

**BUILDING STANDARDS COMMISSION**

2525 Natomas Park Drive, Suite 130  
Sacramento, California 95833-2936  
(916) 263-0916 FAX (916) 263-0959



June 14, 2011

Frank Rainone  
Building Services Division  
City of East Palo Alto  
1960 Tate Street  
East Palo Alto, CA 94303

Dear Mr. Rainone:

This letter is to acknowledge receipt on June 14, 2011 of the City of East Palo Alto submittal pertaining to Ordinance No. 339 with findings and is acceptable for filing. Your filing attests to your understanding that according to Health and Safety Code Section 17958.7 no modification or change to the California Building Standards Code shall become effective or operative for any purpose until the finding and the modification or change have been filed with the California Building Standards Commission (the Commission).

This letter attests only to the filing of these local modifications with the Commission, which is not authorized by law to determine the merit of the filing.

As a reminder, local modifications are specific to a particular edition of the Code. They must be readopted and filed with the Commission in order to remain in effect when the next triennial edition of the Code is published. In addition, should you receive Fire Protection District ordinances for ratification, it is required to submit the ratified ordinances to the Department of Housing and Community Development [H&SC Section 13869.7(c)], attention State Housing Law Program Manager, rather than the Commission.

If you have any questions or need any further information, you may contact me at (916) 263-0916.

Sincerely,

  
Enrique M. Rodriguez  
Associate Construction Analyst

cc: Chron  
Local Filings

**ORDINANCE NO. 339**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF EAST PALO ALTO AMENDING TITLE 15 (BUILDING AND CONSTRUCTION), OF THE EAST PALO ALTO MUNICIPAL CODE TO ADOPT BY REFERENCE THE 2010 CALGREEN BUILDING CODE (BASED ON THE 2010 CALIFORNIA BUILDING CODE), WITH LOCAL AMENDMENTS, AS THE GREEN BUILDING CODE OF THE CITY OF EAST PALO ALTO.**

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF EAST PALO ALTO DOES ORDAIN AS FOLLOWS:

SECTION 1. CHAPTER 15.11 ADDED. East Palo Alto Municipal Code Chapter 15.11 (Green Building Code) is hereby added to Title 15 (Building and Construction) of the East Palo Alto Municipal Code.

SECTION 2. CHAPTER 15.11 ADDED. East Palo Alto Municipal Code Chapter 15.11 (Green Building Code) is hereby added to Title 15 (Building and Construction) of the East Palo Alto Municipal Code to read as set forth Exhibit "A" attached and incorporated.

SECTION 3. STATUTORY REFERENCES, INCLUSIONS OF AMENDMENTS AND ADDITIONS. Whenever reference is made to any portion of this ordinance, or of any other chapter or section of the East Palo Alto Municipal Code, or of any other ordinance of the City of East Palo Alto, or of any law of the State of California, the reference applies to all amendments and additions now or thereafter made.

SECTION 4. INTERPRETATIONS. In interpreting and applying the provisions of this ordinance, the requirements contained herein are declared to be minimum requirements for the purposes set forth. The provisions of this ordinance, insofar as they are substantially the same as existing statutory provisions relating to the same subject matter, shall be construed as restatements and continuations and not as new enactments. This ordinance shall not nullify the more restrictive provisions of covenants, agreements or other ordinances or laws, but shall prevail as to such provisions which are less restrictive.

SECTION 5. CONSTITUTIONALITY, SEVERABILITY. If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held by a court of competent jurisdiction to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council of the City of East Palo Alto declares that it would have passed this ordinance and every section, subsection, clause and phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared unconstitutional.

SECTION 6. FINDINGS. The deletions, amendments and/or additions to the California Building Codes as set out in Exhibit "A" and which are the subject of this ordinance, are based upon the General and Specific findings by the City Council of the City of East Palo Alto, which findings are set forth in Resolution No. \_\_\_\_\_.

