

2010
San Francisco Building Code

Amendments to the

2010 California Building Code
2010 California Green Building Standards Code
2010 California Residential Code

Operative date: January 1, 2011

CHAPTER 1
SCOPE AND ADMINISTRATION

DIVISION I
CALIFORNIA ADMINISTRATION

No San Francisco Building Code Amendments.

DIVISION II
SCOPE AND ADMINISTRATION

See Chapter 1A for the Administration provisions of the San Francisco Building Code.

**CHAPTER 1A
SAN FRANCISCO ADMINISTRATION**

The City and County of San Francisco adopts the following Chapter 1A for the purpose of administration of the 2010 San Francisco Building Code. Certain specific administrative and general code provisions as adopted by various state agencies may be found in Chapter 1, Divisions I and II of this code.

SECTION 101A — TITLE, SCOPE AND GENERAL

101A.1 Title. These regulations shall be known as the “2010 San Francisco Building Code,” may be cited as such and will be referred to herein as “this code.” The 2010 San Francisco Building Code amends the 2010 California Building Code, the 2010 California Residential Code and the 2010 Cal Green Code which is Part 2, 2.5 & 11 respectively of the 12 parts of the official compilation and publication of the adoption amendment and repeal of the building regulations to the California Code of Regulations, Title 24, also referred to as the California Building Standards Code. The California Building Code and California Residential Code incorporates by adoption the 2009 International Building Code and 2009 International Residential Code respectively of the International Code Council with necessary California amendments.

101A.2 Purpose. The purpose of this code is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, access to persons with disabilities, sanitation, adequate lighting and ventilation and energy conservation, and safety to life and property from fire and other hazards attributed to the built environment; to regulate and control the demolition of all buildings and structures, and the quarrying, grading, excavation, and filling of land; and to provide safety to fire fighters and emergency responders during emergency operations.

The further purpose of this code is to ensure that barrier-free design is incorporated in all buildings, facilities, site work and other developments to which this code applies and to ensure that they are accessible to and usable by persons with disabilities.

101A.3 Scope. The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

101A.3.1 Non-state-regulated buildings, structures and applications. Except as modified by local ordinance pursuant to Section 1.1.8, the following standards in the California Code of Regulations, Title 24, Parts 2,2.5,3,4,5,6,8,9,10,11 and 12 shall apply to all occupancies and applications not regulated by a state agency.

101A.4 Effective Date of this code.

101A.4.1 Only those standards approved by the California Building Standards Commission and code amendments, additions or deletions adopted by the City and County of San Francisco that are effective at the time an application for building permit is deemed acceptable for building plan review by the Department of Building Inspection shall apply to the plans and specifications for, and to the

construction performed under, that permit. For the effective dates of the provisions contained in this code, see History Notes page of this code.

101A.4.2 Appendices. Provisions contained in the appendices of this code shall not apply unless specifically adopted by a state agency or adopted by a local enforcing agency in compliance with Health and Safety Code Section 18938(b) for Building Standards Law, Health and Safety Code Section 17950 for State Housing Law and Health and Safety Code Section 13869.7 for Fire Protection Districts.

101A.5 Validity. If any chapter section, subsection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, contrary to statute, exceeding the authority of the state as stipulated by statutes, or otherwise inoperative, such decision shall not affect the validity of the remaining portion of this code.

101A.6 Reference Documents. The codes, standards and publications adopted and set forth in this code, including other codes, standards and publications referred to therein are, by title and date of publication, hereby adopted as standard reference documents of this code.

When this code does not specifically cover any subject relating to building design and construction, recognized architectural or engineering practices shall be employed. The National Fire Codes and Fire Protection Handbook of the National Fire Protection Association are permitted to be used as authoritative guides in determining recognized fire-prevention engineering practices.

In the event of any differences between these building standards and the standard reference documents, the text of these building standards shall govern.

101A.7 Order of Precedence.

101A.7.1 Specific provisions. Where a specific provision varies from a general provision, the specific provision shall apply.

101A.7.2 Conflicts. When the requirements of this code conflict with the requirements of any other part of the California Building Standards Code, Title 24, any provision contained elsewhere in the San Francisco Municipal Code, or any regulation or requirement adopted by the Public Utilities Commission or other City agency under its Charter authority, the most restrictive requirement shall prevail.

101A.7.3 Fire Codes. Nothing in these building standards shall diminish the requirements of the state fire marshal.

Sections 101A.8 – 101A.19 Are Reserved

101A.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 106A.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 Building Official 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 collection 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.

101A.21 Safety assessment placards. This section establishes standard placards to be used to indicate the condition of a building or structure after a natural or human-created disaster. A description of the placards to be used is set forth in this Section. The Building Official and their authorized representatives are authorized to post the appropriate placard at each entry point to a building or structure upon completion of a safety assessment. A safety assessment is a visual, nondestructive examination of a building or structure for the purpose of determining the condition for continued occupancy.

101A.21.1 Application of provisions. The provisions of this section are applicable to all buildings and structures of all occupancies regulated by the City and County of San Francisco.

101A.21.2 Description of placards. The Department of Building Inspection shall use the form of standard placards that the Applied Technology Council has recommended and revises from time to time. The actual placards shall be in a form that the Building Official approves. In addition, the ordinance number, the name of the department, its address, and phone number shall be permanently affixed to each placard. In addition, each placard shall include the following language or its equivalent as determined by the Building Official: Any unauthorized removal, alteration, or covering of this placard shall be considered a violation of the San Francisco Building Code and the responsible person(s) shall be subject to applicable penalties set forth in the code. A general description of the placards is as follows:

1. **INSPECTED – LAWFUL OCCUPANCY PERMITTED.** This placard is to be posted on any building or structure where no apparent structural hazard has been found. This placard is not intended to mean that there is no damage to the building or structure.

