UL GREENGUARD Gold (formerly the Greenguard Children's & Schools Program).

Exception: . . .

Notation:

Authority – Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference – Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

13. CBSC Proposes to amend Table A5.601

A5.601.2 CALGreen Tier 1...

A5.601.2.4 Voluntary measures for CALGreen Tier 1.

In addition to the provisions of Sections A5.601.2.1 and A5.601.2.3 above, compliance with the following voluntary measures from Appendix A5 is required for Tier 1:

1. From Division A5.1,...
2. From Division A5.3,
 - a. Comply with the ~~30~~12 percent reduction for indoor potable water use in Section A5.303.2.3.1.

...

A5.601.3 CALGreen Tier 2...

A5.601.3.4 Voluntary measures for Tier 2.

In addition to the provisions of Sections A5.601.3.1 and A5.601.3.3 above, compliance with the following voluntary measures from Appendix A5 and additional elective measures shown in Table A5.601.3.4 is required for Tier 2:

1. From Division A5.1...
2. From Division A5.3,
 - a. Comply with the ~~35~~20-percent reduction for indoor potable water use in Section A5.303.2.3.4 ~~2~~.
 - b. Comply with Section A5.304.4.4 ~~2~~ for outdoor potable water use not to exceed 55 percent of ETo.
- ...

**TABLE A5.601 NONRESIDENTIAL BUILDINGS:
Green Building Standards Code Proposed Performance Approach**

Note: This table is intended only as an aid in illustrating the nonresidential tier structure

CATEGORY	ENVIRONMENTAL PERFORMANCE GOAL	TIER 1	TIER 2
All	Minimum Mandatory	Meet all of the provisions of Chapter 5	Meet all of the provision of Chapter 5
Planning and Design	Designated Parking for Fuel Efficient Vehicles	10% of total spaces	12% of total spaces
	Electric Vehicle Charging	Approx. 4% of total spaces	Approx. 6% of total spaces
Energy Efficiency	Cool Roof to Reduce Heat Island Effect	Roof Slope < 2:12 SRI 64 <u>75</u> Roof Slope > 2:12 SRI 16	Roof Slope < 2:12 SRI 78 <u>82</u> Roof Slope > 2:12 SRI 30 <u>27</u>
		1 additional Elective from Division A5.1	3 additional Electives from Division A5.1
	Energy Performance 2a, 2b 3	Outdoor lighting power 90% of Part 6 allowance	Outdoor lighting power 90% of Part 6 allowance
Water Efficiency and Conservation	Indoor Water Use	If applicable, solar water-heating system with minimum solar savings fraction of 0.15	If applicable, solar water-heating system with minimum solar savings fraction of 0.15
		If applicable, certain functional areas comply with residential indoor lighting requirements	If applicable, certain functional areas comply with residential indoor lighting requirements
		Energy Budget 95% or 90% of Part 6 calculated value of allowance	Energy Budget 90% or 85% of Part 6 calculated value of allowance
Material Conservation and Resource Efficiency 4 3	Construction Waste Reduction	At least 65% reduction	At least 80% reduction
		Recycled Content	Utilize recycled content materials for 10% of total material cost
		1 additional Elective from	3 additional Electives from

		Division A5.4	Division A5.4
Environmental Quality	Low-VOC Resilient Flooring	90% of flooring meets VOC limits	100% of flooring meets VOC limits
	Low-VOC Thermal Insulation	Comply with VOC limits	Install no-added formaldehyde insulation and comply with VOC limits
		1 additional Elective from Division A5.5	3 additional Electives from Division A5.5
Additional Measures	Added measures shall be achieved across at least 3 categories	1 Additional Elective	3 Additional Electives
Approximate Total Measures		14	24

1. Exception: Allowance may be permitted in Tier 2 for up to 5-percent specialty purpose flooring.
2. ~~Exceptions for~~ Solar water-heating system requirement for newly constructed restaurants as per A5.203.1.1.2:
Exceptions:
 - 2- a. Buildings with a natural gas service water heater with a minimum of 95-percent thermal efficiency.
 3. b. Buildings where greater than 75 percent of the total roof area has annual solar access that is less than 70 percent. Solar access is the ratio of solar insolation including shade to the solar insolation without shade. Shading from obstructions located on the roof or any other part of the building shall not be included in the determination of annual solar access.
- 4-3 Life cycle assessment compliant with Section A5.409.4 in this code may be substituted for prescriptive measures from Division A5.4.