SECTION 7. EXEMPTION FROM CEQA. The City Council finds, pursuant to Title 14 of the California Code of Regulations, Section 15061(b)(3), that this ordinance is exempt from the requirements of the California Environmental Quality Act (CEQA) in that it is not a Project which has the potential for causing a significant effect on the environment.

SECTION 8. EFFECTIVE DATE. This ordinance shall be in full force and effect on January 1, 2011.

SECTION 9. POSTING AND PUBLICATION. The City Clerk is directed to cause copies of this ordinance to be posted in three (3) prominent places in the City of East Palo Alto and to cause publication of a notice once in The Palo Alto Daily News, the official newspaper for publication of legal notices of the City of East Palo Alto, setting forth the date of adoption, the title of this ordinance, and a list of places where copies of this ordinance are posted, within fifteen (15) days after adoption of this ordinance.

Adopted as an ordinance of the City of East Palo Alto at a regular meeting of the City Council held on December 7, 2010, by following vote:

AYES:  
NOES:  
ABSTAIN:  
ABSENT:

ATTEST:

APPROVED:

\_\_\_\_\_  
City Clerk

\_\_\_\_\_  
Mayor

Date of Attestation: \_\_\_\_\_

APPROVED AS TO FORM AND LEGALITY:

\_\_\_\_\_  
Vincent Ewing, City Attorney

**Chapter 15.11**

**GREEN BUILDING CODE**

**15.11. Title.**

**15.11.010. Adoption by reference.**

**15.11.020. Repeal Section 4.408.1 of the California Green Building Code.**

**15.11.022. Repeal Section 5.408.1 of the California Green Building Code.**

**15.11. Title.**

This chapter shall be known and may be cited and referred to as the “Green Building Code for the City of East Palo Alto.”

**15.11.010. Adoption by reference.**

The “2010 California Green Building Code” is hereby adopted by reference as the Building Code of the City of East Palo Alto. All references to jurisdictional requirements are found in the East Palo Alto Municipal Code or other appropriate schedules.

**15.11.020. Repeal Section 4.408.1 of the California Green Building Code.**

Section 4.408.1 of the California Green Building Code, Construction Waste Reduction Disposal and Recycling, is repealed.

**15.11.022. Repeal Section 5.408.1 of the California Green Building Code.**

Section 5.408.1 of the California Green Building Code, Construction Waste Reduction Disposal and Recycling, is repealed.

RESOLUTION NO. 4092A RESOLUTION OF THE CITY COUNCIL OF THE CITY  
OF EAST PALO ALTO FINDING AND DETERMINING  
THE NEED FOR MODIFICATIONS TO THE 2010  
CALIFORNIA BUILDING CODE

WHEREAS, the City of East Palo Alto is adopting the 2010 California Building Codes with numerous changes and modifications;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF EAST PALO ALTO that it finds and determines there is a need to adopt the changes or modifications because of local climatic, topographic, geological and related geographic conditions.

**General Findings****1. Climatic**

- a. **Precipitation.** Precipitation ranges from 4.83 to 30.30 inches per year with an average of approximately 13.86 inches per year. Approximately 90% falls during the months of November through April and 10% from May through October. This area experienced a major drought in 1977-78 and a moderate drought the next five years; it is possible that more droughts will occur in the future. The local climate is characterized by markedly delineated rainy and dry seasons, which tend to maximize the expansive characteristics of soil.
- b. **Relative Humidity.** Humidity generally ranges from 60% during daytime to 80% at night. It drops to 20% during the summer months and occasionally drops lower.
- c. **Temperatures.** Temperatures have been recorded as high as 108° F. Average summer highs are in the 78°-82° F. range.
- d. **Winds.** Prevailing winds are from the Northwest or Southeast. However, winds are experienced from virtually every direction at one time or another. Velocities are generally in the 5-mph to 15-mph range, gusting to 7.4 mph to 30 mph, particularly during the summer months. Extreme winds, up to 70 mph, have been known to occur.
- e. **Summary.** These local climatic conditions affect the acceleration, intensity and size of fire in the community. Times of little or no rainfall, of low humidity and high temperatures create extremely hazardous conditions, particularly as they relate to wood shake and shingle roof fires and conflagrations. The winds experienced in this area can have a tremendous impact upon structure fires of buildings in close proximity to one another commonly found in East Palo Alto. During wood shake and shingle roof fires, or exposure fires, winds can carry sparks and burning brands to other structures, thus spreading the fire and causing conflagrations. In building fires, winds can literally force fires back into the building and can create a blowtorch effect, in addition to preventing "natural" ventilation and cross-ventilation efforts.

