

**AN ORDINANCE OF THE CITY OF BELMONT AMENDING CHAPTER 7 OF THE CODE OF THE CITY OF BELMONT; ADOPTING BY REFERENCE THE 2010 EDITION OF THE CALIFORNIA BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24 (CCR, T-24), STATE HOUSING LAW, THE CALIFORNIA CODE OF REGULATIONS, TITLE 25, DIVISION 1, CHAPTER 1, SUBCHAPTER 1, SECTION 32 (CCR, T-25), GREEN BUILDING REQUIREMENTS, AND AMENDMENTS AND MODIFICATIONS THERETO**

**IT IS ORDAINED** by the Belmont City Council as follows:

**WHEREAS**, the State of California has adopted the 2010 edition of the California Building Standards Code, incorporating the 2009 International Building Code, Volumes 1 and 2, the 2009 International Residential Code as published by the International Code Conference (ICC), 2009 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials (IAPMO), 2009 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials (IAPMO), 2008 National Electrical Code as published by the National Fire Protection Agency (NFPA), and local jurisdictions are mandated to apply the standards set forth therein unless the jurisdiction has adopted more stringent codes; and

**WHEREAS**, the previous editions of the California Building Codes and amendments and modifications thereto currently in force as part of Chapter 7 of the Belmont City Code will expire on December 31, 2010; and

**WHEREAS**, on January 1, 2011 certain City of Belmont Building Codes will default to the new California Building Codes without amendments and modifications unless amendments and modifications are affirmatively adopted; and

**WHEREAS**, adoption of the new Building Codes is a local goal through the Silicon Valley Uniform Code Adoption and Interpretation Program, a joint venture comprised of 28 cities to obtain local uniformity in the Building Code adoption process, and one in which the City of Belmont actively participates; and

**WHEREAS**, Article XV (Green Building Requirements), of the City of Belmont Municipal Code is an amendment and modification to the newly adopted California Green Building Standards Code and as such must be affirmatively adopted; and

**WHEREAS**, Article XV (Green Building Requirements), of the City of Belmont Municipal Code will require buildings to consume no more energy than is permitted by the California Energy Standards, Title 24 Part 6; and

**WHEREAS**, green building design, siting, construction, and operation can have a significant positive effect on energy and resource efficiency, reduction of waste and pollution generation, and the health and productivity of a building's occupants over the life of the building.

**WHEREAS**, green building is a critical component of sustainable construction that meets

the needs of the present without compromising the ability of future generations to meet their own needs.

**WHEREAS**, green building design, construction and operational techniques have become increasingly widespread in commercial and residential building construction. National and regional systems have been established to serve as guides and objective standards for green building practices. At the national level the US Green Building Council has established the Leadership in Energy and Environmental Design (LEED), a Green Building Rating System for new construction and major renovation of commercial projects. At the State level, the Building Standards Commission has adopted a Green Building Code. At the regional level, Build It Green (BIG), a non-profit organization headquartered in the Bay Area, has developed Home Remodeling, New Home Construction, and Multifamily Green Building Guidelines and a Green Point Rating System for single-family, multi-family, and existing home residences.

**WHEREAS**, California Health and Safety Code Sections 18938 and 17958 provide that the California Building Standards Code establishes building standards for all occupancies throughout the State.

**WHEREAS**, Health and Safety Code Section 17958.5 provides that a city may establish more restrictive building standards if they are reasonably necessary due to local climatic, geological or topographical conditions and findings are made based on these criteria during adoption.

**WHEREAS**, certain local climatic, geological, and/or topographic conditions, such as hillside construction, a corrosive water table along the bay shoreline, and dense vegetation are unique to the City of Belmont and are not specifically addressed by the minimum requirements of the International Building Codes; and

**WHEREAS**, the proposed amendments and modifications to the new Building Codes address these unique conditions. Therefore, this council finds and declares it necessary to amend Article IV of Chapter 7 of the Belmont City Code by enacting this ordinance to preserve minimum health, safety and welfare standards due to local climatic, geological and/or topographic conditions unique to the City of Belmont.