Notation:

Authority – Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference – Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

14. CBSC Proposes to amend Table A5.602

SECTION A5.602

⁴

NONRESIDENTIAL OCCUPANCIES APPLICATION CHECKLISTS

[Due to formatting issues, the check boxes in mandatory and voluntary columns may be inaccurate at this time.]

APPLICATION CHECKLIST FOR BSC Requirements	MAN DATO RY	VOLUNTARY	
		CALGreenTier 1	CALGreenTier 2
APPLICATION CHECKLIST FOR BSC Deconstruction and Reuse of Existing Structures Site Development			
5.106.1 Storm water pollution prevention. Newly constructed projects and additions which disturb less than one acre of land shall prevent the pollution of stormwater runoff from the construction activities through local ordinance in Section 5.106.1.1 Or Best management practices (BMP) in Section 5.106.1.2.	<input checked="" type="checkbox"/> or <input checked="" type="checkbox"/>		

<p>from expired HOV lane programs may be considered eligible for designated parking spaces.</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. Exception: Other pre-installation methods approved by the local enforcing agency that provide sufficient conductor sizing and service capacity to install Level 2 EVSE.</p> <p>A5.106.5.3.2 Multiple charging spaces required. When multiple charging spaces are required, plans shall include the location(s) and type of the EVSE, raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to charge simultaneously all the electrical vehicles at all designated EV charging spaces at their full rated amperage. Plan design shall be based upon Level 2 EVSE at its maximum operating ampacity. Provide raceways from the electrical service panel to the designated parking areas which are required to be installed at the time of construction. 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 percent of the total parking spaces, but not less than one, shall be capable of supporting installation of future electric vehicle supply equipment (EVSE).</p> <p>A5.106.5.3.4 Tier 2. At least 5 percent of the total parking spaces, but not less than two, shall be capable of supporting installation of future EVSE.</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 space.</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input checked="" type="checkbox"/></p> <p><input checked="" type="checkbox"/></p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>
<p>5.106.5.3 Electric vehicle (EV) charging. [N] Construction shall comply with Section 5.106.5.3.1 or Section 5.106.5.3.2 to facilitate future installation of electric vehicle supply equipment (EVSE).</p> <p>5.106.5.3.1 Single charging space requirements. [N]</p> <p>5.106.5.3.2 Multiple charging spaces requirements.[N]</p> <p>5.106.5.3.3 EV charging space calculation. [N] per Table 5.106.5.3.3 (approx. 3%).</p> <p>5.106.5.3.4 [N] Identification.</p> <p>5.106.5.3.5 [N] EV spaces count as designated parking.</p> <p>A5.106.5.3.1 Tier 1. per Table A5.106.5.3.1 (approx. 4%)</p> <p>A5.106.5.3.2 Tier 2. per Table A5.106.5.3.2 (approx. 6%)</p>	<p><input checked="" type="checkbox"/></p> <p><input checked="" type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>
<p>5.106.8 Light pollution reduction. [N] Outdoor lighting systems shall be designed and installed to comply with the following:</p> <ol style="list-style-type: none"> 1. The minimum requirements in the <i>California Energy Code</i> for Lighting Zones 1–4 as defined in Chapter 10 of the <i>California Administrative Code</i>; and 	<p><input checked="" type="checkbox"/></p>		