**2. Geological, Geographic and Topographic**

- a. **Geographic Location.** East Palo Alto is located in the Santa Clara Valley. Located near the heart of the "Silicon Valley," the center for an expanding and changing technology industry.

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b. **Seismic Location.** East Palo Alto is situated on alluvial soils between San Francisco Bay and the San Andreas Fault zone. The City's location makes it particularly vulnerable to damage to older structures caused by seismic events including liquefaction. The relatively young geological processes that have created the San Francisco Bay Area are still active today. Seismically, the City sits between two active earthquake faults (San Andreas and the Hayward/Calaveras) and numerous potentially active faults.

c. **Seismic and Fire Hazards.** Gypsum wallboard and exterior portland cement plaster have performed poorly during recent California seismic events. The shear values for gypsum wallboard and portland cement stucco contained in the code are based on mono-directional testing. It is appropriate to limit the use of these products until cyclic loading testing are performed and evaluated. Fire following an earthquake has the potential of causing greater loss of life and damage than the earthquake itself.

Police and Fire resources would have to be prioritized to mitigate the greatest threat spread of fire, due to the seismic event.

Other variables may tend to intensify the situation:

1. The extend of damage to the water system;
2. The extent of isolation due to bridge and/or freeway overpass collapse;
3. The extent of roadway damage and/or amount of debris blocking the roadways;
4. Climatic conditions (hot, dry weather with high winds);
5. Time of day will influence the amount of traffic on roadways and could intensify the risk to life during normal business hours;
6. The availability of timely mutual aid or military assistance;
7. The large portion of dwellings with wood shingle roof coverings could result in conflagrations.

d. **Size and Population.** The City has an area over 2.5 square miles in size and a population estimated to be 31,876.

e. **Development.** East Palo Alto is a community, which is projected to add 2,010 new households/housing units within the next twenty years, primarily in multi-family configurations, for which building security is a matter of acute importance.

f. **Police and Fires Departments.** East Palo Alto utilizes the East Police Department with police officers, working closely with the Menlo Park Fire District when emergency situations occur. Menlo Park Fire District provides East Palo Alto with its fire fighting and emergency response first team. East Palo Alto Police Department and Menlo Park Fire District are the cities first responders in emergency issues. Menlo Park Fire District serves as the responsible agency for protection of life and property within the city limits. It is therefore also imperative that fire detection and suppression occur as quickly as possible to minimize loss of property and life. For these reasons the most stringent provisions are required concerning fire detection, alarm and suppression systems.

g. **Roads and Streets.** The number of vehicle miles driven in the City is steadily increasing and considerable efforts in traffic and roadway improvements are being made to ease the crush of commuters to and through the City to their homes and places of work. Because of the City's high concentration of jobs, much of the peak traffic is made by nonresidents traveling to or from East Palo Alto. The impact of planned developments and traffic flow will continue to have an effect on the Police Department and delivery of fire services.

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**h.** Another outstanding issue is the current lack of stored water within the city limits to fight fire. The City is currently working on a city wide master water plan which will address this issue and implement proper water storage.

**i.** **Industry.** The city currently has an approved site for future research and development that will allow the use of small amounts of hazardous materials in the development of future products to service Silicon Valley.

**j.** **Transportation.** East Palo Alto is divided by an interstate highway, which potentially could affect response times of fire suppression equipment.

