

ORDINANCE NO. NS-1100.123

AN ORDINANCE OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SANTA CLARA AMENDING ARTICLE II, CHAPTER 3 OF DIVISION C3 OF THE COUNTY OF SANTA CLARA COUNTY ORDINANCE CODE RELATING TO AMENDMENTS TO THE GREEN BUILDING CODE

Summary

This ordinance reflects certain amendments to the County's Green Building Ordinance and adoption of the 2013 California Green Building Code to address local conditions.

WHEREAS, Health and Safety Code section 18938 provides that the California Standards Commission ("Commission") shall adopt building standards applicable to all occupancies in the State of California. The building standards consist of certain model building codes published by specified code-writing bodies, as amended to address California-specific issues. When adopted, these building standards constitute the California Building Standards Code;

WHEREAS, the California Building Standards Code is typically revised on a triennial basis. The Commission adopted the 2013 triennial edition of the California Building Standards Code, Title 24, California Code of Regulations. The new building standards became effective on January 1, 2014 unless the standards are modified by local jurisdictions; and

WHEREAS, the Board of Supervisors adopted the 2013 triennial edition of the California Building Standards Code and the Board now wishes to modify certain sections of the Green Building Code because of local climatic, geological or topographical conditions consistent with Health and Safety Code sections 17958.7 and 18941.5, which authorizes counties and cities to modify the State building standards where reasonably necessary because of local climatic, geological or topographical conditions.

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THE BOARD OF SUPERVISORS HEREBY FINDS that each of the amendments to the Green Building Code adopted below are reasonably necessary to address local climatic, geological, and topographical conditions. The basis for each of these findings is set forth in Exhibit A, attached hereto.

**THE BOARD OF SUPERVISORS OF THE COUNTY OF SANTA CLARA
ORDAINS AS FOLLOWS:**

SECTION 1. Article 2, Chapter III, Division C3 of Title C of the County of Santa Clara Ordinance Code is hereby repealed in its entirety and reenacted to read as follows:

**ARTICLE 2. - ADDITIONS, DELETIONS AND AMENDMENTS TO 2013 CALIFORNIA
GREEN BUILDING STANDARDS CODE**

Sec. C3-31. - Additions, deletions and amendments.

Additions, deletions and amendments to the 2013 California Green Building Standards Code are as set forth in this article.

Sec. C3-32. – Amendments to Chapter 4:

Chapter 4 is amended as follows:

(a) Section 4.106.4.1 is amended to read as follows:

4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages. For new dwellings and the rebuild of existing dwellings that include a panel upgrade or construction between the panel and parking area, 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 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.

(b) Section 4.106.4.2 is amended to read as follows:

4.106.4.2 New multifamily dwellings. For new dwellings, at least 3 percent of the total number of parking spaces provided for all types of parking facilities, but in no case less than one, 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.

(c) Section 4.106.4.3 is added to read as follows:

4.106.4.3 Multifamily dwellings with more than 100 new parking spaces. In addition to requirements in 4.106.8.2, install Level 2 EVSE to service one (1) percent of the total number of parking spaces. The percentage calculated shall be rounded up to the next whole number. The EVSE shall be located within the parking area.

(d) Section 4.106.4.4 Shared Parking is added to read as follows:

4.106.4.4 Shared Parking. When parking is provided to new buildings from shared parking lots, including existing and new parking lots, the requirements of this section may be met through the installation of pre-wiring and / or EVSE among both the existing and new parking lots. Pre-wiring or EVSE previously installed in shared parking lots servicing new buildings may also meet the requirements of this section. If a new building does not require the installation of new parking spaces, as approved by the County, the requirements to install pre-wiring or EVSE in parking areas does not apply.

Sec. C3-33. –Amendments to Chapter 5:

Chapter 5 is amended as follows:

(a) Section 5.106.5.3 is amended to read as follows:

Section 5.106.5.3 Electric vehicle (EV) charging. At least 5 percent of the total parking spaces, but not less than one, shall be capable of supporting future electric vehicle supply equipment (EVSE). The percentage calculated shall be rounded up

to the next whole number. When EVSE(s) is/are installed, it shall be in accordance with the *California Building Code*, the *California Electrical Code* and as follows:

(b) Section 5.106.5.3.1. [N] is amended to read as follows:

Section 5.106.5.3.1. Single charging space requirements. When only a single charging space is required, 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.

