

TRANSMITTAL

To:

THE COUNCIL

Date:

SEP 30 2015

From:

THE MAYOR

TRANSMITTED FOR YOUR CONSIDERATION. PLEASE SEE ATTACHED.



ERIC GARCETTI
Mayor

Ana Guerrero

BOARD OF
BUILDING AND SAFETY
COMMISSIONERS

VAN AMBATIELOS
INTERIM PRESIDENT

E. FELICIA BRANNON
JOSELYN GEAGA-ROSENTHAL
GEORGE HOVAGUIMIAN
JAVIER NUNEZ

CITY OF LOS ANGELES

CALIFORNIA



ERIC GARCETTI
MAYOR

DEPARTMENT OF
BUILDING AND SAFETY
201 NORTH FIGUEROA STREET
LOS ANGELES, CA 90012

RAYMOND S. CHAN, C.E., S.E.
GENERAL MANAGER

FRANK BUSH
EXECUTIVE OFFICER

September 24, 2015

Honorable Eric Garcetti
Mayor, City of Los Angeles
Room 303, City Hall

Attention: Legislative Coordinator Room 301

PROPOSED EV AND COOL ROOF ORDINANCE

The Department of Building and Safety has completed a Draft Ordinance that amends the following sections of the Los Angeles Green Building Code (LAGBC):

1. Section 4.106.4 incorporates the code revisions adopted by the State of California on July 1, 2015.
2. Sections 4.106.5, 4.106.5.1 and 4.106.5.2 add an exception threshold similar to the California Energy Code.

The proposed code revisions have been heard by the Building and Safety Board of Commissioners on September 18, 2015 and recommended to be forwarded to City Council.

We respectfully request that the proposed ordinance be reviewed and forwarded to City Council for its consideration at your earliest convenience.

Please direct any questions regarding the proposed ordinance to Mr. Osama Younan at (213) 482-7407. Should you need my assistance, please contact me at (213) 482-6800.

Raymond S. Chan, C.E., S.E.
General Manager

Attachments

ORDINANCE NO. _____

An ordinance amending Section 99.04.106.4 and 99.04.106.5 of Article 9 of Chapter IX of the Los Angeles Municipal Code to reflect local administrative changes.

Section 1. Section 99.04.106.4 of the Los Angeles Green Building Code is deleted and replaced with the following (based on new CALGreen Section adopted by the State in July, 2015):

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 and use of EV chargers. Electric vehicle supply equipment (EVSE shall be installed in accordance with *City of Los Angeles Electrical Code*, Article 625.

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

1. Where there is no commercial power supply
2. Where there is evidence substantiating that meeting the requirement will alter the local utility infrastructure design requirements on the utility side of the meter so as to increase the utility side cost to the homeowner or the developer by more than \$400.00 per dwelling unit.

99.04.106.4.1. New 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 into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

99.04.106.4.1.1. Identification. The service panel or subpanel circuit directory 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".

99.04.106.4.2. New 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 electric vehicle charging stations (EVCS) capable of supporting future EVSE and shall be identified on construction documents. Calculations for the number of EVCS shall be rounded up to the nearest whole number.

Note: Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging. There is no requirement for EVCS to be constructed or available until EV chargers are installed for use.

99.04.106.4.2.1. Electric Vehicle Charging station (EVCS) locations. Construction documents shall indicate the location of proposed EVCS. At least one EVCS shall be located in common use areas and available for use areas and available for use by all residents.

When EV chargers are installed, EVCS required by Section 4.106.2.2 .Items 3 shall comply with at least one of the following options:

1. The EVCS shall be located adjacent to an accessible parking space meeting the requirements of City of Los Angeles Building Code, Chapter 11A, to allow the use of the EV charger from the accessible parking space.
2. The EVCS shall be located on an accessible route, as defined in the City of Los Angeles Building Code, Chapter 2, to the building.

99.04.106.4.2.2. Electric vehicle charging station (EVCS) dimensions and slope. The EVCS shall be designed to comply with the following:

1. The minimum length of each EVCS shall be 18 feet (5486 mm).
2. The minimum width of each EVCS shall be 9 feet (2743 mm).
3. One in every 25 EVCS, but not less than one EVCS, shall also have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum asile shall be permitted provided the minimum width of the EVCS is 12 feet (3658 mm).
 - a. Surface slope for this EVCS and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.

99.04.106.4.2.3. Single EVCS 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 proposed location of the EVCS. Construction documents shall

identify the raceway termination point. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

99.04.106.4.2.4 Multiple EVCS required. Construction documents shall indicate the raceway termination point and proposed location of future EVCS and EV chargers. Construction documents shall also provide information on amperage of future EVSE, raceway method(s), wiring schematics and electrical load calculations to verify that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EVCS at the full rated amperage of the EVSE. Plan design shall be based upon a 40-ampere minimum branch circuit. 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.

99.04.106.4.2.5 Identification. The service panel or subpanel director shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the City of Los Angeles Electrical Code.

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. Website: www.dot.ca.gov/hq/traffops/signtech/signdel/policy.htm.
2. See 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 (OPR) 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.pdf.

Sec. 2. Subsection 99.04.106.5 of the Los Angeles Municipal Code is amended as follows:

99.04.106.5. Cool Roof for Reduction of Heat Island Effect. Roofing material shall comply with both Subsections 99.04.106.5.1 and 99.04.106.5.2, or comply with Subsection 99.04.106.5.3 of this code.

Exceptions:

1. Roof repair as defined in Section 100.1(b) of the California Energy Code; or
2. Roof replacement when the roof area being replaced is equal to or less than 50% of the total roof area; or
3. Roof replacement where solar systems are being installed; or
4. Additions resulting in less than 500 square feet of added roof area or less than 50% of the total roof area, whichever is greater; or
5. Application for a building permit with full payment of all fees prior to October 1, 2014; or
6. Application for a building permit with full payment of all fees prior to January 1, 2015, for the replacement of an existing roof with asphalt roof shingles or asphalt composition roll roofing.

Sec. 3. Subsection 99.04.106.5.1 of the Los Angeles Municipal Code is amended as follows:

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 of this code. Solar reflectance shall be determined by testing by an approved agency in accordance with ASTM C1549, ASTM E1918 or CRRC-1. Solar reflectance values shall be based on the aged reflectance value of the roofing product or the equation in Section A4.106.5.1 of this code if aged solar reflectance values are not available.

Sec. 4. Subsection 99.04.106.5.2 of the Los Angeles Municipal Code is amended as follows:

99.04.106.5.2. Thermal Emittance. Roofing materials shall have an emittance value equal to or greater than those specified in Table 4.106.5 of this code. Thermal emittance shall be determined by testing by an approved agency in accordance with ASTM D7897, ASTM C1371, ASTM E408 or CRRC-1.