**SECTION I. FINDINGS.** To the extent the proposed Green Building Ordinance effects changes to the California Energy code and the California Building Standards Code as adopted by the City, the City Council finds the provisions herein to be reasonably necessary due to local climatic, geologic and topographic conditions, specifically:

a. Climatic

Belmont is located in a climate zone with precipitation averaging approximately 20 inches per year. Most precipitation falls during the months of November through April, leaving a relatively dry period of approximately six months each year. Belmont potable water, storm water collection, and waste collection and treatment systems are designed to accommodate and make use of historically consistent weather patterns and supplies, which may, in fact, be unreliable, as evidenced by recent periods of drought. Green building practices encourages water conservation and sustainable efforts that lower the carbon footprint.

b. Geologic

Belmont is located in an active seismic area. The San Andreas Fault is located within 3 miles of the geologically active San Juan Canyon and Western Hills. Green building practices encourage development away from these areas and the fault zone; locating the development near existing public transportation and services that are found, in part, on the east side of the Community.

c. Topographic

Belmont can be characterized as a hillside community that is substantially built-out. The remaining open space is generally located in steep terrain. New development often requires substantial grading, which impacts the topography of the adjacent land and results in unintended consequences, such as run-off and drainage issues. Green building practices encourages minimal grading and the siting of buildings in harmony with the natural topography, rather than attempting to alter it. In addition, Belmont is a community that values its trees. Green building practices encourages minimal disruption of the natural flora and strategic placement of trees for shading.

Chapter 7 of the Belmont City Code is hereby amended to read as follows:

## CHAPTER 7

### ARTICLE IV. CONSTRUCTION REGULATIONS

#### DIVISION 1. BUILDING CODE

##### **Sec. 7-21. Adopted; exceptions; purposes for exceptions.**

7-21-01. Adopted.

The rules, regulations and requirements published by the International Code Council (ICC) under the title "2009 International Building Code Volume 1 & 2" and adopted as the "2010 California Building Code Volume 1 & 2" including Appendix Chapters I and State of California amendments thereto, are adopted as and for the rules, regulations and standards within this city as to all matters therein contained with the following amendments are hereby adopted and the following sections of Chapter 7 are amended. All other sections of Chapter 7 shall remain as previously adopted:

Sec. 7-21-02 Exceptions, is replaced in its entirety with the following.

Chapter 9 of the Building Code is amended to read as follows:

##### **Section 901.1 Scope Amended.** Adding the following amendments:

The Fire Chief may require additional extinguishers, and/or extinguishers of different ratings for protection of special hazards or hazardous areas. The higher ratings may be permitted if in the opinion of the Fire Chief, they are better suited to substantially protect or mitigate the hazard.

**Section 903.1 Amended.** Section 903.2 of this code is deleted in its entirety and is replaced by the Sub-sections 903.2.1.1 and 903.2.1.2:

**903.2.1.1 New Construction.** When the provisions of Chapter 9 of the 2009 IFC with the 2010 State of California Fire Code Amendments do not mandate automatic fire sprinkler system protection, and when the following occupancies are of new construction and the total square footage of the new building exceeds 2,500 square feet in size, or more than one-story in height, an automatic fire sprinkler system, shall be installed: Group A, Group B, Group E, (Non-public schools), Group F, Group H, Group I, Group M, and Group S occupancies.

**903.2.1.2 Existing Construction.** An approved automatic fire sprinkler system shall be installed in all locations of existing Group A, Group B, Group E (Non-public schools), Group F, Group H, Group I, Group M, Group R Division 2 (Hotels & Motels, only) and Group S occupancies, when the total square footage of the existing building exceeds 2,500 square feet in size, or is greater than one-story in height, and one or more of the following items apply:

- a. Change to a more hazardous use/occupancy.
- b. When the Fire Chief determines that an automatic sprinkler system is necessary due to emergency vehicle access, fire load, occupant load or some other reason that may hinder fire suppression efforts in the event of a fire or other perils.