2. **RESTRICTED USE.** This placard is to be posted on each building or structure that is damaged to such an extent that restrictions on continued occupancy are required. The person or persons authorized to post this placard will note in general terms the type of damage encountered and will note with specificity any restrictions on continued occupancy.

3. **UNSAFE – DO NOT ENTER OR OCCUPY.** This placard is to be posted on each building or structure that is damaged to such an extent that continued occupancy poses a threat to life safety. Buildings or structures posted with this placard shall not be entered under any circumstance except as authorized in writing by the Building Official of Building Inspection or his or her authorized representative. Authorized safety assessment individuals or teams may enter these buildings at any time. This placard is not to be used or considered to be a demolition order. The person or persons authorized to post this placard will note in general terms the type of damage encountered.

101A.21.3 Removal or alteration prohibited. Once it has been attached to a building or structure, a placard is not to be removed, altered, or covered except by an authorized representative of the Department or upon written notification from the Department. Any unauthorized removal, alteration, or covering of a placard shall be considered a violation of this code and the responsible person(s) shall be subject to the penalties set forth herein.

SECTION 102A – UNSAFE BUILDINGS, STRUCTURES OR PROPERTY

All buildings, structures, property, or parts thereof, regulated by this code that are structurally unsafe or not provided with adequate egress, or that constitute a fire hazard, or are otherwise dangerous to human life, safety or health of the occupants or the occupants of adjacent properties or the public by reason of inadequate maintenance, dilapidation, obsolescence or abandonment, or by reason of occupancy or use in violation of law or ordinance, or were erected, moved, altered, constructed or maintained in violation of law or ordinance are, for the purpose of this chapter, unsafe.

Whenever the Building Official determines by inspection that property or properties either improved or unimproved are unstable because of landslide, subsidence or inundation or that such occurrences are deemed imminent, the Building Official shall give written notice to the owner or owners that said property or properties are unsafe. The notice shall specify the conditions creating the unsafe classification.

All such unsafe buildings, structures, property, or portions thereof, are hereby declared to be public nuisances and shall be vacated, repaired, altered or demolished as hereinafter provided.

102A.1 Fire Hazard. No person, including but not limited to the state and its political subdivisions, operating any occupancy subject to these regulations shall permit any fire hazard, as defined in this section, to exist on premises under their control, or fail to take immediate action to abate a fire hazard when requested to do so by the enforcing agency.

Note: “Fire hazard” as used in these regulations means any condition, arrangement or act which will increase, or may cause an increase of, the hazard or menace of fire to a greater degree than customarily recognized as normal by persons in the public service of preventing, suppressing or extinguishing fire; or which may obstruct, delay or hinder, or may become the cause of obstruction, delay or hindrance to the prevention, suppression or extinguishment of fire.

102A.2 Authority to Enforce. Subject to other provisions of law, for administration, enforcement, actions, proceedings, abatement, violations and penalties in structures subject to State Housing Law, refer to Health and Safety Code Sections 17910 through 17995.5 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1.

102A.2.1 Mobilehome parks and special occupancy parks. Subject to other provisions of law, for administrative, enforcement, actions, proceedings, abatement, inspections and penalties applicable to the Mobilehome Parks Act, refer to California Health and Safety Code, commencing with Section 18200 and California Code of Regulations, Title 25, Division 1, Chapter 2.

102A.2.2 Employee Housing. Subject to other provisions of law, for administrative, enforcement, actions, proceedings, violations and penalties applicable to the Employee Housing Act, refer to Safety Code, Sections 17000 through 17062.5 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 3.

102A.3 Inspections and Complaints. The Building Official is hereby authorized to inspect or cause the inspection of any building, structure or property for the purpose of determining whether or not it is unsafe in any of the following circumstances:

1. Whenever the Building Official, with reasonable discretion, determines that such inspection is necessary or desirable.

2. Whenever any person files with the Building Official a complaint from which there is, in the Building Official's opinion, probable cause to believe that the building, structure or property or any portion thereof, is unsafe.

3. Whenever an agency or department of the City and County of San Francisco transmits to the Building Official a written report from which there is, in the opinion of the Building Official, probable cause to believe that the building, structure or property, or any portion thereof, is unsafe.

Upon the completion of any such inspection and the finding by the Building Official of any condition which renders the building, structure or property unsafe, the Building Official shall, within 10 days thereafter, serve a written notice of violation upon the building owner which shall contain specific allegations, setting forth each condition the Building Official has found which renders the building, structure or property unsafe. The Building Official shall, within three days of mailing of such notice of violation, post a copy thereof in a conspicuous place in or upon such building, structure or property and make available a copy of the notice of violation to each tenant thereof. Such notice shall also set forth the penalties for violation prescribed in Section 103A of this code. In addition to the civil penalties prescribed in Section 103A, the Department's cost of preparation for and appearance at the hearing required by Section 102 A.4, and all prior and subsequent attendant and administrative costs, shall be assessed upon the property owner monthly, after failure to comply with a written notice of violation that has been served upon the property owner. Said violations will not be deemed legally abated until the property owner makes full payment of the assessment of costs to the Department of Building Inspection. See Section 110A, Table 1A-D – Standard Hourly Rates and Table 1A-K – Penalties, Hearings, Code Enforcement Assessments – for the applicable rate. Failure to pay the assessment of costs shall result in tax lien proceedings against the property per Section 102A.18.

If the unsafe conditions observed on the property have not been corrected within the time period provided, the matter shall be set for hearing within 30 days of the serving of such notice of violation, and notice of such hearing shall be given as hereinafter provided. The applicant may waive the hearing before the Building Official and request the matter go directly for hearing by the Abatement Appeals Board.

102A.4 Notice of Hearing.

