# Ordinance No. 5101

Ordinance of the Council of the City of Palo Alto Adopting a New Chapter 16.06 of the Palo Alto Municipal Code, California Residential Code, 2010 Edition, and Local Amendments and Related Findings

The Council of the City of Palo Alto does ORDAIN as follows:

SECTION 1. Title 16 of the Palo Alto Municipal Code is amended to adopt a new Chapter 16.06 to read as follows:

# 16.06.010 2010 California Residential Code adopted.

The California Residential Code, 2010 Edition, Title 24, Part 2.5 of the California Code of Regulations, together with those omissions, amendments, exceptions and additions thereto, is adopted and hereby incorporated in this Chapter by reference and made a part hereof the same as if fully set forth herein. One copy of the California Residential Code, 2010 Edition, has been filed for use and examination of the public in the Office of the Building Official of the City of Palo Alto.

Wherever the phrases "California Residential Code" or "Residential Code" are used in this code or any ordinance of the city, such phrases shall be deemed and construed to refer and apply to the California Residential Code, 2010 Edition, as adopted by this Chapter.

# 16.06.020 2010 California Residential Code Appendix Chapters adopted.

The following Appendix Chapters of the California Residential Code, 2010 Edition, are adopted and hereby incorporated in this Chapter by reference and made a part hereof the same as if fully set forth herein:

- A. Appendix G Swimming Pools, Spas and Hot Tubs
- B. Appendix H Patio Covers

#### 16.06.030 Cross - References to California Residential Code.

The provisions of this Chapter contain cross-references to the provisions of the California Residential Code, 2010 Edition, in order to facilitate reference and comparison to those provisions.

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# 16.06.040 Enforcement -- Citation Authority.

The employee positions designated in this section may enforce the provisions of this chapter by the issuance of citations; persons employed in such positions are authorized to exercise the authority provided in Penal Code section 836.5 and are authorized to issue citations for violations of this chapter. The designated employee positions are: (1) chief building official; (2) assistant building official; (3) building inspection supervisor; and (4) code enforcement officer.

#### 16.06.050 Local Amendments.

The provisions of this Chapter shall constitute local amendments to the cross-referenced provisions of the California Residential Code, 2010 Edition, and shall be deemed to replace the cross-referenced sections of said Code with the respective provisions set forth in this Chapter.

# 16.06.60 Chapter 1, Division II amended – Administration.

Chapter 1, Division II of the California Residential Code is amended to read:

# DIVISION II ADMINISTRATION

The provisions of Chapter 1 (Scope and Administration), Division II (Scope and Administration), of the California Building Code, 2010 Edition, as locally amended and adopted, shall apply to this code.

# 16.06.070 Section R202 amended – Definitions added.

Section R202 of the California Residential Code is amended to include the following definitions:

**DUAL SENSOR PHOTOELECTRIC/IONIZATION SMOKE DETECTOR OR ALARM.** A smoke alarm or detector that utilizes both photoelectric and ionization methods in a single device.

**IONIZATION SMOKE DETECTOR OR ALARM.** A smoke alarm or detector that uses a small amount of radioactive material to detect invisible particles generated by flame.

PHOTOELECTRIC SMOKE DETECTOR OR ALARM. A smoke alarm or detector that uses a light-source to detect the presence of smoke.

WILDLAND-URBAN INTERFACE FIRE AREA is a geographical area identified by the State of California as a "Fire Hazard Severity Zone" in accordance with Public Resources Code Sections 4201 through 4202 and Government Code Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires. Within the city

limits of the City of Palo Alto, "Wildland-Urban Fire Interface Area" shall also include all areas west of Interstate 280, and all other areas recommended as a "Very High Fire Hazard Severity Zone" by the Director of the California Department of Forestry.

16.06.080 Section R313.2 amended – One- and two-family dwellings automatic fire sprinkler systems.

Section R313.2 of the California Residential Code is amended to read:

- R313.2 One- and two-family dwellings automatic fire sprinkler systems. Approved automatic sprinkler systems in new one- and two- family dwellings and in existing modified one- and two- family dwellings shall be provided in accordance with this section.
- 1. An automatic sprinkler system shall be provided throughout all new residential buildings and structures.

**Exception:** New detached Group U occupancies, buildings or structures that do not exceed 1,000 square feet of building area.

2. An automatic sprinkler system shall be provided throughout all existing buildings when modifications are made that create an increase in fire area beyond 3,600 square feet or that create an increase in the number of stories to two (2) or more.

Exception: One-time additions to existing buildings made after January 1, 1994 that do not exceed 500 square feet in building area.