**Section 903.2.8 Amended.** Section 903.2.7 of this code is deleted in its entirety and is replaced by the following Sub-sections 903.2.7.1 and 903.2.7.2:

**903.2.8.1 Group R, Division 1 and 2 Occupancies – New Construction.**

When the provisions of Part 9, Title 24, C.C.R., 2011 California Fire Code, Section 903 do not mandate automatic fire sprinkler system protection, an approved automatic fire sprinkler system shall be installed in all new Group R-1 and R-2 occupancies, when the total square footage including garages and carports, exceeds 2,500 square feet in size, or one-story in height. Installation of the sprinkler system shall conform to NFPA Standard 13R if the residential building is four stories or less in height and with the following additional protection:

1. Sprinklers shall be installed throughout garages, open attached porches, carports, large under-floor spaces that are of combustible construction, and accessible for storage use.
2. Sprinklers shall be installed throughout attic areas.

**903.2.7.2 Group R, Division 3 Occupancies – New Construction.**

1. An approved automatic fire sprinkler system shall be installed in accordance with the provisions of the 2009 International Residential Code as adopted and amended by the City of Belmont Building Division.

**Section 905-Standpipes-Amended:** Section 905 of the 2009 IBC and the 2010 CBC is amended by adding the following Section 905.3(A)

**905.3(A) Where Required.** When the provisions of Section IBC Section 905.3 do not mandate fire standpipe system protection, approved fire standpipe system shall be installed in all buildings, except Group R-Division 3 occupancies, when the building or structure is three or more stories in height. Design and installation requirements shall be, as per the current edition of NFPA Standard #14. Each floor shall be provided with at least two fire department hose connection outlets. Locations for the

outlets shall be as directed by the Belmont-San Carlos Fire Department.

**Section 1505.1 amended – Roof covering requirements.**

The first paragraph of Section 1505.1 is amended to read as follows:

**Section 1505.1 – General**

Roof assemblies shall be divided into the classes defined below. Class A or Class B roof assemblies and roof coverings required to be listed by this section shall be tested in accordance with ASTM E 108 or UL 790. In addition, fire-retardant-treated wood roof coverings shall be tested in accordance with ASTM D 2898. The minimum roof coverings installed on buildings shall comply with the Table 1505.1 as amended.

**Table 1505.1--Roof Minimum fire retardant classes.**

Table No. 1505.1 is amended to read as follows:

<b>TABLE NO. 1505.1<sup>a</sup></b>									
<b>MINIMUM ROOF COVERING CLASSIFICATION FOR TYPES OF CONSTRUCTION</b>									
Type	IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
Roof Covering	B	B	B	B	B	B	B	B	B

a. Unless otherwise required in accordance with Chapter 7A.

**Section 1505.1.3 amended – Roof covering within all other areas**

Section 1505.1.3 is amended to read as follows:

**Section 1505.1.3 – Roof covering within all other areas**

The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class B.

**Section 3403 amended – Additions, alterations or repairs – Suspended ceiling upgrade.**

Section 3403 is amended by adding a new Subsection 3403.6 to read as follows:

**Section 3403.6 Suspended Ceiling Upgrade.** When an addition, alteration or repair is performed on an occupancy in which there is an existing suspended ceiling, such suspended ceilings shall be modified throughout to comply with the provisions of ASTM C 635 and ASTM C 636.

## **DIVISION 1.5. RESIDENTIAL CODE**

### **Sec. 7-22. Adopted; exceptions; purpose for exceptions.**

7-22-01. Adopted.

