[Building Code – Technical Corrections/Clarifications.]

Ordinance amending the Building Code to effect technical corrections/clarifications to Section 3102.8, by adding provisions previously included in the Code regarding woodburning appliances, Section 101.20, by adding provisions previously included in the Code regarding the operation of the Central Permit Bureau, Section 106.1, by deleting provisions regarding permit requirements that were previously removed from the Code, Section 106.3.2, by adding provisions previously included in the Code regarding submittal documents for permit applications, Section 103.3.1, 103.3.2, 103.3.3, 103.3.4, and 103.3.5 by deleting provisions regarding unlawful residential demolition and adding the provisions regarding unlawful residential demolition that were previously included in the Code, Section 205 by deleting the definition of demolition, by amending Figure 16B-1, Sections 105.4.2, 105.4.3.1, 107.1.1, 108.5.6, 1003.3.2, 1001A, 1304A.1, 1307A.2, 1311A.1, 1313A.3, 1314A.2, 1316A.1, 1308A.3, 1605.4.3, 1604B.2.3, 1605B.3, 1605B.8, 1606B, 1604C, 1608C.5, 1611C.3.1, 1611C.4.2, 1611C.6.1, 1611C.6.2, 1611C.2.2.2, Table 16C-D, 1701.5, 3403.2.1.2, 3407.1, 3407.2.3, 3407.4.3, 3407.5.3.4, 3407.5.3.5, 3408.3.2, 1605.4.3, 1605.5, 106.4.4, 409.9.1, 1602C.6.1, 1602C.6.2, 3303.9.2, 3403.2.1.1, and 1605.4.1 to correct typographical errors, and making findings in accordance with California Health and Safety Code Section 17958.5 as to the local climatic, topological and geological reasons for amending the State Building Code.

Note: Additions are single-underline italics Times New Roman; deletions are strikethrough italics Times New Roman. Board amendment additions are double underlined. Board amendment deletions are strikethrough normal.

Be it ordained by the People of the City and County of San Francisco:
Section 1. The Board of Supervisors hereby finds, as required by California Code of
Health and Safety Code Section 17958.5, that the following amendments to the Building Code
are necessary for the specific climatic, topological, and geological reasons listed below:

1) Certain buildings/occupancies in San Francisco are at increased risk for
earthquake-induced structural failure and consequent fire due to local hazardous microzones,
slide areas, and local liquefaction hazards. (Amendments to sections 1605.4.3, 1608C.5,
1611C.3.1, 1611C.4.2, 1611C.6, 1612C.2.2.2, 1701.5, 3403.2.1.2, 1605.4.3, 1605.4.3)

2) Topography of San Francisco has led to development of a high density of buildings
on very small lots, necessitating special provisions for exiting, fire separation, or fire-resistive
construction. (Amendments to sections 1003.3.3.1, and 409.9.)

3) Many buildings are built on steep hills and narrow streets, requiring special safety
considerations. (Amendment to section 1701.5.)

4) Additional fire, structural and other protection is required due to high building
density and crowded occupancy. (Amendments to sections 1701.5, 409.9, and 3303.9.2.)

5) San Francisco has narrow, crowded sidewalks due to building and population
density and unusual topography. (Amendment to section 3303.9.2.)

6) Soils conditions in this region induce adverse reactions with some materials, leading
to premature failures and subsequent unsanitary conditions. (Amendment to Figure 16B-1.)

7) Not a building standard; no local findings required. (Amendments to sections
101.20, 106.1, 106.3.2, 3102.8, 103.3, 103.3.1, 103.3.2, 103.3.3, 103.3.4, 103.3.5, 105.4.2,
105.4.3.1, 107, 108.5.6, 205-D, 1001A, 1304A.1, 1307A, 1311A, 1313A, 1314A, 1316A,
1308A.3, 1604B.2.3, 3303.9.2, 1605B.3, 1605B.8, 1606B, 1604C, 3407, 3407.2.3, 3407.4.3,
3407.5.3, 3408.3.2, 1605.5, 1311A.1, 1602C.6.1, 1602C.6.2, 3310, 3403.2.1.1, 1605.4.1, and
106.4.4.)
Section 2. The San Francisco Building Code is hereby amended by adding Section 3102.8, to read as follows:

Section 3102.8. Add the following section.

Sec. 3102.8 Woodburning Appliances.

3102.8.1 Definitions. The definitions set forth in this section shall govern the application and interpretation of this section.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT means the air quality agency for the San Francisco Bay Area established pursuant to California Health and Safety Code Section 40200.

EPA means the United States Environmental Protection Agency.

EPA CERTIFIED WOOD HEATER means any wood heater that meets the standards in Title 40, Part 60, Subpart AAA, Code of Federal Regulations in effect at the time of installation and is certified and labeled pursuant to those regulations.

FIREPLACE means any permanently installed masonry or factory-built appliance that burns wood, except a pellet-fueled wood heater, designed to be used with an air-to-fuel ratio greater than or equal to 35 to one.

GARBAGE means all solid, semisolid and liquid wastes generated from residential, commercial and industrial sources, including trash, refuse, rubbish, industrial wastes, asphaltic products, manure, vegetable or animal solids and semisolid wastes, and other discarded solid and semisolid wastes.

GAS FIREPLACE means any device designed to burn natural gas in a manner that simulates the appearance of a woodburning fireplace.

PAINTS means all exterior and interior house and trim paints, enamels, varnishes, lacquers, stains, primers, sealers, undercoatings, roof coatings, wood preservatives, shellacs, and other paints or paint-like products.

PAINT SOLVENTS means all original solvents sold or used to thin paints or to clean up painting equipment.

SUPERVISOR DALY
BOARD OF SUPERVISORS
PELLET-FUELED WOOD HEATER means any appliance that burns wood and operates exclusively on wood pellets.

RECONSTRUCTION means the complete rebuilding of the woodburning appliance such that all or a substantial portion of its parts are new. It does not include repairs made to the appliance in order to make it safer or more efficient.

SOLID FUEL means wood or any other nongaseous or nonliquid fuel.

TREATED WOOD means wood of any species that has been chemically impregnated, painted or similarly modified to improve resistance to insects or weathering. It does not include products such as Duraflame or Presto logs that are specifically designed and sold to be burned in a woodburning appliance.

WASTE PETROLEUM PRODUCTS means any petroleum product other than gaseous fuels that has been refined from crude oil and has been used, and as a result of use has been contaminated with physical or chemical impurities.

WOODBURNING APPLIANCE means fireplace, wood heater, or pellet-fueled wood heater or any similar device burning any solid fuel used for aesthetic or space-heating purposes.

WOOD HEATER means a stove that burns wood.

3102.8.2 Residential installations. All woodburning appliances installed in new residential units or woodburning appliances being added to or replacing woodburning appliances in existing residential units shall comply with this section.

3102.8.3 Commercial installations. All woodburning appliances installed in new commercial buildings or woodburning appliances being added to or replacing woodburning appliances in existing commercial buildings shall comply with this section. Commercial buildings shall include, but not be limited to, hotels and restaurants.
3102.8.4 Gas fireplaces. Gas fireplaces shall be exempt from the requirements of this section. However, the conversion of a gas fireplace to burn wood shall constitute the installation of a woodburning appliance and shall be subject to the requirements of this section.

3102.8.5 Additions, alterations or repairs. A woodburning appliance shall comply with this section if:

1. The appliance is reconstructed; or
2. The appliance is being replaced.

3102.8.6 Unauthorized appliances prohibited. No person shall install a woodburning appliance that is not one of the following:

1. A pellet-fueled wood heater;
2. An EPA-certified wood heater; or
3. A fireplace certified by the Northern Sonoma Air Pollution Control District.

EXCEPTIONS:

1. Woodburning appliances that are designed primarily for food preparation in new or existing restaurants or bakeries.
2. Historic woodburning appliances installed in historic structures, as determined by the Director of the Department of Building Inspection in consultation with the Director of the Department of Planning.

3102.8.7 Prohibited fuels. The following fuels are prohibited from use in a woodburning appliance:

1. Garbage;
2. Treated wood;
3. Plastic products;
4. Rubber products;
5. Waste petroleum products;
6. Paints or paint solvents;
7. Coal;
8. Glossy or colored paper;
9. Particle board; or
10. Saltwater driftwood.

3102.8.8 Certification. Any person who plans to install a woodburning appliance must submit documentation to the Director demonstrating that the appliance is a pellet-fueled wood heater, a certified wood heater, or a fireplace certified by Northern Sonoma Air Pollution Control District.