102A.4.1 General. Notice of hearing shall be given upon a form prescribed by the Building Official. It shall set forth the street address sufficient for identification of the property or premises upon which the building or structure is located. It shall contain or be attached to a copy of the notice of violation which includes a list of code violations. It shall state the date, hour and place of the hearing and shall order all interested parties who desire to be heard in the matter to appear before the Building Official to show cause why the property, building or structure, or portion thereof, should not be ordered repaired, altered, vacated and repaired or altered, or vacated and demolished.

One copy of the notice of hearing and notice of violation, including the list of code violations, shall be posted in a conspicuous place upon the building or property. The notice shall also include a conspicuous warning which sets forth the penalties for violation prescribed in Section 103A of this code.

One copy of the notice of hearing and notice of violation, including the list of code violations, shall be served upon each of the following:

1. The person, if any, in real or apparent charge and control of the premises involved.

2. The owner of record.
3. The holder of any mortgage, deed of trust, lien or encumbrance of record.
4. The owner or holder of any lease of record.
5. The record holder of any other estate or interest in the building, structure or property, or the land upon which it is located.

102A.4.2 Method of service. The notice of hearing shall be served upon all persons entitled thereto, either personally or by certified or registered mail. Service by certified or registered mail shall be effective on the date of mailing if the certified or registered letter is mailed, postage prepaid, return receipt requested, to each such person as their address appears on the last annual tax roll of the county or at the address to which the most recent real property tax bill for said building, structure or property was mailed by the Tax Collector. If no such address appears on the annual tax roll of the county or the records of the Tax Collector, then a copy of the notice shall be addressed to such person at the address of the building, structure or property involved in the proceedings. The failure of any owner or other person to receive such notice shall not affect in any manner the validity of any proceedings taken hereunder.

102A.4.3 Proof of service. The person serving notice as provided herein shall file an affidavit or declaration thereof under penalty of perjury, certifying to the time and manner in which such notice was given. Such person shall also file therewith any receipt card of such notice by certified or registered mail. The notice shall be posted and served at least 10 days prior to the date set for the hearing.

102A.5 Hearing. The public hearing shall be held at the time and place designated in the notice of hearing. For good cause shown, a hearing may be continued by the Building Official, except that any such continuance shall not exceed 30 days and there shall be only one such continuance allowed. Subject to procedures prescribed by the Building Official for the orderly conduct of the hearing, all persons having an interest in the building, structure or property or having knowledge of facts material to the allegations of the notice of violation including the list of code violations, may present evidence for consideration by the Building Official.

The Building Official may designate a deputy who may act in place of the Building Official as the hearing officer. The deputy shall have the same authority as the Building Official to hear and decide the case and to make any order hereinafter provided for.

102A.6 Decision. The Building Official, after a full and fair consideration of the evidence and testimony received at the hearing, shall render within 30 days following the conclusion of such hearing, a decision in writing either dismissing the proceedings, or, if finding that the building, structure or property, or portion thereof, is unsafe, ordering that it be repaired, altered, vacated and altered or repaired, or vacated and demolished.

102A.7 Contents of Order. The order shall contain a statement of the particulars which render the building, structure, or property unsafe and shall contain a statement of work required to be done and the time requirements for the execution of the order.

102A.7.1 Address. The order shall set forth the street address of the building or structure, sufficient for identification.

102A.7.2 Time. The order shall specify the time within which the premises or portion thereof shall be vacated, if ordered. The order shall further specify a reasonable time, not to exceed 360 days from permit issuance, within which the work shall be completed.

102A.7.3 Extension for completion. The time for completion may be extended by the Building Official for good cause shown, except that such extension shall not exceed 360 days. Such extension shall be in writing upon the request of the owner and shall be limited to the minimum time necessary for completion. Only one such extension may be allowed.

102A.8 Posting and Service of Order. A copy of the order shall be posted in a conspicuous place upon the building, structure or property and shall be served in the manner above prescribed in the case of the notice of hearing, upon all persons to whom the notice of hearing is required to be served, and a copy shall be recorded in the Assessor-Recorder's Office.

102A.9 Compliance, Rescinding Order. When the property, building or structure or portion thereof that was determined to be unsafe, has been found to comply with requirements of the Building Official as to rehabilitation, alteration, repair or demolition, the Building Official shall issue and record in the Assessor-Recorder's Office an order rescinding the original order.

102A.10 Appeal of Order. Any person may appeal from an order of the Building Official made pursuant to the provisions of Section 102A.7 and shall, at the hearing provided for in Section 102A.5 and in said order, be apprised of the right of appeal to the Abatement Appeals Board, provided that the appeal is made in writing and filed with the Secretary of the Abatement Appeals Board within 15 days after such order is posted and served. The 15-day limitation shall not apply when any type of a moratorium authorized in this section is sought. Where construction materials, methods, types of construction, or compliance with the time limits set forth in Table No. 16B-A are the bases, in whole or in part, of the Building Official's finding that an unreinforced masonry building, or portion thereof, is unsafe, the Abatement Appeals Board shall refer these matters to the Board of Examiners established in Section 105A.1 of this code. Where construction materials, methods, and types of construction are the bases, in whole or in part, of the Building Official's finding that the building, or structure, or portion thereof, is unsafe, the Abatement Appeals Board shall refer these matters to the Board of Examiners for its examination and determination with respect to such materials, methods, and types of construction.

The Board of Examiners shall approve or disapprove such materials, methods, and types of construction, and may attach conditions to its approval, and shall forward a copy of its report to the Abatement Appeals Board. The Abatement Appeals Board shall include in its decision the findings of the Board of Examiners.

102A.11 Violation – Penalties for Disregarding Order.

102A.11.1 Failure to comply. The owner of any building, structure, or property or portion thereof determined by the Building Official to be unsafe who has failed to comply with any order shall be guilty of a misdemeanor as set forth in Section 103A.