- 3. An automatic sprinkler system shall be provided throughout all new basements regardless of size and throughout existing basements that are expanded by more than 50%.
- 4. An automatic sprinkler system shall be provided throughout all new buildings located in the designated Wildland-Urban Interface Fire areas.

Exception: Any detached non-residential accessory structures to single family residences that have a fire area of 500 square feet or less.

5. An automatic sprinkler system shall be provided throughout all existing buildings located in the designated Wildland-Urban Interface Fire areas when modifications are made that increases the fire area.

**Exception:** One-time additions to existing buildings made after January 1, 1994 that do not exceed 500 square feet in fire area.

### 16.06.090 Section R314.1 amended – Smoke detection and notification.

Section R314.1 of the California Residential Code is amended to read:

**R314.1 Smoke detection and notification.** Listed single- and multiple-station smoke alarms complying with UL 217 shall be installed in accordance with the provisions of this code and the household warning equipment provisions of NFPA 72.

Smoke alarms more than 10 years old shall not be considered as satisfying any requirement of this code or of the Health and Safety Code Section 13113 and shall be immediately replaced by the owner with a smoke alarm that complies with this section.

Smoke alarms and smoke detectors installed on or after January 1, 2011 in compliance with this code or with the provisions of the Health and Safety Code Section 13113 shall also meet the following requirements:

- 1. Smoke detectors or smoke alarms located within 20 feet of a kitchen or room containing a wood-burning stove or fireplace shall be photoelectric detectors or alarms.
- 2. In any other required locations dual sensor photoelectric/ionization detectors or alarms, shall be installed. A photoelectric smoke detector or alarm installed together with an ionization smoke detector or alarm may be used as a substitute for a dual sensor photoelectric/ionization detector or alarm.

Exception: A fire alarm system with smoke detectors located in accordance with, and meeting the requirements of, this section may be installed in lieu of smoke alarms. Upon actuation of the detector, only those notification appliances in the dwelling unit or guest rooms where the detectors are actuated shall activate.

#### 16.06.100 Section R322.1 amended – General.

The following paragraph is added to Section R322.1 of the California Residential Code:

Palo Alto Flood Hazard Regulations. Notwithstanding the provisions of this section, all construction or development within a flood hazard area (areas depicted as a Special Flood Hazard Area on Flood Insurance Rate Maps published by the Federal Emergency Management Agency) shall comply with the City of Palo Alto Flood Hazard Regulations (Palo Alto Municipal Code Chapter 16.52). Where discrepancies exist between the requirements of this code and said regulations, the provisions of said regulations shall apply.

#### 16.06.110 Section R329 added - Sound Transmission.

Section R329 is added to the California Residential Code to read:

# SECTION R329 SOUND TRANSMISSION

**R329.1 General.** For building standards and regulations governing sound transmission, refer to Section 1207 of the California Building Code.

16.06.120 Section R403.1.8 amended – Foundations on expansive soils.

Section R403.1.8 of the California Residential Code is amended to read:

**R403.1.8 Foundations on expansive soils.** Foundations and floor slabs for buildings located on expansive soils shall be designed in accordance with Section 1808.6 or Table 1809.7 of the California Building Code.

16.06.130 Table R602.10.1.2(2) amended – Bracing Requirements Based on Seismic Design Category.

Footnote d is added to Table R602.10.1.2(2) to read as follows:

d. In Seismic Design Categories  $D_0$ ,  $D_1$  and  $D_2$ , Method GB is not permitted and the use of Method PCP is limited to one-story single-family dwellings and accessory structures.

16.06.140 Section R902.1.4 amended – Roofing requirements in a Wildland-Urban Interface Fire Area.

Section R902.1.4 of the California Residential Code is amended to read:

R902.1.4 Roofing requirements in a Wildland-Urban Interface Fire Area. The entire roof covering on new structures and existing structures on which more than 50 percent of the total roof area is replaced within any one-year period, and any roof covering applied in the alteration, repair or replacement of roofs on existing structures, shall be a fire-retardant roof covering that is at least Class A. Roofing requirements for structures located in a Wildland-Urban Interface Fire Area shall also comply with Section R327.5.

**16.06.150** Section R1003.9.2 added – *Repairs, replacements and alterations*. Section R1003.9.2 is added to the California Residential Code to read:

R1003.9.2 Repairs, replacements and alterations. When any repair, replacement or alteration to the roof of an existing structure is performed, a spark arrester shall be installed on the existing chimney in accordance with Section R1003.9.1.

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SECTION 2. The Council adopts the findings for local amendments to the California Residential Code, 2010 Edition, attached hereto as Exhibit "A" and incorporated herein by reference.

SECTION 3. The Council finds that this project is exempt from the provisions of the California Environmental Quality Act ("CEQA"), pursuant to Section 15061 of the CEQA Guidelines, because it can be seen with certainty that there is no possibility that the amendments herein adopted will have a significant effect on the environment.