6. ...		<input type="checkbox"/>	<input type="checkbox"/>
7. ...		<input type="checkbox"/>	<input type="checkbox"/>
5.303.4- 5 Wastewater reduction. [N] Each building shall reduce the generation of wastewater by one of the following methods: 1. The installation of water-conserving fixtures or 2. Utilizing nonpotable water systems.	As applicable <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
A5.303.5 Dual plumbing. New buildings and facilities shall be dual plumbed for potable and recycled water systems. <u>New buildings and facilities shall be dual plumbed for potable and recycled water systems for toilet flushing when recycled water is available as determined by the enforcement authority.</u>		<input type="checkbox"/>	<input type="checkbox"/>
...			
Outdoor Water Use			
A5.304.4 Potable water reduction. Provide water efficient landscape irrigation design that reduces by the use of potable water. <u>Provide water efficient landscape irrigation design that reduces the use of potable water beyond the initial requirements for plant installation and establishment in accordance with Section A5.304.4.1 or A5.304.4.2. Calculations for the reduction shall be based on the water budget developed pursuant to Section 5.304.1.</u> A5.304.4.1 Tier 1 – Reduce the use of potable water to a quantity that does not exceed 60 percent of ETo times the landscape area. A5.304.4.2 Tier 2 –Reduce the use of potable water to a quantity that does not exceed 55 percent of ETo times the landscape area. Note: Methods used to accomplish the requirements of this section shall include, but not be limited to, the items listed in A5.304.4. 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 checked="" type="checkbox"/>
...		<input type="checkbox"/>	<input type="checkbox"/>
..		<input type="checkbox"/>	<input type="checkbox"/>
A5.304.8 Graywater irrigation system. Install graywater collection system for onsite subsurface irrigation using graywater <u>collected from bathtubs, showers, bathroom wash basins and laundry water.</u> <u>See California Plumbing Code.</u>		<input type="checkbox"/>	<input type="checkbox"/>
Water Reuse			
5.407.2 Moisture control. Employ moisture control measures by the following methods; 5.407.2.1 Sprinklers. <u>Design and maintain landscape irrigation systems to P-prevent irrigation spray on structures.</u> 5.407.2.2 Entries and openings. Design exterior entries and openings to prevent water intrusion into <u>buildings as follows.</u> 5.407.2.2.1 Exterior door protection. <u>Primary exterior entries shall be covered to prevent water intrusion by using nonabsorbent floor and wall finishes within at least 2 feet around and perpendicular to such openings plus at least one of the following:</u> 1. <u>An installed awning at least 4 feet in depth.</u> 2. <u>The door is protected by a roof overhang at least</u>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		

<p>4 feet in depth.</p> <p>3. <u>The door is recessed at least 4 feet.</u></p> <p>4. <u>Other methods which provide equivalent protection.</u></p> <p>5.407.2.2.2 Flashing. <u>Install flashings integrated with a drainage plane.</u></p>	<input checked="" type="checkbox"/>		
Construction Waste Reduction, Disposal and Recycling			
<p>..</p> <p>5.408.1.3 Waste stream reduction alternative. <u>The combined weight of new construction disposal that does not exceed two pounds per square foot of building area may be deemed to meet the 50 percent minimum requirement as approved by the enforcing agency.</u></p> <p>...</p>	<input checked="" type="checkbox"/>		
<p>A5.408.3.1 Enhanced construction waste reduction–Tier 1 [BSC]. Divert to recycle or salvage at least 65% of nonhazardous construction and demolition waste generated at the site.</p> <p>A5.408.3.1.1 Enhanced construction waste reduction–Tier 2 [BSC]. Divert to recycle or salvage at least 80% of nonhazardous construction waste generated at the site.</p> <p>...</p>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<p>5.410.2 Commissioning. [N] For new buildings 10,000 square feet and over, building commissioning for all building systems covered by Title 24, Part 6, process systems and renewable energy systems shall be included in the design and construction processes of the building project. Commissioning requirements shall include items listed in Section 5.410.2.</p> <p>Exceptions:</p> <ol style="list-style-type: none"> 1. Dry storage warehouses Unconditioned warehouses of any size 2. Areas under less than 10,000 square feet used for offices or other conditioned accessory spaces within dry storage warehouses unconditioned warehouses. 3. Tenant improvements under less than 10,000 square feet as described in Section 303.1.1. 4. Commissioning requirements for energy systems covered by the 2013 California Energy Code. 5. <u>Open parking garages of any size, or open parking garage areas, of any size, within a structure.</u> 	<input checked="" type="checkbox"/>		
Environmental Quality			
Fireplaces....			
<p>...</p>			