The rules, regulations and standards printed in one volume and published by the International Code Council under the title "2009 International Residential Code" and adopted as the "2010 California Residential Code", including appendices A, B, C, D, E, G, H, J, K, M, N, and O are adopted as and for the rules, regulations and standards within this city as to matters therein contained except as provided in this chapter. The mandatory requirements of any adopted appendices to the code shall be enforceable to the same extent as if contained in the body of the code.

### **Section 7-23—7-30. Reserved.**

## **DIVISION 2. MECHANICAL CODE**

### **Sec. 7-31. Adopted; exceptions; purpose for exceptions.**

Sec. 7-31-01. Adopted.

The rules, regulations and standards printed in one volume and published by the International Association of Plumbing and Mechanical Officials (IAPMO), under the title "2009 Uniform Mechanical Code" and adopted as the "2010 California Mechanical Code," including the appendices and State of California amendments thereto, hereinafter called "mechanical code," is adopted as and for the rules, regulations and standards within this city as to all matters therein contained, except as otherwise provided in this chapter. The appendices to the mechanical code shall be enforceable to the same extent as if contained in the body of the code.

### **Secs. 7-32 through 7-40. Reserved.**

## **DIVISION 3. PLUMBING CODE**

### **Sec. 7-41. Adopted; exceptions; purpose for exceptions.**

7-41-01. Adopted.

The rules, regulations and standards printed in one volume and published by the International Association of Plumbing and Mechanical Officials (IAPMO), under the title "2009 Uniform Plumbing Code" and adopted as the "2010 California Plumbing Code" including the appendices A and D, and State of California amendments thereto, hereinafter called "plumbing code," is adopted as and for the rules, regulations and standards within this city as to all matters therein contained, except as otherwise provided in this chapter. The appendices specified herein shall be enforceable to the same extent as if contained in the body of the plumbing code.

Sec. 7-21-02 Exceptions, is replaced in its entirety with the following.

Section 508.4 is amended to read as follows:

**508.4** When a water heater is located where damage may result from a leaking water heater, a watertight pan of corrosion resistant material shall be installed beneath the water heater. The pan shall not be less than three inches (3") in height, nor less than four inches (4") larger in diameter than the water heater and equipped with a three-quarter inch (3/4") drain line that is extended to the exterior of the building and terminated in a downward direction a minimum of 6" and a maximum of 24" above grade.

7-41-03. Purpose for exceptions is removed and replaced with the following:

Where water heaters are located in living areas or when leakage would damage a building or its contents, a requirement that water heaters shall have safety pans with drains is necessary. In the event of a leak the dwelling unit will flood without this safety pan. The City of Belmont is in seismic zone 4, the most active seismic zone, and the City's proximity to known active seismic faults increases the likelihood of water heater failure, particularly those water heaters nearing the end of their serviceable life spans. This amendment also clarifies *Plumbing Code*, Section 508.4 which does not specify the dimensions of the pan required beneath the water heater nor does it specify the termination of the drain line for that pan.

**Sections 7-42 through 7-50 reserved.**

## **DIVISION 4. ELECTRICAL CODE**

**Sec. 7-51. Adopted; exceptions; purpose for exceptions.**

7-51-01. Adopted.

The rules, regulations and standards printed in one volume and published by the National Fire Protection Association (NFPA), under the title "2008 National Electrical Code" with amendments as contained in the "2010 California Electrical Code", including the appendices, are adopted as and for the rules, regulations and standards within this city as to matters therein contained except as provided in this chapter. The mandatory requirements of the appendices to the code shall be enforceable to the same extent as if contained in the body of the code.

## **ARTICLE XV. GREEN BUILDING REQUIREMENTS**

**Sec. 7-801. Purpose.**

The purpose of this chapter is to enhance public health and welfare by encouraging green building practices in the design, construction, and maintenance of buildings. The green building practices referenced in this chapter are intended to achieve the following goals:

- a) To encourage the conservation of natural resources;
- b) To reduce waste in landfills generated by construction projects;
- c) To increase energy efficiency and lower energy usage;

- d) To reduce the operating and maintenance costs for buildings; and
- e) To promote a healthier indoor environment.