(c) Section 5.106.5.3.2 is amended to read as follows:

Section 5.106.5.3.2 Multiple charging space requirements. When multiple charging spaces are required, raceway(s) 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

(d) Section 5.106.5.3.3 is amended to read as follows:

5.106.5.3.3 Buildings with more than 100 new parking spaces. Install Level 2 EVSE to service one (1) percent of the total number of parking spaces. The percentage calculated shall be rounded up to the next whole number. The EVSE shall be located within the parking area.

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.

(e) Section 5.106.5.3.6 is added to read as follows:

5.106.5.3.6 Shared Parking. When parking is provided to new buildings from shared parking lots, including existing and new parking lots, the requirements of this section may be met through the installation of pre-wiring and / or EVSE among both the existing and new parking lots. Pre-wiring or EVSE previously installed in shared parking lots servicing new buildings may also meet the requirements of this section. If a new building does not require the installation of new parking spaces, as approved by the County, the requirements to install pre-wiring or EVSE in parking areas does not apply.

Section C3-34. Chapter 4, Appendix A4 Added.

Appendix A4 of Chapter 4 is added with the following modifications and amendments:

- (a) Section A4.106.8, Electrical vehicle (EV) charging for new construction, is deleted.
- (b) Division A4.2 of Appendix A4 Residential Voluntary Measures is deleted.
- (c) Division A4.6 Tier 1 and Tier 2 is amended to read as follows:

- (1) Section A4.601.1 is amended to read as follows:

A4.601.1 Scope. The measures contained in this appendix are mandatory for new single family dwellings equal to or greater than 3000 square feet in area and new multi-family residential buildings equal to or greater than 25,000 square feet in area. The provisions of this section outline means of achieving enhanced construction or reach levels by incorporating additional green building measures. In order to meet one of the tier levels designers, builders or property owners are required to incorporate additional green building measures necessary to meet the threshold of each level.

- (2) Section 4.601.4.2, Prerequisite and elective measures for Tier 1 subsection 2, from Division A4.2, Energy Efficiency, is deleted.
- (3) Section A4.601.5, Tier 2 is deleted.

Sec. C3-35. –Chapter 5, Appendix A5 Added.

Appendix A5 of Chapter 5 is added with the following modifications and amendments:

- (a) Appendix A5 Non-Residential Voluntary Measures, Division A5.1-Planning and Design is amended to delete Section A5.106.5.3, Electric vehicle (EV) charging.
- (b) Appendix A5 Non-Residential Voluntary Measures, Division A5.2-Energy Efficiency is deleted.

(c) Appendix A5 Non-Residential Voluntary Measures, Division A5.6 Tier 1 and Tier 2 is amended as follows:

- (1) *Section A5.601.1 Scope.* The measures contained in this appendix are ~~not~~ mandatory_new commercial equal to or greater than 25,000 square feet in area. The provisions of this section outline means of achieving enhanced construction or reach levels by incorporating additional green building measures for newly constructed nonresidential buildings as well as additions. In order to meet one of the tier levels designers, builders or property owners are required to incorporate additional green building measures necessary to meet the threshold of each level.
- (2) Section A5.601.2.3, Tier 1 is deleted.
- (3) Section A5.601.3 *CALGreen*, Tier 2 is deleted.

SECTION 2. Severability. This ordinance and the various parts thereof are hereby declared to be severable. Should any section of this ordinance be declared by a court to be unconstitutional or invalid, such decision shall not affect the validity of the ordinance as a whole, or any portion thereof, other than the section so declared to be unconstitutional or invalid.