NOTE: Ordinance No. 13-02, adopted 1-14-2002, which amended Section 3102.8, contained the following findings:

(a) In 1982, the State Air Resources Board (ARB) adopted a particulate matter (PM10) Ambient Air Quality Standard (AAQS). Levels for the PM10 AAQS were selected pursuant to California Code of Regulations Title 17 Section 70200 to protect the health of people who are sensitive to exposure to fine particles.

(b) Research indicates that woodsmoke is a significant contributor to PM10 levels that pose significant health risks.

(c) The City and County of San Francisco desires to lessen the risk to life and property from air pollution from woodburning appliances.

(d) The City and County of San Francisco finds that the proposed regulation will significantly reduce the increases in particulate emissions from future installation and construction activities.

(e) The City and County of San Francisco finds a need exists to adopt regulations which apply to woodburning combustion emissions.

Section 3. The San Francisco Building Code is hereby amended by adding Section 101.20, to read as follows:

SUPERVISOR DALY
BOARD OF SUPERVISORS
Section 101.20 Add the following section:

Sec. 101.20 Central Permit Bureau.

A Central Permit Bureau is hereby established in the Department of Building Inspection. The Central Permit Bureau shall process applications for permits required in Section 106.1 of this code and for certain other permits required by ordinance or regulation for other departments and bureaus of the City and County of San Francisco. Permit processing procedures are detailed in an Administrative Bulletin issued by the Director in cooperation with other departments and bureaus. The Central Permit Bureau shall arrange for the review of permit applications, the issuance of permits and the collections of fees as fixed by law.

The fees collected by the Central Permit Bureau shall be credited to the account of the department or bureau authorized by ordinance or Charter to approve such permits. The Controller, in conjunction with the Central Permit Bureau and the concerned departments and bureaus, shall analyze the cost to the City and County of San Francisco of regulation and inspection required by each such class of permit and shall propose the rates to be fixed therefore by ordinance, which shall not be less than the cost to the City and County of San Francisco of such regulation and inspection.

Section 4. The San Francisco Building Code is hereby amended by amending Section 106.1, to read as follows:

Section 106.1 Revise this section as follows:

Sec. 106.1 Permits Required.

Except as specified in Section 106.2 of this section, no building or structure, property, or portion thereof regulated by this code shall be erected, constructed, enlarged, altered, repaired, moved, improved, removed, converted or demolished, nor shall any site be graded, quarried, excavated or filled unless a separate permit for each building, or structure, property or portion thereof has first been obtained from the building official. When considering an application for a permit for development of "dwellings" as defined in Chapter 87 of the San
Francisco Administrative Code, the Department of Building Inspection shall comply with that chapter which requires, among other things, that the Department of Building Inspection not base any decision regarding the development of "dwellings" in which "protected class" members are likely to reside on information which may be discriminatory to any member of a "protected class" (as all such terms are defined in Chapter 87 of the San Francisco Administrative Code).

Section 5. The San Francisco Building Code is hereby amended by amending Section 106.3.2, to read as follows:

Section 106.3.2. Revise this section as follows:

Sec. 106.3.2 Submittal documents.

Plans, specifications, engineering calculations, diagrams, soil investigation reports, special inspection and structural observation programs and other data shall constitute the submittal documents for a permit. When such plans are not prepared by an architect or an engineer, the Director may require the applicant submitting such plans or other data to demonstrate that state law does not require that the plans be prepared by a licensed architect or engineer. The Director may require plans, computations and specifications to be prepared and designed by an engineer or architect licensed by the state to practice as such even if not required by State law. Materials submitted by a licensed architect or engineer must be signed and sealed with an original signature on the first sheet of each set of documents, and facsimile stamps plus the required registration seal of the architect or engineer on the balance of the sheets.

Two complete sets of plans and specifications and three copies of the soil investigation report (when required) shall be submitted. Additional complete sets of plans and specifications may be required for special permit processing services that may be offered by the City and County of San Francisco.
EXCEPTIONS:

1. The requirements for plans or specifications may be waived by the Director, provided that the nature and extent of the proposed construction can be clearly described in writing, and such a description is filed with the application.

2. In addition to all other requirements of this Section 106.3.2, the following requirements shall apply to applications for construction of new buildings or structures, and to alterations that involve a substantial increase in the building envelope of an existing building or structure, within the Edgehill Mountain Slope Protection Area, created by Building Code Section 106.4.1.2:

   The Director may not waive the requirements for submittal documents set forth in this Section 106.3.2.

   Submittal documents shall substantiate that the building or structure will comply with applicable codes and regulations.

   Submittal documents shall include (1) plans prepared by a State-licensed architect or engineer and (2) a construction/staging plan establishing that the proposed construction will not compromise the health, safety or welfare of neighboring property owners. Submittal documents shall demonstrate to the satisfaction of the Director, based on consultation with and written communications from appropriate City officials, including the Director of the Department of Public Works, that there is sufficient infrastructure (including utilities and streets) to support the proposed residential development and that the proposed emergency vehicle access routes comply with the standards in use by the Fire Department or similar agency in effect at the time the application is submitted.

Section 6. The San Francisco Building Code is hereby amended by amending Section 103.3.1 to read as follows:

Sec. 103.3.1 Unlawful residential demolition. Demolition without permit.
Whenever the demolition of any residential building or structure containing one or more residential units takes place without the issuance of a demolition permit as required by this code, or is altered beyond the scope of an issued alteration permit such that an unlawful residential demolition, as defined below, is determined to have taken place, the site on which the unlawful residential demolition occurred shall be subject to the following restriction:

For five years from the date of the unlawful residential demolition, no permit authorizing the construction or alteration of any building or structure for that site shall be issued, except for a permit for the construction or alteration of a building or structure with the same number of residential units, with the same proportion of residential to nonresidential units, and with the same or fewer square feet as the building or structure that was unlawfully demolished.

Section 7. The San Francisco Building Code is hereby amended by amending Section 103.3.2 to read as follows:

Sec. 103.3.2 Definitions. For the purposes of this section, the following definitions shall apply:

UNLAWFUL RESIDENTIAL DEMOLITION means the total tearing down or destruction of a building containing one or more residential units without a demolition permit, or any alteration beyond the scope of an approved permit without first obtaining a permit for such additional work as required under Section 106.4.7, which destroys or removes, as those terms are defined by the Director of the Department of Building Inspection, principal portions of an existing structure containing one or more residential units.

PRINCIPAL PORTION means that construction which determines the shape and size of the building envelope (such as the exterior walls, roof and interior bearing elements), or that construction which alters two-thirds or more of the interior elements (such as walls, partitions, floors or ceilings).
RESIDENTIAL UNIT means any dwelling unit, as defined in this code, or any guest room, as defined in the San Francisco Housing Code, other than the following:

1. Any guest room in a building classified as a residential hotel pursuant to the Residential Hotel Unit Conversion and Demolition Ordinance.

2. Any residential unit in a building where the demolition or alteration is required to comply with this code, the Housing Code or the City Planning Code.

Section 8. The San Francisco Building Code is hereby amended by amending Section 103.3.3 to read as follows:

Sec. 103.3.3 Hearing.

The Director shall hold a hearing within a reasonable period of time after discovering that an unlawful *residential* demolition may have taken place. The Director shall cause notice to be given to the owners of the affected property, and to the owners and occupants of property on the same block as the affected property's site and across the street from the site for one block (that is, on lots which abut the same street as that which abuts the site to the nearest intersections on either side of the site), using the names and addresses of the owners as shown on the last *assessment rolls* annual *tax roll* of the City and County of San Francisco.

For corner lots, notice shall be provided to the owners and occupants of property on the same block as the affected property's site and for one block along both streets which the lot abuts (that is, on lots which abut the two streets which the site abuts to the nearest intersection on either side of the site) and, in addition, to the other corner lots at the intersection where the site is located. Notice may be given either by personal service or any mail, not less than 30 days before the scheduled date of the hearing. Immediately after giving such notice, the Director shall cause a copy of the notice, printed on a card of not less than 8 inches by 10 inches (203.2 mm x 254 mm), to be posted in a conspicuous place on the affected property.

The notice shall specify the date and nature of the hearing and that the following issues will be
determined at the hearing: whether an unlawful residential demolition has taken place as described in Sections 103.3.1 and 103.3.2, and, if so, the number of residential units that existed on the site, the proportion of residential to nonresidential units that existed on the site and the total square footage of the building or structure that existed on the site. Upon determination that an unlawful residential demolition has taken place, the Director shall promptly record a notice in the official records of the Recorder of the City and County of San Francisco, with the Assessor-Recorder’s Office; the recorded notice shall state that the property is subject to the restrictions set forth in Section 103.3.1 of this code.