**Sec. 7-802. Definitions**

- A. “3<sup>rd</sup> Party Inspection” means an inspector having a GreenPoint Rater Certification by the organization Build It Green or a LEED AP Credential.
- B. “Build It Green (BIG)<sup>TM</sup>” means the nonprofit organization that publishes the New Home Construction Green Building Guidelines, the New Home Green Points Checklist, the Existing Home Green Points Checklist, and the Multifamily Green Points Checklist, and any successor entity that assumes responsibility for the programs and operations of Build It Green<sup>TM</sup>.
- C. “Commercial and industrial project” means any new construction or tenant improvement of a retail, office, industrial, warehouse, or service building, or portion of a building, which is not a residential project.
- D. “Residential alteration and new construction project” means the alteration or new construction of R2, R3, R3.1, and R4 buildings, except hotels and motels, built to the specifications of the California Building Code (CBC), California Electrical Code (CEC), California Mechanical Code (CMC), California Plumbing Code (CPC), and California Energy Code.
- E. “Green building” means a whole systems approach to the design, construction, location and operation of buildings and structures that helps to mitigate the environmental, economic, and social impacts of construction, demolition, and renovation. Green building practices recognize the relationship between the natural and built environments and seek to minimize the use of energy, water, and other natural resources and promote a healthy, productive indoor environment.
- F. “GreenPoint Rated (GPR)” means the version of the applicable GreenPoint Rated checklist approved by Build It Green<sup>TM</sup>, in effect at the time of project application for a City building permit.
- G. “LEED<sup>®</sup> Rating System” means the applicable version of the Leadership in Energy and Environmental Design (LEED<sup>®</sup>) rating system, approved by the U.S. Green Building Council (USGBC), in effect at the time of project application for a City building permit.

**Sec. 7-803. Application**

- a) This article shall apply to all construction that falls within the scope of work detailed in the matrix below.
- b) This article shall not apply to maintenance, repair, or replacement of existing building elements including, but not limited to: roofs, water heaters, boilers, furnaces, air conditioning equipment, wood decay, and structural repair.

**Sec. 7-804 Compliance Thresholds for Green Building Requirements**

The following construction projects are subject to this ordinance:

<i>Covered Project Type</i>	<i>Point Level</i>	<i>Verification</i>
<i>Residential alteration projects adding less than 400 ft<sup>2</sup> with a construction valuation of 0 to \$50,000</i>	<i>One BIG Green Building Practice from the Existing Home Checklist</i>	<i>City review and inspection required</i>
<i>Residential alteration projects adding less than 400 ft<sup>2</sup> with a construction valuation of \$50,001 to \$99,999</i>	<i>Three BIG Green Building Practices from the Existing Home Checklist</i>	<i>City review and inspection required</i>
<i>Residential alteration projects adding less than 400 ft<sup>2</sup> with a construction valuation of \$100, 000 or more</i>	<i>25 BIG points Elements or 50 BIG points Whole House</i>	<i>City review and inspection required</i>
<i>New residences and residential alteration projects adding 400 ft<sup>2</sup> or greater</i>	<i>70 BIG points Whole House</i>	<i>City review and 3<sup>rd</sup> party inspection required</i>
<i>Tenant improvement or new construction commercial projects 10,000 ft<sup>2</sup> or greater</i>	<i>LEED Silver Certification</i>	<i>3<sup>rd</sup> party review and inspection required</i>

**Sec. 7-805 Undue Hardship Exemption**

- a) Exemption. If an applicant for a Covered Project believes that circumstances exist that make it an undue hardship to meet all of the requirements of this Chapter, the applicant may request an exemption as set forth below. In applying for an exemption, the burden is on the applicant to show undue hardship.
  