<p>A5.504.4.5.1 Early compliance with formaldehyde limits, Tier 1. Meet the requirements contained in Table A5.504.8.5 before the compliance dates.</p> <p>A5.504.4.5.2 1 No added formaldehyde, Tier 2. Use composite wood products approved by the ARB as no-added formaldehyde (NAF) based resins or ultra-low emitting formaldehyde (ULEF) resins.</p> <p>...</p>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>
<p>5.504.4.6 Resilient flooring systems. For 80 percent of floor area receiving resilient flooring, install resilient flooring which meets one of the following:</p> <p>Comply with the VOC emission limits defined in the 2012 CHPS criteria and listed on its High Performance Products Database; products compliant with CHPS criteria certified under the Greenguard Children & Schools program; certified under the FloorScore program of the Resilient Floor Covering Institute; or meet California Department of Public Health 2010 Specification.</p> <ol style="list-style-type: none"> <u>1. Certified under the Resilient Floor Covering Institute (RFCI) FloorScore program;</u> <u>2. Compliant with the VOC-emission limits and testing requirements specified in the California Department of Public Health's 2010 Standard Method for the Testing and Evaluation Chambers, Version 1.1, February 2010;</u> <u>3. Compliant with the Collaborative for High Performance Schools California (CA-CHPS) Criteria Interpretation for EQ 7.0 and 7.1 (formerly EQ. 2.2) dated July 2012 and listed in the CHPS High Performance Product Database ;or</u> <u>4. Products certified under UL GREENGUARD Gold (formerly the Greenguard Children's & Schools Program).</u> <p>...</p> <p>A5.504.4.7 Resilient flooring systems, Tier 1 [BSC]. For 90 percent of floor area receiving resilient flooring, installed resilient flooring shall meet at least one of the following: complying with the VOC-emission limits defined in the 2009 CHPS criteria and listed on its High Performance Products Database; products compliant with CHPS criteria certified under the Greenguard Children & Schools program; certified under the FloorScore program of the Resilient Floor Covering Institute; or meet California Department of Public Health 2010 Specification 01350.</p> <ol style="list-style-type: none"> <u>1. Certified under the Resilient Floor Covering Institute (RFCI) FloorScore program;</u> <u>2. Compliant with the VOC-emission limits and testing requirements specified in the California Department of Public Health's 2010 Standard Method for the Testing and Evaluation Chambers, Version 1.1, February 2010;</u> <u>3. Compliant with the Collaborative for High Performance Schools California (CA-CHPS) Criteria Interpretation for EQ 7.0 and 7.1 (formerly EQ. 2.2) dated July 2012 and listed in the CHPS High Performance Product Database ;or</u> <u>4. Products certified under UL GREENGUARD Gold (formerly the Greenguard Children's & Schools Program).</u> 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

stringent. ³			
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1. Green building measures in this table may be mandatory if adopted by a city, county, or city and county as specified in Section 101.7.
2. Required prerequisite for this Tier.
3. These measures are currently required elsewhere in statute or in regulation.
4. This application checklist is non-regulatory, intended only as an aid to the user and may not contain complete code language. Refer Chapter 5 and Appendix Chapter A5 for complete code provisions.

Notation:

Authority – Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference – Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.