Upon determination that an unlawful residential demolition has taken place, the Director shall also assess the owner all costs incurred by the City and County of San Francisco in detecting violations of this section and in conducting the Director’s hearing. Notice of payment due shall be sent to the property owner at the address shown on the city’s last assessment rolls. Annual tax roll of the City and County of San Francisco. The notice shall list the costs incurred by the City and County of San Francisco in detecting violations of the ordinance and this section and in conducting the Director’s hearing, shall advise the owner that he or she is liable for these costs and costs, and shall advise the owner that payment to the city is due within 60 days of the mailing date of the notice. The notice shall also advise that, if payment of the costs is not received within 30 days of the due date, a lien may be imposed on the property pursuant to the report and confirmation procedure set forth in Sections 102.18 and 102.19 of this code.

Section 9. The San Francisco Building Code is hereby amended by amending Section 103.3.4 to read as follows:

Sec. 103.3.4 Civil penalties.

Any agent, contractor or other person acting on behalf of the owner of a building or structure containing one or more residential units who causes or permits the unlawful...
residential demolition of the building or structure with the knowledge that a demolition permit has not been issued as required by this code shall be subject to a civil penalty of $5,000. Any owner who causes or permits the unlawful residential demolition of his or her building or structure containing one or more residential units with the knowledge that no demolition permit has been issued as required by this code shall be subject to a civil penalty of $1,000.

Section 10. The San Francisco Building Code is hereby amended by amending Section 103.3.5 to read as follows:

Sec. 103.3.5 Penalties nonexclusive. Other penalties.
The penalties set forth in this section are not exclusive, but are in addition to any other penalties set forth in this code. For penalties that apply to the unlawful demolition of residential buildings that are also qualified historical buildings, refer to the San Francisco Planning Code.

Section 11. The San Francisco Building Code is hereby amended by amending Section 205 - D.

Sec. 205 - D
Add the following definitions:

DEMOLITION is the removal of all parts of a building or structure that are above grade except those parts that are necessary to provide support for adjoining properties or structures.

DIRECTOR is the Director of the Department of Building Inspection and is the building official.

DIRECTOR OF PUBLIC HEALTH is the Director of the Department of Public Health of the City and County of San Francisco.

Section 12. The following typographical errors in the San Francisco Building Code are hereby amended by amending the following Sections:
Table 16-B-1

(See attached document for Table 16-B-1 – Unreinforced Masonry Building Study Areas)

Section 105.4.2

Sec. 105.4.2 Functions.

Its functions shall be:

1. To review recommendations for code changes made by the Director or the Building Inspection Commission pursuant to Section 104.2.11.
2. To develop, review and recommend code changes to the Director and the Building Inspection Commission.
3. To review rules and regulations promulgated by the Director and the Building Inspection Commission pursuant to Section 104.2.10.
4. To recommend to the Director and the Building Inspection Commission, within 30 days after the effective date of a new edition of a code, which existing Section 104.2.1 rules and regulations should remain in effect, be modified or be canceled.

Section 105.4.3.1

Sec. 105.4.3.1 Members.

In the event that a vacancy occurs during the term of office of any member of the Code Advisory Committee, a new member shall be appointed in a manner similar to that described herein for new members. The membership shall consist of:

1. A licensed architect whose practice is primarily in the area of major commercial and institutional projects of Type I and II construction.
2. A licensed architect whose practice is primarily in the area of smaller commercial and residential projects of Type III and V construction.
3. A registered civil engineer whose practice is primarily in the area of major commercial and institutional projects of Type I and II construction and who has the authority to use the title "Structural Engineer."

4. A registered civil engineer whose practice is primarily in the area of smaller commercial and residential projects of Type III and V construction.

5. A registered mechanical engineer or licensed mechanical contractor.

6. A registered fire protection engineer who practices in the area of fire protection.

7. A registered electrical engineer or licensed mechanical electrical contractor.

8. A representative of a licensed general contractor whose work is primarily in the area of major commercial and institutional projects of Type I and II construction.

9. A representative of a licensed general contractor whose work is primarily in the area of alterations, remodeling or restoration.

10. A representative of a licensed general contractor whose work is primarily the construction of single- and multifamily residential construction for its own account.

11. A commercial property owner or a person practicing in the area of property management.

12. A representative of the general business community.

13. A person qualified in the area of historical preservation.

14. A person, preferably with a disability, who is knowledgeable about disability access regulations.

15. Three at-large members who may, but need not, possess technical skills or knowledge.

The terms "registered" and "licensed" shall be understood to mean registered or licensed by the State of California.
The Building Inspection Commission shall make appointments after giving careful consideration to nominations made by technical associations and other organizations, including the San Francisco Chapter of the American Institute of Architects, the Structural Engineers Association of Northern California, the Society of Fire Protection Engineers, the San Francisco District of the Associated General Contractors of California, American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., Sheet Metal and Air Conditioning Contractors National Association, San Francisco Bay Area Chapter of the National Association of the Remodeling Industry, National Electrical Contractors Association, the Residential Builders Association of San Francisco, Inc., the San Francisco Chapter of the Building Owners and Managers Association of California, the San Francisco Chamber of Commerce and the Foundation for San Francisco's Architectural Heritage.

The following shall constitute ex officio members of the Code Advisory Committee without vote: The Director of the Department, who shall act as Secretary of the Code Advisory Committee, and the Fire Marshal.

Section 107.1.1

Sec. 107.1.1 107.1.3. Add the following section:

107.1.3 Exemption from fees. The fees provided for in this chapter shall not apply to permits issued to perform work on buildings which are owned and occupied by the Federal or State governments. The San Francisco Housing Authority shall be exempt from all permit fees in this chapter except the strong motion instrumentation fee. Permits required under this code for buildings and sites owned or leased by the City and County of San Francisco shall be subject to all fees provided defined set forth in this chapter.

Section 108.5.6

Sec. 108.5.6 Replace the section with the following:
108.5.6 Final inspection. A final inspection shall be made when the construction work has been completed, and the structure is ready for occupancy, but before it is occupied. There shall be a final inspection and approval on all buildings and structures when completed and ready for occupancy or use after plumbing, electrical and special inspection, and any other applicable approvals have been obtained. See Section 109 for certificate of occupancy requirements.

An exclusive electrical or plumbing final approval shall not be given or posted unless it is ascertained by the Director that no building permit is required.

Section 1003.3.3.1

Section 1003.3.3.1. Revise as follows:

1003.3.3.1 General. Every stairway having two or more risers serving any building, structure, property or portion thereof shall comply with the requirements of Section 1003.3.3. For the purposes of Section 1003.3.3, the term “stairway” shall include stairs, landings, handrails and guardrails as applicable. Where aisles in assembly rooms have steps, they shall comply with the requirements in Section 1004.3.2.

EXCEPTIONS:

1. Stairs or ladders used only to attend equipment or window wells are exempt from the requirements of this section.

2. Stairways that replace existing stairways in residential occupancies and which complied with the code in effect at the time they were constructed, and which have been adequately maintained and increased in relation to any increase in occupant load, alteration or addition, or any change in occupancy, may be reconstructed in the same configuration and construction as the existing stairways.

Sec. 1003.3.3.2

Add an exception after the first paragraph as follows:
EXCEPTION: Stairways serving one individual dwelling unit in Group R Division 1 or 3, or a Group R Division 3 Congregate Residence or Group U Occupancies may be no less than 30 inches (762 mm) in width if the area served is limited to 400 square feet (37.16 m²).

EXCEPTIONS:

1. Stairs or ladders used only to attend equipment or window wells are exempt from the requirements of this section.

2. Stairways that replace existing stairways in residential occupancies and which complied with the code in effect at the time they were constructed, and which have been adequately maintained and increased in relation to any increase in occupant load, alteration or addition, or any change in occupancy, may be reconstructed in the same configuration and construction as the existing stairways.

Section 1001A

Sec. 1001A — Scope

1001A.1 General. This chapter shall apply to all Group R, Division 1 Occupancies.

1001A.2 Apartment Houses. Apartment houses (Group R, Division 1 Occupancies) and buildings containing more than two residential condominium units shall meet the security requirements of this chapter.

1001A.3 Hotels and Motels. Hotels and motels shall comply with the security requirements of this section chapter. For the purpose of this section chapter, any building open to the public and offering accommodations to transient persons for compensation shall be considered as a hotel or motel.

Section 1304.A.1

Sec. 1304A — Rules And Guidelines

1304A.1 Adopt Rules. The Director, in cooperation with the General Manager of the Public Utilities Commission City Water Department and other advisors as the Director may deem appropriate, shall adopt reasonable rules and guidelines implementing the provisions and
intent of this chapter and shall make them available to the public along with the informational
brochure described in Section 1309A. The Director, in cooperation with the General Manager
of the City Water Department Public Utilities Commission, may amend these rules and guidelines
from time to time after considering public input.