- b) Application. If an applicant for a Covered Project believes such circumstances exist, the applicant may apply for an exemption at the time of the planning application or the building permit submittal. The applicant shall indicate the maximum threshold of compliance he or she believes is feasible and the circumstances that he or she believes create an undue hardship to fully comply with this Chapter. For the purposes of this section, an undue hardship exists if:
  - 1) There is a lack of commercially available green building materials and technologies, or,
  - 2) The green building compliance requirements do not include enough green building measures that are compatible with the scope and cost of the covered project.

- c) Granting of Exemption. If the Building Official determines that it is an undue hardship for the applicant to fully meet the requirements of this chapter, based on the information provided, the Building Official shall determine the maximum feasible threshold of compliance reasonably achievable for the project. The decision of the Building Official shall be provided to the applicant in writing. If an exemption is granted, the applicant shall be required to comply with this chapter in all other respects and shall be required to achieve, in accordance with this chapter, the threshold of compliance determined to be achievable by the Building Official.
- d) Denial of Exemption. If the Building Official determines compliance would not constitute an undue hardship, the request shall be denied and the Building Official shall notify the applicant in writing.
- e) All decisions of the Building Official under this section shall be final.

**Section 7-807 Effective Date**

This Article shall take effect on May 25, 2011.

**Section 7-809 CEQA Exempt**

This Article is categorically exempt from the provisions of Chapter 3 (commencing with Section 21100 of Division 13 of the Public Resources Code (California Environmental Quality Act (CEQA)) pursuant to the State CEQA Guidelines Section 15308, *Actions By Regulatory Agencies for the Protection of the Environment* of the CEQA Guidelines as an action that assures the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment.

**Section 7-810**

The City Clerk shall cause this Ordinance to be published and posted in accordance with the requirements of Section 36933 of the Government Code of the State of California.

**Section 2.** All ordinances or parts of ordinances of the City of Belmont in conflict with this ordinance are hereby repealed to the extent that they are in conflict.

**Section 3.** In the event that any section or portion of this ordinance shall be determined invalid, such section or portion shall be deemed severable and all other sections or portions hereof shall remain in full force and effect.

**Section 4.** This ordinance, as it pertains to occupancies regulated by the State Housing Law, is determined to be in compliance with Section 17958 et seq. of the California Health and Safety Code. The amendments made to the codes adopted by the State of California and contained herein are determined to be reasonably necessary, to preserve minimum health, safety and welfare standards because of the unique local climatic, geological and/or topographic conditions.

**Section 5.** The City Clerk shall cause a copy of this ordinance to be filed with the *Building Standards Commission*, within thirty (30) days of its final passage.

**Section 6.** This ordinance shall be posted on the bulletin boards at the following three public places in the City of Belmont: 1) City Hall; 2) Post Office; and 3) Fire Station No. 14.

**Section 7.** This ordinance shall take effect and be in force not less than thirty (30) days after its adoption.

**Section 8.** An application for a building permit, or any discretionary review approval, received after December 31, 2010 must comply with this Ordinance unless complete plans were submitted to the City of Belmont prior to December 31, 2010.

Introduced this day \_\_\_\_\_ of \_\_\_\_\_, 2010

\* \* \* \* \*

I hereby certify that the foregoing Ordinance was duly and regularly passed and adopted by the City Council of the City of Belmont at a regular meeting thereof held on \_\_\_\_\_ by the following vote:

AYES, COUNCILMEMBERS: \_\_\_\_\_

NOES, COUNCILMEMBERS: \_\_\_\_\_

ABSTAIN, COUNCILMEMBERS: \_\_\_\_\_

ABSENT, COUNCILMEMBERS: \_\_\_\_\_

\_\_\_\_\_  
MAYOR of the City of Belmont

ATTEST

\_\_\_\_\_  
CLERK of the City of Belmont