102A.11.2 Failure to vacate. The occupant or lessee in possession who fails to comply with the order to vacate said building or portion thereof in accordance with any order given as provided for hereinabove shall be guilty of a misdemeanor as set forth in Section 103A.

102A.11.3 Removal of notice. Any person who removes any notice or order posted as required in this section shall be guilty of a misdemeanor as set forth in Section 103A.

102A.12 Costs of Abatement by the City and County of San Francisco. Whenever the Building Official, pursuant to authority conferred by this code, causes a building, structure, or property, or portion thereof, to be barricaded, secured, repaired or altered, demolished, or have other actions taken by the Department or its contractor to remedy an unsafe condition, the cost thereof shall be paid from the Repair and Demolition Fund and assessed against said property.

102A.13 Repair and Demolition Fund. A special revolving fund, to be known as the Repair and Demolition Fund, may be used for the purpose of defraying the costs and expenses (including Department administrative costs) which may be incurred by the Building Official in carrying out the actions described in Section 102A.12.

The Board of Supervisors may, by transfer or by appropriation, establish or increase the special revolving fund with such sums as it may deem necessary in order to expedite the performance of the work of securing, repairing, altering or demolition. The Repair and Demolition Fund shall be replenished with all funds collected under the proceedings hereinafter provided for, either upon voluntary payments or as the result of the sale of the property after delinquency, or otherwise. Balances remaining in the Repair and Demolition Fund at the close of any fiscal year shall be carried forward in such fund.

102A.14 Failure to Comply with Order. Whenever an order to repair, alter, vacate and alter or repair, or vacate and demolish any building, structure or property, or portion thereof, has not been complied with within the time set by the Building Official, or within such additional time as the Building Official may for good cause extend, or within the time fixed by the Abatement Appeals Board, the Building Official shall have the power, in addition to any other remedy provided herein or by law or any other ordinance, to:

1. Cause the building, structure, property, or portion thereof, to be vacated, barricaded, or otherwise secured against use or occupancy pending the correction of all conditions ordered to be corrected, or pending demolition; or
2. Cause the building, structure, property, or portion thereof, to be dismantled or demolished and the site cleared by such means as the Building Official shall deem advisable; or
3. Cause the building, structure, property, or portion thereof, to be repaired or altered, so as to render it safe and in compliance with applicable laws and ordinances, by such means as the Building Official shall deem advisable.

Any work done pursuant to the authority herein shall be performed in accordance with the limitations as to repair expenditure as contained in Section 102A.16 and with the established practices applicable to the Department.

102A.15 Forfeiture of Owner's Right to Do Work. Whenever, pursuant to Section 102A.14, the Building Official intends to cause to be done any of the work described therein, the Building Official shall provide notice in the manner set forth in Section 102A.4, of the Building Official's intention to do such work, and shall specify a date certain upon which the Building Official shall solicit bids to accomplish the necessary work, which shall be not sooner than 10 days from the date such notice is given. From and after said date certain the owner and every other person having charge or control over said building, structure or property shall be deemed to have forfeited all right to do such work and is thereafter prohibited from doing any such work except as the Building Official may allow.

102A.16 Serious and Imminent Hazards – Emergency Orders. Notwithstanding any other provisions of this chapter, whenever, in the judgment of the Building Official, it appears from an inspection or notice of violation that there exists in, on, or near any building, structure, property, or portion thereof, any condition constituting an imminent and substantial hazard to the life, health or safety of the occupants or other persons, or to such building, structure, or property requiring prompt action to correct said condition, the Building Official shall have the power to issue an order in writing detailing the serious and imminent hazard conditions and requiring:

- 1. That the building, structure, property, or portion thereof, be vacated and thereafter be kept vacant until the Building Official gives written permission that the same may be reoccupied, without giving the notice and holding the hearing prescribed in Sections 102A.4 through 102A.6, whenever, by reason of serious and imminent danger, prompt vacating of the premises, building, structure or property, or a portion thereof, appears necessary in the judgment of the Building Official;**
- 2. That the building, structure, property, or a portion thereof, be barricaded, boarded up, or otherwise secured against entry, occupancy or use by all persons, except as permitted by said order;**
- 3. That the building, structure, property, or a portion thereof, be demolished or that serious and imminent hazard conditions be repaired, altered, corrected or eliminated in accordance with the particulars set forth in the order.**

The order shall contain time frames required for compliance with the order and shall set forth the street address of the building or structure and a description of the building, structure, or property sufficient for identification.

In such cases of serious and imminent hazard, the order may be issued by the Building Official without giving the notice and holding the hearing specified in Sections 102A.4 through 102A.6. A copy of said order shall be posted in a conspicuous place upon the building, structure, or property, a copy shall be served in the manner prescribed in Section 102A.4, and a copy shall be recorded in the Assessor-Recorder's Office.

The Building Official shall have the further power under this section to cause or compel the work required under the order to be undertaken by such means as the Building Official may deem advisable if the owner and all other persons having an interest in the building, structure, or property have failed, for a period of not more than 48 hours after the posting and service of the order, to comply with the order.

Whenever the Building Official orders that repairs or alterations be made pursuant to this Section, the authority of the Building Official to repair or alter, or cause repairs or alterations to be made to comply with the order, shall be limited to repairs or alterations whose cost does not exceed 50 percent of the value, as defined by the Assessor, of the building, structure, property, or portion thereof.

102A.17 Assessment of Costs. The Building Official shall take action to have the costs of all work done or caused to be done pursuant to the provisions of Section 102A.14 or Section 102A.16 assessed against the parcel or parcels of land upon which said building, structure, property or portion thereof is situated. Such costs shall include, in addition to the cost of barricading, securing, repairing, or demolishing the building and the clearing of the site, the cost to the City and County of San Francisco of administration and supervision of such work. See Section 110A, Table 1A-K – Penalties, Hearings, Code Enforcement Assessments – for applicable rates.