1304A.2 Energy Inspection Procedures. The Director shall include coverage of this
chapter's requirements in the Water Inspection Procedures established by the Department.

Section 1307A.2
Sec. 1307A — Time Allowed For Compliance

1307A.1 Title Transfers or Major Improvements. For title transfers or building
additions, alterations and improvements (Section 1306A above), compliance with this chapter
shall be triggered by the requirement of an energy conservation inspection for compliance
with the water conservation measures set forth in this chapter.

1307A.2 Affidavits. In lieu of the inspection and certificate of compliance requirements
of Section 1313A, the owner or the owner's authorized agent shall file with the Public Utilities
Commission an affidavit signed by the owner affirming that the water
conservation devices required by Section 1315A either have been installed or compliance is
not required. The affidavit shall be on a form provided by the Public Utilities Commission City
Water Department. Copies of the affidavit are to be filed in the Department.

Section 1311A.1
Sec. 1311A — Early Compliance With Water Conservation Measures

1311A.1 Early Compliance. To encourage early compliance with the requirements of
this chapter, an affidavit of compliance may be voluntarily filed with the Public Utilities
Commission City Water Department in accordance with Section 1307A at any time before
compliance would otherwise be required.
Section 1313A.3
Sec. 1313A — Proof Of Compliance With Water Conservation Measures

1313A.1 Inspection Form. The Department shall provide standardized forms suitable for conducting a valid water conservation inspection and certifying compliance with the requirements of this chapter. The inspection form shall be completed and signed by a qualified inspector, furnished to the permit applicant, building owner or the owner's authorized representative, and filed with the Department in accordance with Section 1313A.2 of this code.

1313A.2 Certificate of Compliance. When all of the water conservation requirements have been met, a certificate of compliance shall be signed, filed and recorded in accordance with Section 1313A.3.

1313A.3 Public Records. Completed water conservation inspection forms, informational surveys and certificates of compliance shall be filed with the Department and are public records, and any person may inspect them during regular business hours at the Department.

Affidavits filed pursuant to Section 1307A shall be public records, and any person may inspect them during regular business hours at the Public Utilities Commission City Water Department.

Section 1314A.2
Sec. 1314A — Appeals From Results Of A Water Conservation Inspection

1314A.1 Notice of Appeal. Any person with an interest in the property subject to a water conservation inspection who contests the determination of a qualified inspector regarding required water conservation measures may appeal said decision to the Director within 20 working days from the date the completed inspection form was filed with the Department. The notice of appeal shall state, clearly and concisely, the grounds upon which the appeal is
based. The burden of proof shall be on the applicant to demonstrate that the water conservation measure is not required under this chapter.

1314A.2 Appeal Procedures. The applicant may appeal the Director's decision to a hearing officer or the Abatement Appeals Board within 10 working days from the date that said decision was issued. The hearing officer shall be appointed by the Director. The determination of the hearing officer or Abatement Appeals Board shall be final.

The Director, in conjunction with the Public Utilities Commission, shall develop clear rules and procedures for submitting and processing appeals, and the rules set forth in Section 105.2 of this code shall not be applicable to these appeals. Any person filing an appeal pursuant to this section shall pay a filing fee.

Section 1316A.1

Sec. 1316A — Water Conservation Inspections

1316A.1 Inspections. Inspections to determine compliance with the water conservation requirements of this chapter may be conducted by one of the following:

1. An authorized inspector of the Department;
2. A private inspector authorized by the Director pursuant to established rules and guidelines;
3. A private inspector hired by the Department, or Public Utilities Commission, on a contractual basis under terms and fees to be recommended by the Departments and established by the Board of Supervisors.

Section 1308A.3

Sec. 1308A.3 Filing of Written Agreement. The seller or the seller's authorized agent shall file the water inspection form with the Department along with a written agreement signed by the buyer and seller whereby the buyer agrees that the required water conservation
measures will be installed within 180 days of the close of escrow with a certificate of
compliance filed pursuant to Section 1310.13A.

**Section 1605.4.3**

Sec. 1605.4.3 Seismic forces. Buildings and structures shall comply with the applicable
provisions of Sections 1626 through 1634, except that, when compliance with this section is
required by:

1. Section 3403.2.2.1, Substantial change; or
2. Section 3403.2.2.2, Structural alterations; or
3. Section 3403.2.1.2, Horizontal additions; for those lateral force resisting elements
   which do not share lateral loads with the addition; or
4. Section 3405, Change in Use, which does not involve a change in the $l$ or $l_w$ factors of
   Table 16-K; or
5. Section 1630.1.1, New storage or warehouse live loads in more than 10 percent of the total
   floor area; or
6. Section 3403.2.2.4, Repair – Repairs to buildings or structures which have sustained structural
damage; then structures and elements may be designed for seismic forces of not less than 75 percent of
those given in Sections 1626 through 1634, and
   Then structures and elements may be designed for seismic forces of not less than 75 percent of
those given in Sections 1626 through 1634, and
   1. Near field effects ($N_a$ and $N_v$ of Tables 16-S and 16-T) and the reliability/redundancy
      factor ($P$) need not exceed 1.0; and
   2. The load factor resulting from the vertical component of the earthquake ground motion
      ($E_v$) may be 0; and
3. Fifty percent of $\Delta_m$ may be used to evaluate deformation compatibility of existing elements and existing exterior elements in accordance with Section 1633.2.4; new elements shall meet the full criteria of this code; and

4. The building separation limitations of Section 1633.2.11 do not apply; and

5. The maximum allowable height-to-length ratio for shear resisting construction with wood frame may be taken as 3.5; and

6. In wood frame buildings not more than 4 stories in height, $R$ may be 5.5 regardless of the bracing system or materials used.

When upper floors are exempted from compliance by Section 3405, the lateral forces generated by their masses shall be included in the analysis and design of the lateral force resisting systems for the strengthened floor. Such forces may be applied to the floor level immediately above the topmost strengthened floor and distributed in that floor in a manner consistent with the construction and layout of the exempted floor.

In lieu of meeting the specific requirements of this section, an alternative lateral analysis procedure complying with Section 1629.10.1 and incorporating inelastic behavior may be submitted and approved in accordance with rules and regulations adopted by the Director pursuant to Section 104.2.1.

**Section 1604B.2.3**

Sec. 1604B.2.3 Engineering reports. The owner shall engage a registered civil or structural engineer or licensed architect to prepare an engineering report on the building when:

1. An owner desires to demolish a qualified historical building or any building containing a nonexempt Group R Occupancy rather than retrofit the building, and a report is requested by the Director or the Director of the Planning Department; or

2. The Bolts-plus level of strengthening is proposed; or
3. Strengthening to comply with the State Historical Building Code is proposed; or

4. The owner believes the building complies with Chapters 16B and 16C without any further alteration.

The engineering report shall detail applicable retrofit requirements of the least restrictive retrofit procedure for which the building qualifies. The required retrofit measures shall be developed schematically, and a conceptual construction cost estimate shall be included. If the Bolts-plus level of strengthening defined above and described in Exception 1 to Section 1609C.2 is proposed, the necessary measures for compliance with the Special Procedure of Section 1611C shall also be designated, and a second cost estimate for this option shall also be included in the report. If the engineering report demonstrates that no deficiencies exist, and the report is approved by the DBI Department, the structure will be considered to conform to the requirements of this chapter. Except as noted in 1. above, the report shall be submitted not later than the date when the application for the building permit to either strengthen or demolish the building would otherwise be required. The format and content of the engineering report shall comply with the provisions of rules and regulations to be issued by the Director pursuant to Section 104.2.1 after consultation with the Seismic Safety Retrofit Bond Program Board. See Section 110, Table 1-S for the applicable fee for the review of the engineering report.

Section 1605B.3

Sec. 1605B.3 Processing and Recordation. Within 30 days of receipt of the inventory form, the Director shall review it and either approve it as submitted or reject it and return it for correction. Inventory forms returned for correction shall be revised by the owner's architect or engineer and returned to the DBI Department within 30 days of the date of the DBI Department's initial rejection. The Director shall cause to be recorded with the Assessor-Recorder's Office a notice of the requirement for structural alteration or demolition and the inventory form. The
Director may cause such a notice to be recorded upon expiration of the time limits for
submittal of the inventory form as stated in Table 16B-A.