SECTION 4. This ordinance shall be effective on the thirty-first day after the date of its adoption.

INTRODUCED: November 8, 2010

PASSED:

November 22, 2010

AYES:

BURT, ESPINOSA, HOLMAN, KLEIN, PRICE, SCHARFF, SCHMID,

SHEPHERD, YEH

NOES:

**ABSENT:** 

ABSTENTIONS:

APPROVED AS TO FORM:

Senior Deputy City Attorney

APRROVED:

City Manager

Director of Planning & Community

Environment

Director of Administrative

Services

# EXHIBIT "A" FINDINGS FOR LOCAL AMENDMENTS TO CALIFORNIA RESIDENTIAL CODE

Section 17958 of the California Health and Safety Code provides that the City may make changes to the provisions of the California Building Standards Code. Sections 17958.5 and 17958.7 of the Health and Safety Code require that for each proposed local change to those provisions of the California Building Standards Code which regulate buildings used for human habitation, the City Council must make findings supporting its determination that each such local change is reasonably necessary because of local climatic, geological, or topographical conditions.

# A. Explanation of Administrative Amendments

# 16.06.060 Chapter 1, Division II amended – Administration.

<u>Finding</u>: This amendment brings the administrative provisions of the California Residential Code into compliance with those of the California Building Code as locally amended and adopted, the Palo Alto Municipal Code and the organization of the City of Palo Alto.

B. Explanation of Amendments to conform California Residential Code, as amended locally, to California Fire Code, as amended locally

16.06.070	Section R202 amended – Definitions added.
16.06.080	Section R313.2 amended - One- and two-family dwellings automatic fire
	sprinkler systems.
16.06.090	Section R314.1 amended – Smoke detection and notification.
16.06.140	Section R902.1.4 amended – Roofing requirements in a Wildland-Urban
	Interface Fire Area.
16.06.150	Section R1003.9.2 added – Repairs, replacements and alterations.

Finding: These amendments make the provisions of the California Residential Code, 2010 Edition, as amended locally, consistent with those of the California Fire Code, 2010 Edition, as amended locally pursuant to Section 18941.5 of the Health and Safety Code. The Findings for these amendments are more specifically set forth in Exhibit "A" of the City's Ordinance adopting the California Fire Code, 2010 Edition. In general, these amendments have been recognized by the City of Palo Alto as tools for addressing the fire problems, concerns and future direction by which the authority can establish and maintain an environment that will afford a level of fire and life safety to all who live and work within the City's boundaries. Based on the specific findings that identify the unique local climatic, geologic and topographic conditions within the City of Palo Alto, these amendments are also considered reasonable and necessary. The experience of several disastrous fires within the city, in addition to other fires in Santa Clara, Monterey, San Mateo, Alameda and Contra Costa Counties have demonstrated the need for additional I fire protection features in new buildings and those that are under construction. Implementation of these amendments may reduce the severity and potential of loss of life and property due to fire.

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# C. Findings for Substantive Local Amendments

#### 16.06.100 Section R322.1 amended – General.

<u>Finding</u>: This section is amended to conform to other provisions of the Palo Alto Municipal Code and to comply with the National Flood Insurance Program (implementing the National Flood Act of 1968, as amended), and federal regulations adopted thereunder, for the purpose of promoting public health, safety and general welfare and to minimize public and private losses due to flood conditions in the mapped Flood Hazard areas of the City.

#### 16.06.110 Section R329 added – Sound Transmission.

<u>Finding</u>: This section merely makes reference to and incorporates the provisions of California Building Code Section 1207 to provide design guidance and requirements for sound transmission within buildings. It is included in lieu of Appendix Chapter K that was not adopted by any State agencies.

# 16.06.120 Section R403.1.8 amended – Foundations on expansive soils.

<u>Finding</u>: This amendment is necessary and justified due to the documented existence of expansive soil conditions throughout much of Palo Alto as shown on published geotechnical and geologic hazard maps in the City's Comprehensive Plan. The prescribed minimum foundation requirements are based on sound engineering practices.

# 16.06.130 Table R602.10.1.2(2) amended – Bracing Requirements Based on Seismic Design Category.

<u>Finding</u>: This amendment limits the bracing methods that can be used for walls within certain seismic design categories and is based on sound engineering principles. The amendment is necessary because the greater San Francisco Bay region is a densely populated area with many buildings constructed over and near a vast array of fault systems capable of producing major earthquakes, including but not limited to, the 1989 Loma Prieta Earthquake. These fault systems place structures within the City of Palo Alto at greater risk of damage or collapse due to earthquakes.

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