102A.18 Report of Costs, Notice of Hearing on Confirmation.

102A.18.1 Preparation of delinquency report. If any penalty or assessment imposed pursuant to Section 102A is not received within the required time period, the Building Official shall initiate proceedings to make the penalty or assessment, plus accrued interest, a special assessment lien against the real property which is the subject of the penalty or assessment. The Building Official shall prepare a delinquency report for the Board of Supervisors. For each delinquent account, the report shall contain the owner's name, the amount due, including interest, and a description of the real property. The report shall also indicate which of the delinquent accounts should be exempted from the lien procedure because of the small amounts involved, or because another debt collection procedure is more appropriate. The descriptions of the parcels shall be those used for the same parcels on the Recorder/Assessor's Office records for the current year.

102A.18.2 Notice. Five days prior to forwarding the delinquency report to the Board of Supervisors, the Building Official shall serve copies of the report in the manner prescribed in Section 102A.4 and shall post the report at the subject properties. Upon receipt of the report, the Board of Supervisors shall fix a time, date and place for hearing the report and any protests or objections thereto, and shall mail notice of the hearing not less than ten days prior to the date of hearing to each owner of real property described in the report.

102A.19 Hearing and Confirmation of Report for Special Assessment of Costs.

102A.19.1 Hearing and confirmation. The Board of Supervisors shall hold a hearing on the report along with protests or objections by the representatives of the real property liable to be assessed for such delinquent accounts. The Board of Supervisors may make such revisions, corrections, or modifications of the report as it may deem just, after which, by motion or resolution, the report shall be confirmed. The Board of Supervisor's decision on the report and on all protests or objections thereto shall be final and conclusive and shall constitute confirmation of the report; provided, however, that any delinquent account may be removed from the report by payment in full at any time prior to confirmation of the report. The Clerk of the Board of Supervisors shall cause the confirmed report to be verified in form sufficient to meet recording requirements.

102A.19.2 Collection of assessment. Upon confirmation of the report by the Board of Supervisors, the delinquent charges contained therein shall constitute a special assessment against the property identified in the report. Each such assessment shall be subordinate to all existing special liens previously imposed upon such property and shall be paramount to all other liens except those for State, County and municipal taxes with which it shall be in parity. The lien shall continue until the assessment and all interest due and payable thereon are paid. All laws applicable to the levy, collection and enforcement of municipal taxes shall be applicable to said special assessment.

102A.19.3 Recordation charges. The Clerk of the Board of Supervisors shall cause the confirmed and verified report to be recorded in the Assessor-Recorder's Office within 10 days of its confirmation. The special assessment lien on each parcel or property described in said report shall include additional charges for administrative expenses. See Section 110A, Table 1A-K – Penalties, Hearings, Code Enforcement Assessments – for Lien Recordation charges.

102A.19.4 Filing with Controller and Tax Collector: Distribution of proceeds. After the report is recorded, the Clerk of the Board of Supervisors shall file a certified copy with the Controller and Tax Collector, whereupon it shall be the duty of said officers to add the amount of said special assessment to the next regular bill for taxes levied against said parcel or parcels, and thereafter said amount shall be collected at the same time and in the same manner as ordinary taxes are collected for the City and

County of San Francisco, and shall be subject to the same penalties and the same procedures for foreclosure and sale in case of delinquency as is provided for property taxes.

102A.19.5 Release of lien, recording fee. Upon payment to the Tax Collector of the special assessment, the Tax Collector shall cause a release lien to be recorded with the Assessor-Recorder's Office, and from the sum collected pursuant to Section 102A.19.3 above, shall pay to the Assessor-Recorder's Office the required recording fee.

102A.20 Continuance of Gas and Electricity. In the event that electricity or gas service to a building, structure, property, or portion thereof is about to be discontinued by the utility company for nonpayment of bills, the Building Official, through the issuance of an Emergency Order, may order that the utility company continue said service to protect the life, health and safety of the occupants. Said order shall be issued pursuant to the provisions of Section 102A.16 of this code and shall remain in force for six months, unless otherwise specified by the Building Official.

The funds for the continuance of said services shall be provided from the Repair and Demolition Fund. Said costs and administrative costs incurred by the City and County of San Francisco shall be assessed against the parcel or parcels of land upon which said building, structure or property is situated. See Section 110A, Table 1A-K – Penalties, Hearings, Code Enforcement Assessments – for applicable rate.

If payment is not received from the property owner within the required time period, a Report of Costs pursuant to Section 102A.18 shall be prepared for all such costs. Submittal, confirmation, recordation and collection of the special assessment shall follow the procedures provided in Section 102A.19.

The provisions of Section 102A.20 shall only apply to buildings, structures, property, or portions thereof for which the owner, and not the tenant, is responsible for payment of said utility bills.

SECTION 103A – VIOLATIONS

It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy or maintain any building, structure, property, or portions thereof or cause or permit the same to be done in violation of this code.

Any person, the owner or the owner's authorized agent, who violates, disobeys, omits, neglects, or refuses to comply with, or resists or opposes the execution of any of the provisions of this code, shall be liable for a civil penalty, not to exceed \$500 for each day such violation is committed or permitted to continue, which penalty shall be assessed and recovered in a civil action brought in the name of the people of the City and County of San Francisco by the City Attorney in any court of competent jurisdiction. Any penalty assessed and recovered in an action brought pursuant to this paragraph shall be paid to the City Treasurer and credited to the Department's Special Fund.

Any person, the owner or the owner's authorized agent, who violates, disobeys, omits, neglects, or refuses to comply with, or who resists or opposes the execution of any of the provisions of this code, shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not exceeding \$500, or by imprisonment not exceeding six months, or by both such fine and imprisonment, unless otherwise provided in this code, and shall be deemed guilty of a separate offense for every day such violation, disobedience, omission, neglect or refusal shall continue. Any person who shall do any work in violation of any of the provisions of this code, and any person having charge of such work who

shall permit it to be done, shall be liable to the penalty provided.