Section 1605B.8

Sec. 1605B.8 Phased Strengthening. Other provisions of this code notwithstanding, an
unreinforced masonry bearing wall building may be strengthened in phases under multiple
alteration permits, provided

1. A complete structural analysis accompanied by plans, specifications and calculations
for the proposed mitigation solution is submitted to DBH the Department with the first alteration
permit application; and

2. A phasing program is submitted to and approved by DBH the Department as part of the
review of the first alteration permit application; and

3. Each subsequent alteration permit application clearly indicates the further work
proposed and the work completed to date; and

4. The engineer or architect responsible for the structural design for the strengthening
program provides structural observation in accordance with Section 1702; and

5. All of the required strengthening work is completed within the time limits set forth in
Table 16B-A.

Section 1606B

Sec. 606B 1606B — Existing Utility, Fire Protection, Life-Safety Systems, Homeless
Shelters And Disabled Access Requirements

This chapter does not require alteration of existing electrical, plumbing, mechanical, fire
protection or life-safety systems which are in compliance with the code in effect at the time of
their construction or installation. The application of Section 3403.7 relating to homeless
shelters does not waive the requirement for compliance with the provisions of this chapter and
Chapter 16C within the time limits set forth in Table 16B-A. This section does not exempt any
building from compliance with the requirements of State or Federal disability access regulations.

Section 1604C

Sec. 1604C — Symbols And Notations

1604C.1 For the purpose of this chapter, the applicable symbols and notations in this code shall apply.

\[
A = \text{cross sectional area of unreinforced masonry pier or wall, square inches.}
\]

\[
A_b = \text{total area of the bed joints above and below the test specimen for each in-place shear test.}
\]

\[
C_p = \text{numerical coefficient as specified in Section 1630.2a and given in Table 16-O for wall anchorage and parapet and appendage strengthening and Table 16C-C for Special Procedure diaphragm shear transfer.}
\]

\[
D = \text{in-plane width dimension of pier, inches, or depth of diaphragm, feet.}
\]

\[
DCR = \text{demand-capacity ratio specified in Section 1611C.4.2.}
\]

\[
F_w = \text{force applied to a wall at level x, pounds.}
\]

\[
H = \text{least clear height of opening on either side of a pier, inches.}
\]

\[
h/t = \text{height-to-thickness ratio of an unreinforced masonry wall. Height, } h, \text{ is measured between wall anchorage levels and/or slab-on-grade.}
\]

\[
L = \text{span of diaphragm between shear walls, or span between shear wall and open front, feet.}
\]

\[
L_o = \text{length of crosswall, feet.}
\]

\[
L_i = \text{effective span for an open front building specified in Section 1611C.8, feet.}
\]
\[ P_D = \] superimposed dead load at the location under consideration, pounds. For
determination of the rocking shear capacity, dead load at the top of the pier under
consideration shall be used.

\[ p_{D+L} = \] stress resulting from the dead plus actual live load in place at the time of
testing, pounds per square inch (psi).

\[ P_w = \] weight of wall, pounds.

\[ V_a = v_a A, \] the allowable shear in any unreinforced masonry pier, pounds.

\[ V_{ca} = \] total shear capacity of crosswalls in the direction of analysis immediately
above the diaphragm level being investigated, \( \sum V_c L_o \), pounds.

\[ V_{cb} = \] total shear capacity of crosswalls in the direction of analysis immediately
below the diaphragm level being investigated, \( \sum V_c L_o \), pounds.

\[ V_p = \] shear force assigned to a pier on the basis of its relative shear rigidity,
pounds.

\[ V_r = \] pier rocking shear capacity of any unreinforced masonry wall or wall pier,
pounds.

\[ V_{test} = \] load at incipient cracking for each in-place shear test per Section 1614C,
pounds.

\[ V_{wx} = \] total shear force resisted by a shear wall at the level under consideration,
pounds.

\[ v_a = \] allowable shear stress for unreinforced masonry, pounds per square inch
(psi).

\[ v_c = \] allowable shear value for a crosswall sheathed with any of the materials
given in Table 16C-D or 16C-E, pounds per foot.

\[ v_t = \] mortar shear strength as specified in Section 1606C.3.3.4, pounds per
square inch (psi).
\[ v_{lo} = \text{mortar shear test values as specified in Section 1606C.3.3.4, pounds per square inch (psi)}. \]
\[ v_{u} = \text{allowable shear value for a diaphragm sheathed with any of the materials given in Table 16C-D or 16C-E, pounds per foot}. \]
\[ \sum v_{u} D = \text{sum of diaphragm shear capacities of both ends of the diaphragm, pounds}. \]
\[ \sum \sum v_{u} D = \text{for diaphragms coupled with crosswalls, } \sum \sum v_{u} D \text{ includes the sum of shear capacities of both ends of diaphragms coupled at and above the level under consideration}. \]
\[ W = \text{total seismic dead load as defined in Chapter 16, pounds}. \]
\[ W_{d} = \text{total dead load tributary to a diaphragm, pounds}. \]
\[ \sum w_{d} = \text{total dead load to all the diaphragms at and above the level under consideration, pounds}. \]
\[ W_{w} = \text{total dead load of an unreinforced masonry wall above the level under consideration or above an open front building, pounds}. \]
\[ W_{wx} = \text{dead load of a unreinforced masonry wall assigned to Level } x \text{ halfway above and below the level under consideration, pounds}. \]
\[ Z = \text{seismic zone factor given in Table 16-I}. \]

**Section 1608C.5**

Sec. 1608C.5 Unreinforced Masonry Materials Other Than Solid Brick. The provisions of this chapter are primarily intended for brick construction but are also applicable to other unreinforced masonry materials when the following conditions are satisfied:

1. The building does not exceed two stories in height.
2. In the case of hollow concrete and clay block, the shear stress is limited to that permitted by Equations 16C-1 and 16C-2 based on the net area in contact through the bed.
joints but not more than that calculated using a mortar shear strength, \( v_h \), of 100 psi (689.476 kPa).

3. In the case of plain concrete, the compressive strength \( f_{c0} \) shall be not less than 900 psi (6,205.28 kPa) and the allowable shear strength is limited to not more than \( 0.02 f_{c0} \).

4. In the case of all other unreinforced masonry materials, the shear stress is limited to 3 psi (20.684 kPa) based on the net area in contact through the bed joint.

Unreinforced masonry not meeting the above criteria shall have its structural function replaced and shall be resupported, if required, in accordance with Section 1613C.8.

**Section 1611C.3.1**

Sec. 1611C.3.1 Crosswall definition. A "crosswall" is a wood-framed wall sheathed with any of the materials described in Table 16C-D or 16C-E or other system as defined in Section 1611C.3.5. Spacing of crosswalls shall not exceed 40 feet (12.19 m) on center measured perpendicular to the direction of consideration and shall be placed in each story of the building. Crosswalls shall extend the full story height between diaphragms.

**EXCEPTIONS:**

1. Crosswalls need not be provided at all levels in accordance with Section 1611C.4.2(4).

2. Existing crosswalls need not be continuous below a wood diaphragm at or within 4 feet (1.219 m) of grade, provided:

   (1) Shear connections and anchorage requirements, Section 1611C.5 are satisfied at all edges of the diaphragm.

   (2) Crosswalls with total shear capacity of \( 0.20 \sum W_d \) interconnect the diaphragm to the foundation.

   (3) The demand-capacity ratio of the diaphragm between the crosswalls that are continuous to their foundations shall be calculated as:
Section 1611.C.4.2

Sec. 1611.C.4.2 Demand-capacity ratios. Demand-capacity ratios shall be calculated for the diaphragm at any level according to the following formulas:

1. For a diaphragm without qualifying crosswalls at levels immediately above or below:
   \[ DCR = 0.83ZW_d \sum V_u D \] \hspace{1cm} (16C-5)

2. For a diaphragm in a single-story building with qualifying crosswalls:
   \[ DCR = 0.83ZW_d (\sum V_u D + V_{cb}) \] \hspace{1cm} (16C-6)

3. For diaphragms in a multi-story building with qualifying crosswalls in all levels:
   \[ DCR = 0.83Z\sum W_d (\sum \sum V_u D + V_{cb}) \] \hspace{1cm} (16C-7)

\( DCR \) shall be calculated at each level for the set of diaphragms at and above the level under consideration. In addition, the roof diaphragm shall also meet the requirements of Formula. \hspace{1cm} (16C-6)

4. For a roof diaphragm and the diaphragm directly below if coupled by crosswalls:
   \[ DCR = 0.83Z\sum W_d / \sum \sum V_u D \] \hspace{1cm} (16C-8)

Section 1611.C.6.1

Sec. 1611.C.6 Shear Walls (In-Plane Loading).

1611.C.6.1 Wall story force. The wall story force distributed to a shear wall at any diaphragm level shall be the lesser value calculated as:

1. For buildings without crosswalls:
   \[ F_{wx} = 0.33Z (W_{wx} + W_d / 2) \] \hspace{1cm} (16C-11)

   but need not exceed

   \[ F_{wx} = 0.33ZW_{wx} + V_u D \] \hspace{1cm} (16C-12)

2. For buildings with crosswalls in all levels:
\[ F_{wx} = 0.25Z (W_{wx} + W_{d}/2) \] ................................. (16C-13)

but need not exceed
\[ F_{wx} = 0.25Z [W_{wx} + \Sigma W_d (\nu D/\Sigma \nu D)] \] ................................. (16C-14)

and need not exceed
\[ F_{wx} = 0.25ZW_{wx} + \nu D \] ................................. (16C-15)

Section 1611C.6.2

Sec. 1611C.6.2 Wall story shear. The wall story shear shall be the sum of the wall story forces at and above the level of consideration.

\[ V_{wx} = \Sigma F_{wx} \] ........................................... (16C-16)

Section 1612C.2.2.2

Sec. 1612C.2.2.2 Pier behavior. The wall piers at any level are acceptable if they comply with one of the following modes of behavior:

1. Rocking controlled mode. When the pier rocking shear capacity is less than the pier shear capacity, i.e., \( V_r < V_a \) for each pier in a level, forces in the wall at that level, \( V_{wx} \), shall be distributed to each pier in proportion to \( P_D D/H \).

For the wall at that level:
\[ V_{wx} < \Sigma V_r \] ........................................... (16C-21)

2. Shear controlled mode. Where the pier shear capacity is less than the pier rocking capacity, i.e., \( V_a < V_r \) in at least one pier in a level, forces in the wall at the level, \( V_{wx} \), shall be distributed to each pier in proportion to \( D/H \).

For each pier at that level:
\[ V_p < V_a \] ........................................... (16C-22)

and
\[ V_p < V_r \] ........................................... (16C-23)
If $V_p < V_a$ for each pier and $V_p > V_r$ for one or more piers, such piers shall be omitted from the analysis, and the procedure shall be repeated for the remaining piers, unless the wall is strengthened and reanalyzed.

**Table 16C-D**

**TABLE 16C-D - ALLOWABLE VALUES FOR EXISTING MATERIALS**

<table>
<thead>
<tr>
<th>EXISTING MATERIALS OR CONFIGURATION OF MATERIALS$^1$</th>
<th>ALLOWABLE VALUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. HORIZONTAL DIAPHRAGMS$^2$</td>
<td>$(x \times 14.5939$ for $N/m)$</td>
</tr>
<tr>
<td>a. Roofs with straight sheathing and roofing applied directly to the sheathing</td>
<td>100 pounds per foot seismic shear</td>
</tr>
<tr>
<td>b. Roofs with diagonal sheathing and roofing applied directly to the sheathing</td>
<td>250 pounds per foot seismic shear</td>
</tr>
<tr>
<td>c. Floors with straight tongue-and-groove sheathing</td>
<td>100 pounds per foot seismic shear</td>
</tr>
<tr>
<td>d. Floors with straight sheathing and finished wood flooring with board edges offset or perpendicular</td>
<td>500 pounds per foot seismic shear</td>
</tr>
<tr>
<td>e. Floors with diagonal sheathing and finished wood flooring</td>
<td>600 pounds per foot seismic shear</td>
</tr>
<tr>
<td>2. CROSSWALLS$^{2,3}$</td>
<td>$(x \times 14.5939$ for $N/m$</td>
</tr>
<tr>
<td>a. Plaster on wood or metal lath</td>
<td>per side: 200 pounds per foot seismic shear</td>
</tr>
<tr>
<td>b. Plaster on gypsum lath</td>
<td>175 pounds per foot seismic shear</td>
</tr>
<tr>
<td>c. Gypsum wallboard, unblocked edges</td>
<td>75 pounds per foot seismic shear</td>
</tr>
<tr>
<td>d. Gypsum wallboard, blocked edges</td>
<td>125 pounds per foot seismic shear</td>
</tr>
</tbody>
</table>
3. EXISTING FOOTINGS, WOOD FRAMING, STRUCTURAL STEEL AND REINFORCING STEEL

| a. Plain concrete footings | \( f'_{c} = 1,500 \text{ psi unless otherwise shown by tests}^{\text{4}} \) |
| b. Douglas fir wood | Allowable stress same as D.F. No. 1\(^{4}\) |
| c. Reinforcing steel | \( f_{t} = 18,000 \text{ psi maximum}^{\text{4}} \) |
| d. Structural steel | \( f_{t} = 20,000 \text{ psi maximum}^{\text{4}} \) |

\(^{1}\) Material must be sound and in good condition.

\(^{2}\) A one-third increase in allowable stress is not allowed.

\(^{3}\) Shear values of these materials may be combined, except the total combined value shall not exceed 300 pounds per foot (2068.43 kPa).

\(^{4}\) Stresses given may be increased for combinations of loads as specified in this code.

**Section 1701.5**

Sec. 1701.5. Revise the item as follows:

1701.5 Types of Work. Except as provided in Section 1701.1, the types of work listed below shall be inspected by a special inspector.

1. Concrete. During the taking of test specimens and placing of reinforced concrete. See Item 12 for shotcrete.

**EXCEPTIONS:**

1. Concrete for foundations conforming to minimum requirements of Table 18-I-C or for Group R, Division 3, or Group M, Division 1 Occupancies, provided the building official finds that a special hazard does not exist.

2. For foundation concrete, other than cast-in-place drilled piles or caissons, where the structural design is based on an \( f'_{c} \) no greater than 2,500 pounds per square inch (psi)
(17.2 MPa). This exception shall not apply to foundations serving as retaining walls of soil over 5 feet (1829 mm) in height measured from the base of the foundation.

Section 1701.5. Revise this item as follows:

15. Special cases. Work which, in the opinion of the Director, involves unusual hazards or conditions such as underpinning, shoring, removal of hazardous materials and new construction methods not covered by this code.

Section 1701.5 Types of Work. Add the following items:

16.17. Exterior facing. During fastening of all exterior veneer and ornamentation facing units constructed of concrete, masonry, stone or similar materials, and all curtain walls weighing more than 15 pounds per square foot (73.39 kg/m²) of wall.

EXCEPTIONS:

1. Veneers weighing less than 5 pounds per square foot (24.46 kg/m) located less than 15 feet (4.57 m) above grade.

2. Anchored veneer located less than 10 feet (3.048 m) above grade.

17.18. Demolition. Demolition of buildings more than two stories or 25 feet (7.62 m) in height. See Section 3303.9 for demolition requirements.

EXCEPTION: Type V buildings.


19.1 During the testing of mortar quality and performance of masonry shear tests in accordance with Section 1614C when required by Sections 1606C.3.3 and 1607C.2.

20.2 During repointing operations in accordance with Section 1616C when required by Sections 1606C.3.3,7 and 1607C.1.

21.3 During the installation of new shear bolts when required by the exception to Section 1607C.4.
Prior to the placement of the bolt and grout or adhesive for embedded bolts as required by Section 1607C.4.

During the prequalification tests in accordance with Section 1615C.3 as permitted by Footnote 8 to Table 16C-E.

Bolts installed in existing masonry or concrete. Except for through bolts with plate washers conforming to Table 16C-E, bolts that are newly installed in existing masonry or concrete shall be tested in accordance with Section 1615C. The number and type of tests required shall be the same as required by Section 1607C.

Shear walls and floor systems used as shear diaphragms. All connections, including nailing, tiedowns, framing clips, bolts and straps, for those parts of a lateral force resisting system utilizing the following components:

Plywood diaphragms, where shear values exceed 2/3 the values in Tables 23-II-H and 23-II-I-1.

Double sheathed shear walls, in all cases.

Plywood shear walls, wherever nailing or hardware are not visible to the district inspector at the time of cover-up inspection.

If nailing is not visible to the inspector at the called inspection, or if the special inspector has not inspected the work prior to the concealment, all work concealing such nailing shall be removed in order to permit a complete inspection.

Gypsum wallboard shearwalls where shear values exceed one-half of the values permitted by Footnote 1 of Table 25A-I.

Fiberboard shearwalls where shear values exceed one-half of the values in Table 23-II-J.

Particle-board diaphragms, where shear values exceed one-half of the values in Table 23-I-I-2.
Construction of a new building or structure, or alterations that involve a substantial increase in the envelope of an existing building or structure within the Edgehill Mountain Slope Protection Area, created by Building Code Section 104.4.1.2; provided, however, that, until the special inspection reports required by Building Code Section 1701.3 are submitted to and approved by the Department, the phase of construction subsequent to the phase or element for which the report was completed cannot commence.

Section 3403.2.1.2
Sec. 3403.2.1.2 Horizontal additions. Horizontal additions shall meet the following requirements:

1. When the cumulative area of horizontal additions, excluding basement additions, exceeds 30 percent of the area of the original building or structure, excluding basements, and the additions are structurally interconnected to, or not separated to comply with Section 1633.2.11, the entire structure shall comply with Section 3403.6; or

2. When the area of the addition does not exceed 30 percent of the original building or structure, excluding basements, only the addition and any lateral force resisting elements common to the addition and original building or structure must comply with Section 3403.6.

For the purpose of this section, the term “original building or structure” shall mean the building or structure as it existed on May 21, 1973. The combined building or structure may be used for more restrictive occupancy classifications as determined in Chapter 3 only when the structure as a whole meets the requirements in this code for such occupancy.

Section 3407.1
Sec. 3407. Add the following new section:

Section 3407 — Work Practices For Exterior Lead-Based Paint

3407.1 Definitions. For the purposes of this section, the following definitions shall apply:
ACCREDITED LABORATORY means a laboratory which operates within the EPA National Lead Laboratory Accreditation Program.

ADJACENT PROPERTIES means properties that adjoin the regulated area of the property in question, including at the corners of lot lines.

CERTIFIED means a process used by the State of California Department of Health Services (DHS) and the US Environmental Protection Agency (EPA) to identify individuals who have completed training and other requirements to permit the safe execution of lead risk assessments and inspections, or lead hazard reduction and control work.

“Certified” includes current interim certification by DHS, unless and until this status is modified by state legislation.

CONTAINMENT BARRIERS means measures that prevent the migration of lead paint contaminants. Containment barriers shall be at least as effective at protecting human health and the environment as those contained in the most current HUD Guidelines.

CONTRACTOR means any person, whether or not in possession of a valid state contractor’s license, who undertakes to or offers to undertake to or purports to have the capacity to undertake to or submits a bid to, or does, by himself or herself or by or through others, any action that may or will disturb or remove paint. For purpose of this section, “contractor” shall also include subcontractors.

DISTURB OR REMOVE PAINT means any action that creates friction, pressure, heat or a chemical reaction upon any lead-based paint on an exterior surface so as to abrade, loosen, penetrate, cut through or eliminate paint from that surface. This term shall include all demolition and surface preparation activities that are performed upon an exterior surface containing lead-based paint.

EXTERIOR means the outside of a building or steel structure and the areas around it within the boundaries of the property, including the outside of any detached
structures, including but not limited to outside and common walls, stairways, fences, light
wells, breezeways, sheds and garages.

3407.1.8 HEPA means a high efficiency particulate air filter.

3407.1.9 HUD GUIDELINES means the most recent "Guidelines for Evaluation and
Control of Lead-Based Paint Hazards" promulgated by the United States Department of
Housing and Urban Development (HUD).

3407.1.10 LEAD means metallic lead and all inorganic and organic compounds of lead.

3407.1.11 LEAD-BASED PAINT or LEAD PAINT means any paint, varnish, shellac or
other coating on surfaces with lead in excess of 1.0 mg/cm² (milligrams per square
centimeter) as measured by x-ray fluorescence (XRF) detector or laboratory analysis or in
excess of 0.5 percent by weight, also expressed as 5,000 ppm (parts per million), 5,000 mg/g
(µg/g) (micrograms per gram), or 5,000 mg/kg (milligrams per kilogram) as measured by
laboratory analysis.

3407.1.12 LEAD-BASED PAINT TESTING means testing of surfaces to determine the
presence of lead-based paint performed by an independent Certified Risk Assessor/Inspector,
in accordance with the HUD Guidelines, and where testing includes bulk paint samples, such
samples are analyzed by an accredited laboratory.

3407.1.13 OWNER means the owner of a property or the owner's authorized agent.

3407.1.14 PERSON means a natural person, his or her heirs, executors, administrators
or assigns, and also includes a municipal or state agency to the extent allowable by law, a
firm, joint stock company, business concern, association, partnership or corporation, its or
their successors or assigns, or the agent of any of the aforesaid.

3407.1.15 PROHIBITED PRACTICES means work practices prohibited under Section
3605-3407.3 of this section.
3407.1.17 REGULATED AREA means an area in which work is being performed that disturbs or removes paint, and to which access is restricted in order to prevent migration of paint contaminants. “Regulated area” shall also include any area contaminated with lead paint contaminants as a result of a breach or lack of containment barriers or a violation of the containment requirement set forth in Section 3605. 3407.3.1.

3407.1.16 RESPONSIBLE PARTY means either (1) the owner of the property where the owner or the owner's employees or persons otherwise under the control of the owner are performing the activities regulated under this section; or (2) the owner and the contractor where the owner has entered into a contract with another to carry out the activities regulated under this section.

3407.1.18 STEEL STRUCTURE means any structure that is not a building and which has exterior surfaces made of steel or other metal, such as bridges, billboards, walkways, water towers, steel tanks and roadway or railway overpasses.

Section 3407.2.3

Sec. 3407.2.3 De Minimis Notification Exemption. Any person performing work subject to this section who disturbs or removes less than 10 square feet (0.929 m²) of lead-based paint in total shall not be required to comply with the notification requirements set forth in Section 3404 3407.4 of this section.

Section 3407.4.3

Sec. 3407.4.3 Contents of notice. The Director shall make available to the public a form that complies with the requirements of Section 3606.2 3407.4.2 and contains blank spaces for the required information.

Section 3407.5.3.4

Sec. 3407.5.3 Evaluation of complaint. When determining the validity of a complaint, if the Director is not able to observe the actual performance of any work practices constituting...
violations of the performance standards of Section 3407.3, the Director shall investigate and consider the following:

3407.5.3.1 The containment measures and work tools being used by the responsible party;
3407.5.3.2 The color(s) of paint being disturbed or removed by the responsible party;
3407.5.3.3 The color(s), quantities, nature and locations of alleged visible lead paint contaminants;
3407.5.3.4 The color(s), locations and conditions of paint on adjacent properties, to determine if such paint could be a source of the alleged visible lead paint contaminants; and
3407.5.3.5 Any work being performed on adjacent properties which could be a source of the alleged visible lead paint contaminants; and
3407.5.3.6 Any other relevant evidence that the Director determines in the exercise of his or her discretion would help to determine whether a violation of this section has occurred.

Section 3408.3.2

Sec. 3408.3.2 Time of posting. Unless the requirement for plans and specifications is waived by the Director of the Department pursuant to Section 106.3.2, provide a notice at least 72 hours prior to commencement of any asbestos-related work to the residential tenants in the building. The notice shall advise the residential tenants of the nature of the asbestos-related work to be performed, the date and time the work is scheduled to commence, the specific location or locations in the building where the work will occur, the name and address of the person or firm performing the work and the name and telephone number of a person to contact on site if the residential tenant has questions or concerns. The notice shall be provided in one of the following ways:

I. At least 72 hours prior to commencement and for the duration of any asbestos-related work, post a notice containing the required information in a conspicuous common area
of the apartment house or residential hotel measuring 15 inches by 15 inches (381 mm x 381 mm); or

2. Mail, by first-class registered mail, a notice containing the required information to each person who rents or leases residential space in the apartment house or residential hotel, postmarked at least five days plus 72 hours prior to commencement of any asbestos-related work; or

3. Personally deliver a notice containing the required information to each person who rents or leases residential space in the apartment house or residential hotel, at least 72 hours prior to commencement of the asbestos-related work.

Section 1605.4.3 [Volume 2]

1605.4.3 Seismic forces. Buildings and structures shall comply with the applicable provisions of Sections 1626 through 1634, except that, when compliance with this section is required by:

1. Section 3403.2.2.1 Substantial change; or

2. Section 3403.2.2.2 Structural alterations; or

3. Section 3403.2.1.2 Horizontal additions; for those lateral force resisting elements which do not share lateral loads with the addition; or

4. Section 3405, Change in Use which does not involve a change in the \( I \) or \( I_w \) factors of Table 16-K; or

5. Section 1630.1.1, New storage or warehouse live loads in more than 10 percent of the total floor area; or

6. Section 3403.2.2.4, Repair – Repairs to buildings or structures which have sustained structural damage; then structures and elements may be designed for seismic forces of not less than 75 percent of those given in Sections 1626 through 1634, and

SUPERVISOR DALY
BOARD OF SUPERVISORS

Page 41
8/1/2003

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1. Near field effects ($N_a$ and $N_v$ of Tables 16-S and 16-T) and the reliability/redundancy factor ($P$) need not exceed 1.0; and

2. The load factor resulting from the vertical component of the earthquake ground motion ($E_v$) may be 0; and

3. Fifty percent of $\Delta_m$ may be used to evaluate deformation compatibility of existing elements and existing exterior elements in accordance with Section 1633.2.4; new elements shall meet the full criteria of this code; and

4. The building separation limitations of Section 1633.2.11 do not apply; and

5. The maximum allowable height-to-length ratio for shear resisting construction with wood frame may be taken as 3.5; and

6. In wood frame buildings not more than 4 stories in height, $R$ may be 5.5 regardless of the bracing system or materials used.

When upper floors are exempted from compliance by Section 3405, the lateral forces generated by their masses shall be included in the analysis and design of the lateral force resisting systems for the strengthened floor. Such forces may be applied to the floor level immediately above the topmost strengthened floor and distributed in that floor in a manner consistent with the construction and layout of the exempted floor.

In lieu of meeting the specific requirements of this section, an alternative lateral analysis procedure complying with Section 1629.10.1 and incorporating inelastic behavior may be submitted and approved in accordance with rules and regulations adopted by the Director pursuant to Section 104.2.1.

**Section 1605.5 [Volume 2]**

1606.5 Add the following section:

**Sec. 1605.5 Earthquake Recording Instrumentation.** The City and County of San Francisco
Adopts Appendix Chapter 16, Division II – Earthquake Recording Instrumentation, for
the purpose of evaluating the performance of instrumented building in earthquakes.

Section 106.4.4

106.4.4 Replace this section with the following:

106.4.4 Expiration. Every permit issued by the building official Director under the
provisions of this code, unless an extension of time has been specifically approved by the
Director, shall expire by limitation and become null and void when the time allowed in Table A
is reached, or when any of the following circumstances is applicable:

1. If the building or work authorized by such permit is not started within 90 days
from the date of such permit, except for site permits with a valuation of $2,500,000 or more
and Director-initiated code compliance permits.

2. For site permits with a valuation of $2,500,000 or more the work shall start within
18 months or half the time period specified in Table A whichever is the greater amount of
time.

3. For Director-initiated code compliance permits, the work shall start within 30
days from the date of such permit.

4. If the building or work authorized is suspended or abandoned at any time after
the work has started, for a period as follows:

   4.1 Thirty days for Director-initiated code compliance permits.
   4.2 Ninety days for all other permits.

5. An extension of time from the stated periods may be permitted for good reason,
provided such requests for an extension are submitted to the Chief Building Inspector in
writing prior to the end of the time period accompanied by payment of a fee. Unless approved
by the Director, no more than three extensions of time may be granted. Any inspections
performed during the extended portion of the life of the permit will require payment of
inspection fees in addition to the basic extension fee. See Section 110, Table 1-J —

Miscellaneous Fees — for applicable fees. Each extension of time shall not exceed the
following time periods:

5.1 180 days for site permits with a valuation of $2,500,000 or more.

5.2 30 days for Director-initiated code compliance permits with a valuation of
less than $25,000.

5.3 90 days for all other permits. The maximum time allowed for Director-
initiated code compliance permits shall be 12 months for all permits exceeding $25,000 total
valuation.

EXCEPTION: See Table 16B-A — Program Implementation Schedule — Footnotes 2 and 3.

6. A demolition permit shall expire 180 days after issuance. Only one extension of
time of 90 days shall be granted upon written request to the Director.

7. The Director may administratively authorize the processing of applications involving
compliance actions initiated by the Department, in a manner other than set forth in this code,
so as to effect said compliance most expeditiously; provided however that due process is
assured all applicants. In this regard, the Director may reduce the time periods set forth in this
Section as they apply to a second application and permit required by the Director to effect full
compliance with this code and other applicable laws and regulations if by doing so code
compliance would be more expeditiously accomplished.

EXCEPTION: In order to avoid repetitive filings and processing of applications to effect code
compliance, the Director is hereby authorized to establish alternate procedures and
extensions of time from cancellation pursuant to Section 106.4.1 and from expiration pursuant
to this section, provided however that the Director, in establishing alternate procedures and
extension of time, shall proceed as expeditiously as possible toward abatement of the
violations.

SUPERVISOR DALY
BOARD OF SUPERVISORS
When a permit is issued but delayed due to actions before the Board of Appeals or other City agencies, or cases in any court of competent jurisdiction, or is under review by a State or regional regulatory body, the time allowable shall be computed from the date of the final action of the agency or court of jurisdiction.

Section 409.9.1

Revise the following section. Section 409.9.4 Add the following section:

409.9. General When a pedestrian walkway is used for other than pedestrian traffic it shall be classified according to its use or the character of its occupancy and shall conform with the requirements of this code.

Section 1602C.6.1

1602C.6.1 Masonry-wood or steel mix. When the lower stories of the building are of unreinforced masonry bearing wall construction and the upper stories are of wood frame or steel stud construction, the unreinforced masonry stories shall be strengthened to meet the requirements of the general procedure of this chapter and the other stories need not be strengthened.

Section 1602C.6.2

1602C.6.2 Masonry-concrete steel-mix. When a building is of mixed unreinforced masonry bearing wall construction and reinforced concrete or masonry construction, the entire building shall be strengthened in accordance with a program developed by the owner's architect or engineer and approved by the Director.

Section 3303.9.2

3303.9.2 – Clean-up. When a building is demolished, the permittee must remove all debris and remove all parts of the structure above grade excepting those parts that are necessary to provide support for the adjoining property.
Section 3310
Section 3310. Replace this section, Table A-33-A and Table A-33-B with the following:

Section 3310 Grading Fees
The permit and the plan review fees shall be per Section 110, Tables 1-F – Specialty Permit Fees, Table 1-A – Building Permit Application and Plan Review Fees 19-F 1-A and 19-B. The valuation shall be based on the volume of earthwork.

3403.2.1.1
3403.2.1.1 Vertical additions. Vertical additions shall meet all of the following requirements:

1. The building or structure shall comply with Section 3403.6, Lateral Force Design Requirements for Existing Buildings and Structures.
   Exception: In Type V, Group R Occupancies where the lateral force story shear in any story is not increased by more than five percent.

2. The occupancy of the vertical addition shall comply with the limitations of Table 5-B.

Section 1605.4.1 [Volumes 1 and 2]
1605.4.1 General. This section is applicable to existing buildings when invoked by Section 3403.6. This section may be used as a standard for voluntary upgrades.

An existing building or structure which has been brought into compliance with the lateral force resistance requirements of the San Francisco Building Code in effect on or after May 21, 1973 shall be deemed to comply with this section except when a vertical extension or other alterations are to be made which would increase the mass or reduce the seismic resistance capacity of the building or structure.
APPROVED AS TO FORM:
DENNIS J. HERRERA, City Attorney

By: [Signature]
Deputy City Attorney
Ordinance amending the Building Code to effect technical corrections/clarifications to Section 3102.8, by adding provisions previously included in the Code regarding woodburning appliances, Section 101.20, by adding provisions previously included in the Code regarding the operation of the Central Permit Bureau, Section 106.1, by deleting provisions regarding permit requirements that were previously removed from the Code, Section 106.3.2, by adding provisions previously included in the Code regarding submittal documents for permit applications, Section 103.3.1, 103.3.2, 103.3.3, 103.3.4, and 103.3.5 by deleting provisions regarding unlawful residential demolition and adding the provisions regarding unlawful residential demolition that were previously included in the Code, Section 205 by deleting the definition of demolition, by amending Figure 16B-1, Sections 105.4.2, 105.4.3.1, 107.1.1, 108.5.6, 1003.3.3.2, 1001A, 1304.A.1, 1307A.2, 1311A.1, 1313A.3, 1314A.2, 1316A.1, 1308A.3, 1605.4.3, 1604B.2.3, 1605B.3, 1605B.8, 1606B, 1604C, 1608C.5, 1611C.3.1, 1611C.4.2, 1611C.6.1, 1611C.6.2, 1611C.2.2.2, Table 16C-D, 1701.5, 3403.2.1.2, 3407.1, 3407.2.3, 3407.4.3, 3407.5.3.4, 3407.5.3.5, 3408.3.2, 1605.4.3, 1605.5, 106.4.4, 409.9.1, 1602C.6.1, 1602C.6.2, 3303.9.2, 3403.2.1.1, and 1605.4.1 to correct typographical errors, and making findings in accordance with California Health and Safety Code Section 17958.5 as to the local climatic, topological and geological reasons for amending the State Building Code.

September 30, 2003 Board of Supervisors — PASSED ON FIRST READING
   Ayes: 11 - Ammiano, Daly, Dufty, Gonzalez, Hall, Ma, Maxwell, McGoldrick, Newsom, Peskin, Sandoval

October 7, 2003 Board of Supervisors — FINALLY PASSED
   Ayes: 10 - Daly, Dufty, Gonzalez, Hall, Ma, Maxwell, McGoldrick, Newsom, Peskin, Sandoval
   Absent: 1 - Ammiano
I hereby certify that the foregoing Ordinance was FINALLY PASSED on October 7, 2003 by the Board of Supervisors of the City and County of San Francisco.

Gloria L. Young
Clerk of the Board

Mayor Willie L. Brown Jr.