**k.** **Soil Conditions and Topography.** East Palo Alto lies at the south eastern side of San Mateo County the southern end of San Francisco Bay and is built atop the alluvial deposits that surround the margins of the Bay. The alluvium was created by the flooding of the many streams emptying into the San Francisco Bay depression, and from intermittent seawater inundation that has occurred over the last 2 or 3 million years. The areas closest to the Bay are overlain by unconsolidated fine silty clay, known as "Bay Mud" which varies in thickness from a few feet to as much as 30 feet. Generally, the older, more stable alluvium is to the south and the younger, less stable material is to the north. Bedrock lies beneath the area at depths generally 300' or more. The city has several different flood zones and more than two thirds of the city is located in these different flood zones. The flood hazard is even compounded since the East Palo Alto eastern side of the city is against San Francisco Bay and on the northern side of the city is San Fransquito Creek.

**l.** The underground aquifer levels are likewise very shallow, between 8'-10' below grade.

The Silicon Valley is within a very active seismic area and local soil conditions can be highly expansive (clay soils). The Northridge earthquake provided hundreds of examples of damage to plain concrete footings. This type of damage is extremely expensive to repair, in contrast to the small expense of providing nominal footing reinforcement. Footing reinforcement is also necessary to prevent damage due to pumping action caused by local expansive soils, which shrink and swell during seasonal drying and wetting conditions.

Most of the surface soils in the Silicon Valley are relatively young and unconsolidated sedimentary materials formed from a wide variety of parent materials. The varying chemical composition, degree of weathering, and the relatively acid environment have created soils of varying types, which are particularly corrosive in nature. Much of the surface soil in the Silicon Valley is highly expansive (i.e., shrink-swell behavior) and has low bearing strength.

**l.** **Water/Sewer.** Some parts of the Silicon Valley have hard water, which is corrosive to ferrous pipe. The groundwater table is unusually high in many places. Expansive soils create unstable conditions, which increase the potential of breaks in sewer laterals. To maintain health and sanitary services, it is necessary to gain access, to periodically maintain public sanitary laterals.

**m.** **Buildings, Landscaping and Clearances.** Many of the large buildings and building complexes are of designs, which greatly limit visibility and approach to and accessibility by Police and Fire. Many houses and other buildings with wood roofs and/or sidings are so close together that fire will readily spread from one to another by both radiation and convection.

**n.** **Summary.** The stated local geological, geographic and topographical conditions increase the magnitude, exposure, accessibility problems and fire hazards presented to the Police and Fire Departments. Lying beneath East Palo Alto are thick layers of sand, gravel and clay, known as alluvium, which amplify the effects of earthquakes. Based on the damage caused in Santa Clara Valley by the 1906 earthquake and the poor performance of alluvial deposits during earthquakes, this area could be subject to severe damage.

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**Findings.**

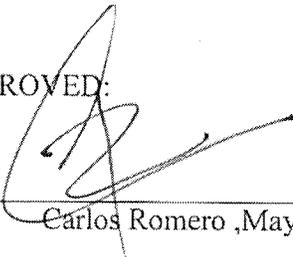
With the exception of changes justified on administrative grounds, the local amendments of the 2010 California Building Codes are justified by all of the aforementioned general findings.

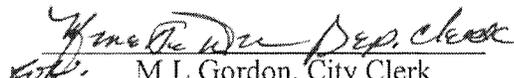
BE IT FURTHER RESOLVED that the City Clerk is hereby directed to cause a copy of this resolution, together with the ordinances making the changes and modifications to the enumerated uniform codes, to be filed with the State Department of Housing and Community Development.

Adopted by the City Council at a regular meeting held on February 1, 2011 , by the following vote:

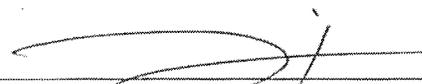
AYES:        ABRICA, EVANS, MARTINEZ, ROMERO  
NOES:        0  
ABSTAIN:    0  
ABSENT:     WOODS

ATTEST:

APPROVED:  
  
\_\_\_\_\_  
Carlos Romero ,Mayor

  
\_\_\_\_\_  
M L Gordon, City Clerk  
(SEAL)

APPROVED AS TO FORM:

  
\_\_\_\_\_  
Vincent Ewing, City Attorney