It shall be unlawful for any person to interfere with the posting of any notice provided for in this code, or to tear down or mutilate any such notice posted by the Department.

103A.1 Pursuant to Health and Safety Code Section 13112, any person who violates any order, rule or regulation of the state fire marshal is guilty of a misdemeanor punishable by a fine of not less than \$100.00 or more than \$500.00, or by imprisonment for not less than six months, or by both. A person is guilty of a separate offense each day during which he or she commits, continues or permits a violation of any provision of, or any order, rule or regulation of, the state fire marshal as contained in this code.

Any inspection authority who, in the exercise of his or her authority as a deputy state fire marshal, causes any legal complaints to be filed or any arrest to be made shall notify the state fire marshal immediately following such action.

103A.2 Actions and proceedings. Subject to other provisions of law, California Code of Regulations, Title 25, Division 1, Chapter 1 commencing with Section 1 and Health and Safety Code, Sections 17980 through 17995.5 address punishments, penalties and fines for violations of building standards in structures subject to the State Housing Law.

103A.2.1 Actions and proceedings. Subject to other provisions of law, California Code of Regulations, Title 25, Division 1, Chapter 2 commencing with Section 1000 and Health and Safety Code, Section 18700 addresses punishments, penalties and fines for violations of building standards subject to the Mobilehome Parks Act.

103A.2.2 Actions and proceedings. Subject to other provisions of law, California Code of Regulations, Title 25, Division 1, Chapter 1 commencing with Section 600 and Health and Safety Code, Sections 17060 through 17062.5 address punishments, penalties and fines for violations of building standards subject to the Employee Housing Act.

103A.3 Restrictions of Unlawful Residential Demolition Replacement.

103A.3.1 Demolition without permit. Whenever the demolition of any building or structure containing one or more residential units takes place without the issuance of a demolition permit as required by this code, the site on which the unlawful demolition occurred shall be subject to the following restriction: For five years from the date of the unlawful 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.

103A.3.2 Definitions. For the purposes of this section, the following definitions shall apply:

DEMOLITION means the total tearing down or destruction of a building containing one or more residential units, or any alteration which destroys or removes, as those terms are defined by the Building Official 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.**

103A.3.3 Hearing. The Building Official shall hold a hearing within a reasonable period of time after discovering that an unlawful demolition may have taken place. The Building Official 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 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 Building Official 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 demolition has taken place as described in Sections 103A.3.1 and 103A.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 feet of the building or structure that existed on the site. Upon determination that an unlawful demolition has taken place, the Building Official shall promptly record a notice in the official records of the Recorder of the City and County of San Francisco; the recorded notice shall state that the property is subject to the restrictions set forth in Section 103A.3.1 of this code.

Upon determination that an unlawful demolition has taken place, the Building Official shall assess the owner all costs incurred by the City and County of San Francisco in detecting violations of this section and conducting the Building Official's hearing by sending a notice of payment due to the property owner at the address shown on the City's last assessment rolls. The notice shall list the costs incurred by the City in detecting violations of the ordinance and conducting the Building Official's hearing, advise the owner that he or she is liable for these costs and 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 102A.18 and 102A.19 of this code.

103A.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 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 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.

103A.3.5 Penalties nonexclusive. The penalties set forth in this section are not exclusive, but are in addition to any other penalties set forth in this code.

103A.4. Vacant or Abandoned Buildings – Annual Registration; Registration Fee; Maintenance and Security Requirements. [Added 8-27-2009 by Ord. No. 194-09, effective 9-26-09]

103A.4.1. Definition. A building shall be defined as a vacant or abandoned if it (1) is unoccupied and unsecured; or (2) is unoccupied and secured by boarding or other similar means; or (3) is unoccupied and unsafe as defined in Section 102 of this Code; or (4) is unoccupied and has multiple code violations; or (5) has been unoccupied for over 30 days. A building which is partially unoccupied and has been cited for blight under Chapter 80 of the San Francisco Administrative Code, shall also be deemed a vacant or abandoned building that is subject to this Section.

For purposes of this Section 103A.4, a building shall not be considered vacant or abandoned if:

(1) There is a valid building permit for repair, rehabilitation, or construction of a building on the parcel and the owner completes the repair, rehabilitation, or construction within one year from the date the initial permit was issued; or

(2) The building complies with all codes, does not contribute to blight as defined in Chapter 80 of the San Francisco Administrative Code, is ready for occupancy, and is actively being offered for sale, lease, or rent.

103A.4.2. Property owner's obligation to register a vacant or abandoned building. The owner of a building defined as vacant or abandoned under Section 103A.4.1 shall register that building with the Department 30 days after it has become vacant or abandoned on a form provided by the Department. The form shall describe the methods by which the owner has secured the property against unauthorized entry, declare any future plans for the property, state whether or not there is fire and liability insurance coverage, and provide such other information as the Department may require. A registration fee shall be paid at the time of registration and annually thereafter. See Section 110A, Table 1A-J for applicable fee.

103A.4.3. Notice. Whenever the Director has probable cause to believe, based upon an inspection, complaint, or report from another agency of the City and County of San Francisco or other governmental agency, that a building is vacant or abandoned and it has not been registered as required by this Section 103A.4, the Director shall serve the owner of record, as shown on the Assessor's Records, or authorized agent with a written notice requiring the owner to register the building with the Department as vacant or abandoned and pay the registration fee within the period of time specified in the notice, which shall be no greater than 30 days.