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PASSED AND ADOPTED by the Board of Supervisors of the County of Santa Clara, State of California on AUG 11 2015 by the following vote:

AYES: **CHAVEZ, CORTESE, SIMITIAN, WASSERMAN, YEAGER**

NOES: **NONE**

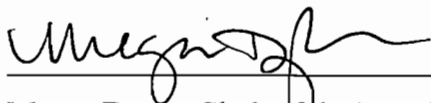
ABSENT: **NONE**

ABSTAIN: **NONE**



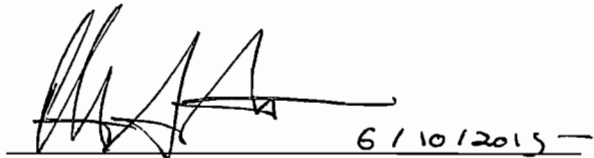
Dave Cortese, President
Board of Supervisors

ATTEST:



Megan Doyle, Clerk of the Board

APPROVED AS TO FORM:


6/10/2015

Elizabeth G. Pianca, Deputy County Counsel

Attachment:

Exhibit A – Bases for Local Changes to the California Green Building Standards Code

EXHIBIT A

BASIS FOR LOCAL AMENDMENTS TO 2013 CALIFORNIA GREEN BUILDING STANDARDS CODE

The proposed modifications the 2013 California Green Building Standards Code are reasonably necessary because of local climatic, geological, or topographical conditions for at least the following reasons:

- (1) Green building is a practice of building construction, operation and design that intends to minimize the environmental impacts of the buildings upon the natural and human environment by preserving natural resources, reducing energy and water usage, and improving indoor environmental quality.
- (2) Reduction of energy usage as a result of efficiencies and conservation required by this ordinance is likely to have local benefits such as cost reduction, additional available system energy capacity, reduction in electricity demand, and a reduction in greenhouse gas emissions. These benefits are likely to become increasingly important as the effects of global warming and climate change are felt locally.
- (3) The availability of sufficient potable water supply to meet demand in Santa Clara County is at risk. Extremely dry conditions have persisted in California since 2012. Snow pack levels in the Sierras were at 20% of normal during the winter of 2014-2015. Expected increased air temperature associated with climate change is expected continue to decrease available potable water from annual snowmelt and to increase the potential for continued drought, reducing both imported and local water sources.
- (4) Environmental benefits of green building include: enhanced and protected biodiversity and ecosystems, improvements in air and water quality, reduced waste streams, and conservation of natural resources. Other benefits of green building according to the EPA include improved occupant productivity, enhanced occupant comfort and health and minimized strain on local infrastructure. Therefore, the design, construction, and maintenance of buildings and structures within the Santa Clara County is likely to have a beneficial impact on the County's environmental sustainability, resource usage, energy efficiency, waste management, and the health and productivity of occupants.
- (5) The adoption of California Assembly Bill 32 (the "Global Warming Solutions Act") recognizes that greenhouse gas ("GHG") emissions from California are contributing to global warming and the legislation mandates that statewide GHG emissions be lowered to 1990 levels by 2020. The use of green building practices furthers, at the local level, the environmental protection goals of the County General Plan and the greenhouse reduction goals set forth under the Global Warming Solutions Act by reducing energy and water usage while conserving resources and creating healthier environments.

(6) The availability of plug-in electric vehicles is growing and will continue to expand over the next several years. According to the International Energy Agency the largest share of the worldwide plug-in hybrid electric vehicle (PHEV) market is in the United States. California Executive Order B-16-2012 targets over 1.5 million plug-in electric vehicles to be on the roadways by 2025.

(7) The amendments increasing the requirements to install pre-wiring for electric vehicle supply equipment in new buildings will increase the availability and visibility of these charging systems, complimenting increased electric vehicle ownership by reducing "range anxiety". Increased use of plug in electric vehicles will reduce the amount of emissions and pollutants emitted from passenger vehicles, improving local air quality and benefitting the citizens of the County of Santa Clara.

(8) The local amendments will further the goals and policies of the County General Plan regarding environmental protection and will reduce future greenhouse gas emissions in accordance with the goals established under the Global Warming Solutions Act. The proposed modifications the 2013 California Green Building Standards Code are reasonably necessary because of local climatic, geological, or topographical conditions for at least the following reasons: