building Department. See Civil Code Section 1101.1, *et seq*. for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.

- Sec. 10. Subsection 99.03.301.3 of the Los Angeles Municipal Code is added to read as follows:
- 99.03.301.3. Nonresidential Additions and Alterations (BSC). The provisions of individual sections of Chapter 5 apply to newly constructed buildings, building additions, and/or building alterations as specified in Section 99.01.101.3. 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 alterations [AA]. When the code section applies to both, no banner will be used.
- Sec. 11. Subsection 99.03.303.1 of the Los Angeles Municipal Code is deleted in its entirety.
- Sec. 12. Subsection 99.03.303.1.1 of the Los Angeles Municipal Code is amended to read as follows:
- **99.03.303.1.1. Tenant Improvements.** The provisions of this Code shall apply to the initial tenant or occupant improvements to a project and to any future alteration that falls under the scope of 99.01.101.3.
- Sec. 13. The second unnumbered paragraph of Subsection 99.03.304.1.1 of the Los Angeles Municipal Code is amended to read as follows:
- [BSC & HCD] Where there are practical difficulties involved in complying with the threshold levels of a tier, the Department may grant modifications for individual cases. The Department shall first find that a special individual reason makes the strict letter of the tier impractical and that modification is in conformance with the intent and purpose of the measure. The details of any action granting modification shall be recorded and entered in the files of the Department.
- Sec. 14. The Title of Division 4 of Article 9 of Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

ARTICLE 9, DIVISION 4

RESIDENTIAL MANDATORY MEASURES

Sec. 15. A new Section 99.04.100 is added to the Los Angeles Municipal Code to read as follows:

SEC. 99.04.100. BASIC PROVISIONS.

Chapter 4 of the 2013 California Green Building Standards Code is adopted by reference except as amended herein.

- Sec. 16. The first unnumbered paragraph of Subsection 99.04.106.2 of the Los Angeles Municipal Code is amended to read as follows:
- **99.04.106.2.** Storm Water Drainage and Retention During Construction. Projects which disturb soil shall manage storm water drainage during construction. In order to manage storm water drainage during construction one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site:
- Sec. 17. A new Subsection 99.04.106.4 is added to the Los Angeles Municipal Code to read as follows:
- **99.04.106.4.** Electric Vehicle (EV) charging for new construction. New construction shall comply with Section 99.04.106.4.1 and 99.04.106.4.2 to facilitate future installation of electric vehicle supply equipment (EVSE). EVSE and all devices related to EV charging shall be installed in accordance with *California Electrical Code*, Article 625.

Notes:

- 1. Due to logistics related to EV charging, this section may apply to non-residential occupancies, e.g., garages, which either are accessory to or support residential (R) occupancies.
- 2. The Society of Automotive Engineers (SAE) International Surface Vehicle Recommended Practice, J1772, "SAE Electric Vehicle and Plug in Hybrid Electric Vehicle Conductive Charge Coupler," Table 5.2 AC Charging Electrical Ratings (North America), October 2012, references the AC Level 2 charge method as 208 to 240-volt AC, single phase, and up to 80 amperes.
- 99.04.106.4.1. One- and Two-Family Dwellings and Townhouses with Attached Private Garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240 volt 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 a subpanel and shall terminate in close proximity to the proposed location of the charging system into a listed cabinet, box or other enclosure. Raceways are required to be continuous at enclosed or concealed areas and spaces. A raceway may terminate in an attic or other approved location when it can be demonstrated that the area is accessible and no removal of materials is necessary to complete the final installation. The panel or subpanel shall have sufficient capacity to support at least Level 2 EVSE.

EXCEPTION: Equivalent installation methods approved by the Department.

- **99.04.106.4.1.1.** Labeling Requirement. A label stating "EV CAPABLE" shall be posted in a conspicuous place at the service panel or subpanel and next to the raceway termination point.
- **99.04.106.4.2. Multifamily Dwellings.** At least five (5)% of the total parking spaces provided for all types of parking facilities, but in no case less than one location, shall be capable of supporting future EVSE.
- **99.04.106.4.2.1. Single Charging Location Required.** When only a single charging location is 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 in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure. The panel or subpanel shall have sufficient capacity to support at least Level 2 EVSE.

EXCEPTION: Equivalent installation methods approved by the Department.

- **99.04.106.4.2.2. Multiple Charging Locations Required.** When multiple charging locations are required, plans shall indicate the proposed type and location of EVSE and also include raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to simultaneously charge all electric vehicles at all designated EV charging locations at their full rated amperage. Plan design shall be based upon Level 2 or greater EVSE at its maximum operating ampacity. Only underground raceways and related underground components are required to be installed at the time of construction.
- **99.04.106.4.2.3.** Labeling Requirement. A label stating "EV CAPABLE" shall be posted in a conspicuous place at the service panel or subpanel and next to the raceway termination point.

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 under number 13-01. Website: www.dot.ca.gov/hg/traffops/signtech/signdel/policy.htm

- 2. See California Vehicle Code Section 22511 for EV charging space 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. Website: http://opr.ca.gov/docs/ZEV_Guidebook.pdf
- 4. The Governor's Office of Planning and Research (OPR) has developed draft guidelines, "Plug-In Electric Vehicles: Universal Charging Access Guidelines and Best Practices," addressing physical accessibility standards and design guidelines for EVs. Website: http://opr.ca.gov/docs/PEV_Access Guidelines.
- Sec. 18. A new Subsection 99.04.106.5 is added to the Los Angeles Municipal Code to read as follows:
- **99.04.106.5.** Cool Roof for Reduction of Heat Island Effect. Roofing material shall comply with the following:
- **99.04.106.5.1. Solar Reflectance.** Roofing material shall have a minimum 3-year aged solar reflectance equal to or greater than the values specified in Table 4.106.5.
- **99.04.106.5.2. Thermal Emittance.** Roofing materials shall have a Cool Roof Rating Council (CRRC) initial or aged thermal emittance equal to or greater than those specified in Table 4.106.5.

Solar reflectance values shall be based on the aged reflectance value of the roofing product or the equation in Section A4.106.5.1 if the CRRC certified aged solar reflectance are not available.

EXCEPTIONS:

- 1. Roof repair;
- 2. Roof replacement when the roof area being replaced is equal to or less than 50% of the total roof area; or
- 3. Building-integrated photovoltaics (BIPV).

TABLE 4.106.5

ROOF SLOPE	MINIMUM 3-YEAR AGED SOLAR REFLECTANCE	THERMAL EMITTANCE
≤ 2 : 12	0.63	0.75
> 2 : 12	0.20	0.75

- Sec. 19. Subsection 99.04.106.6 of the Los Angeles Municipal Code is deleted in its entirety.
- Sec. 20. A new Subsection 99.04.106.7 is added to the Los Angeles Municipal Code to read as follows:
- **99.04.106.7.** Reduction of Heat Island Effect for Nonroof Areas [N]. Reduce nonroof heat islands for 25% of pathways, patios, driveways or other paved areas by using one or more of the methods listed.
 - 1. Use trees or other plantings to provide shade and that mature within 5 years of planting. Trees shall be suitable in mature size and environmental requirements for the site. Tree selection and placement shall consider location and size of areas to be shaded, location of utilities, views from the structure, distance to sidewalks and foundations, overhangs onto adjacent properties and streets; other infrastructure and adjacent to landscaping. In addition, shading shall not cast a shadow, as specified, on any neighboring solar collectors pursuant to *Public Resources Code* Section 25981, *et seq.* (Solar Shade Control Act);
 - 2. Use high albedo materials with an initial solar reflectance value of at least .30 as determined in accordance with American Society for Testing and Materials (ASTM) Standards E1918 or C1549;
 - 3. Use open grid pavement system or pervious or permeable pavement system;
 - 4. Use solar panel arrays to create a canopy shade system; or
 - 5. Other methods of reducing heat island effects acceptable to the Department.
- Sec. 21. Section 99.04.202 of the Los Angeles Municipal Code is deleted in its entirety.
- Sec. 22. Section 99.04.203 of the Los Angeles Municipal Code is deleted in its entirety.