103A.4.4. Sign posting. The owner of record of the vacant or abandoned building is required to post a sign at the front of the building, in a conspicuous location protected from the weather, that provides the current name, address, and phone number of the owner of record and authorized agent if different from the owner. If a notice of default or foreclosure has been recorded for the property, the lender's name, address, and telephone number must also be provided. The sign shall be no smaller than 8-1/2 inches by 11 inches.

103A.4.5. Maintenance and security requirements. The following maintenance and security requirements shall apply to a vacant or abandoned building. The Director has the discretion to modify these requirements in the case of a partially vacant building, and to modify or waive some or all of these requirements in the case of a building that has been damaged by fire, a natural disaster, or other calamity.

103A.4.5.1 Maintenance of property – exterior. The property owner shall actively maintain and monitor the exterior of the building and the grounds so that they remain in continuing compliance with all applicable codes and regulations, and do not contribute to and are not likely to contribute to blight as defined in Chapter 80 of the Administrative Code. Active maintenance and monitoring shall include, but not be limited to:

- (1) Maintenance of landscaping and plant materials in good condition;**
- (2) Regular removal of all exterior trash, debris, and graffiti;**
- (3) Maintenance of the exterior of the building in a good condition that is structurally safe and preserves the physical integrity of the structure, including but not limited to paint and finishes, foundation, roof, chimneys, flues, gutters, downspouts, scuppers, flashing, skylights, windows, exterior stairs and decks;**
- (4) Prevention of criminal activity on the premises and trespass by unauthorized persons; and**
- (5) Turning off all utilities that are not necessary for the upkeep and maintenance of the building.**

103A.4.5.2. Maintenance of property – interior. The property owner shall preserve the interior of the building from damage by the elements or plumbing leaks, and keep it free from accumulation of garbage and other debris, and from infestation by rodents, insects, or other pests.

103A.4.5.3. Security. The building shall be secured against unauthorized entry. The methods of security shall be as approved by the Director, who shall take into consideration whether the property has been cited for nuisance activities or criminal conduct by another department of the City and County of San Francisco or other government agency.

103A.4.6. Insurance. The owner of record shall maintain whatever fire and liability insurance coverage the Director determines is necessary. Any insurance policy shall require notice to the Department in the event of cancellation of insurance or a reduction in coverage.

103A.4.7. Violation a public nuisance; enforcement. A property in violation of the provisions of this section is deemed to be a public nuisance and subject to enforcement by the Department and penalties under Section 102A and 103A of this Code or under other applicable sections of the San Francisco Municipal Code.

SECTION 104A – ORGANIZATION AND ENFORCEMENT

104A.1 Enforcement Agency. The Department of Building Inspection shall be the administering and enforcing agency under this code.

104A.2 Powers and Duties of Building Official.

104A.2.1 General. The Building Official is hereby authorized and directed to enforce all the provisions of this code. For such purposes, the Building Official shall have the powers of a law enforcement officer.

Pursuant to Health and Safety Code Section 13108, upon the written request of the chief fire official of any city, county or fire-protection district, the State Fire Marshal may authorize such chief fire official

and his or her authorized representatives, in their geographical area of responsibility, to make fire-prevention inspections of state-owned or state-occupied buildings, other than state institutions, for the purpose of enforcing the regulations relating to fire and panic safety adopted by the State Fire Marshal pursuant to this section and building standards relating to fire and panic safety published in the California Building Standards Code. Authorization from the State Fire Marshal shall be limited to those fire departments or fire districts which maintain a fire-prevention bureau staffed by paid personnel.

Pursuant to Health and Safety Code Section 13108, any requirement or order made by any chief fire official who is authorized by the State Fire Marshal to make fire-prevention inspections of state-owned or state occupied buildings, other than state institutions, may be appealed to the State Fire Marshal. The State Fire Marshal shall, upon receiving an appeal and subject to the provisions of Chapter 5 (commencing with Section 18945) of Part 2, 5 of Division 13 of the Health and Safety Code, determine if the requirement or order made is reasonably consistent with the fire and panic safety regulations adopted by the Office of the State Fire Marshal and building standards relating to fire and panic safety published in the California Building Code.

The Building Official shall have the power to render interpretations of this code and to adopt and enforce rules and supplemental regulations to clarify the application of its provisions. Such interpretations, rules and regulations shall be in conformance with the intent and purpose of this code. Such rules and regulations, commonly referred to as Code Rulings and Administrative Bulletins supplemental to this code shall not take effect until approved by the Building Inspection Commission and signed by the Building Official except in unusual circumstances where the Building Official has determined that there is an immediate need to protect the public health and safety. When the Building Official finds that such circumstances exist, the Building Official may order immediate enforcement of a particular rule or regulation. The Building Official shall arrange for a subscription service to such rules and regulations, the entire cost of which is to be borne by the subscribers.

NOTE: “Code Rulings” and “Administrative Bulletins” may be found in the Department’s Rules and Regulations printed at the back of this code.

104A.2.2 Deputies. In accordance with prescribed procedures and with the approval of the appointing authority, the building official may appoint such number of technical officers and inspectors and other employees as shall be authorized from time to time. The building official may deputize such inspectors or employees as may be necessary to carry out the functions of the code enforcement agency.

104A.2.3 Right of entry. When it is necessary to make an inspection to enforce the provisions of this code or other codes or ordinances, or when the Building Official has reasonable cause to believe that there exists in a building or upon a premises a condition that is contrary to or in violation of this code or other codes or ordinances that makes the building or premises unsafe, dangerous or hazardous, the Building Official may enter the building or premises at reasonable times to inspect or to perform the duties imposed by this code or other codes or ordinances, provided that if such building or premises be occupied that credentials be presented to the occupant and entry requested. If such building or premises be unoccupied, the Building Official shall first make a reasonable effort to locate the owner or other person having charge or control of the building or premises and request entry. If entry is refused, the Building Official shall have recourse to the remedies provided by law to secure entry.

104A.2.4 Stop orders. Whenever any work is being done contrary to the provisions of this code, or other pertinent laws or ordinances implemented through the enforcement of this code, the building official may order the work stopped by notice in writing served on any persons engaged in the doing or

causing such work to be done, and any such persons shall forthwith stop such work until authorized by the building official to proceed with the work.

104A.2.5 Occupancy violations. Whenever any building, structure, property or portion thereof regulated by this code is being used contrary to the provisions of this code or the code in effect at the time the use was commenced, the Building Official may order such use discontinued and the building, structure, property or portion thereof, vacated by notice served on any person involved in said use or causing such use to be continued. Such person shall discontinue the use within the time prescribed by the Building Official after receipt of such notice to make the building, structure, property or portion thereof, comply with the requirements of this code; provided, however, that in the event of an unsafe building, structure or property the provisions of Section 102A shall apply.

104A.2.6 Liability. The Building Official charged with the enforcement of this code, acting in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance shall not thereby be rendered personally liable for damages that may accrue to persons or property as a result of an act or by reason of an act or omission in the discharge of such duties. A suit brought against the building official or employee because of such act or omission performed by the building official or employee in the enforcement of any provision of such codes or other pertinent laws or ordinances implemented through the enforcement of this code or enforced by the code enforcement agency shall be defended by this jurisdiction until final termination of such proceedings, and any judgment resulting therefrom shall be assumed by this jurisdiction.

This code shall not be construed to relieve from or lessen the responsibility of any person owning, operating or controlling any building or structure for any damages to persons or property caused by defects, nor shall the code enforcement agency or its parent jurisdiction be held as assuming any such liability by reason of the inspections authorized by this code or any permits or certificates issued under this code.

104A.2.7 Modifications. When there are practical difficulties involved in carrying out the provisions of this code, the building official may grant modifications for individual cases. The building official shall first find that a special individual reason makes the strict letter of this code impractical and that the modifications are in conformance with the intent and purpose of this code and that such modifications does not lessen any fire-protection requirements or any degree of structural integrity. The details of any action granting modifications shall be recorded and entered in the files of the code enforcement agency.

104A.2.7.1 Local Equivalencies. Due to unique topographical conditions in the City and County of San Francisco, including but not limited to the City's built environment and historic pattern of development, equivalencies to certain code requirements have been developed by the Department and are approved on an individual basis if specific conditions are met. Wherever in this code a reference to Local Equivalency is made, details of the equivalency to the specific code requirement may be found in the Department's Rules and Regulations printed at the back of this code.

104A.2.8 Alternate materials, design, and methods of construction. The provisions of this code are not intended to prevent the use of any material, alternate design or method of construction not specifically prescribed by this code, provided any alternate has been approved and its use authorized by the building official.

The building official may approve any such alternate, provided the building official finds that the proposed design is satisfactory and complies with the provisions of this code and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this

code in suitability, strength, effectiveness, fire resistance, durability, safety and sanitation.

The building official shall require that sufficient evidence or proof be submitted to substantiate any claims that may be made regarding its use. The details of any action granting approval of an alternate shall be recorded and entered in the files of the code enforcement agency.

104A.2.8.1 Alternate for materials, design, tests and methods of construction. Subject to other provisions of law, alterations, repairs, replacements, occupancy, use and maintenance provisions, and moved buildings are referenced in the State Housing Law, Health and Safety Code, Sections 17912, 17920.3, 17922 (c), 17922.3, 17958.8 and 17958.9 and California Code of Regulations, Title 25, Chapter 1 commencing with Section 1. Health and Safety Code Sections 17958.8 and 17958.9 are repeated here to provide clarity and read as follows:

Section 17958.8. Local ordinances or regulations governing alterations and repair of existing buildings shall permit the replacement, retention, and extension of original materials and the use of original methods of construction as long as the hotel, lodging house, motel, apartment house, or dwelling, or portions thereof, or building and structure accessory thereto, complies with the provisions published in the California Building Standards Code and the other rules and regulations of the department or alternative local standards adopted pursuant to Section 13143.2 and does not become or continue to be a substandard building.

Section 17958.9. Local ordinances or regulations governing the moving of apartment houses and dwellings shall, after July 1, 1978, permit the retention of existing materials and methods of construction so long as the apartment house or dwelling complies with the building standards for foundation applicable to new construction, and does not become or continue to be a substandard building.

104A.2.8.3 Approval and evaluation of materials or systems, methods and types of construction, fabricators, and testing or plan review agencies. General. This section is applicable to evaluations conducted and to approvals granted by the Department, for use in San Francisco, for alternate materials not covered in this code; for plant fabrications of building components which normally require special inspection; for testing or plan review agencies; for evaluation of materials, product methods and types of construction.

Any approval shall be void if, after approval, the design or nature of the device or material, the method of construction, the quality control program, or the capabilities of the agency, are found to deviate in any way from that represented to the Department or the conditions of approval, without first obtaining written authorization from the Building Official.

Any approval may be suspended or revoked if the Building Official finds the approved device or material, method of construction, or quality control program does not meet the requirements of Sections 104A.2.8 or 1701 to such an extent that the approval should not have been granted. See Section 110A, Table 1A-J – Product Approvals – for applicable fees. The fees specified are application fees and are not refundable regardless of whether the action taken is an approval or a denial or whether a subsequent request for hearing by the Board of Examiners is filed, except for the case where an application was filed at the request or on the advice of the Department for situations which subsequently are determined to not require an approval.

Each approval shall become null and void unless renewed within the specified period.

104A.2.9 Tests. Whenever there is insufficient evidence of compliance with any of the provisions of

this code or evidence that any material or construction does not conform to the requirements of this code, the building official may require tests as proof of compliance to be made at no expense to this jurisdiction

Test methods shall be as specified by this code or by other recognized test standards. If there are no recognized and accepted test methods for the proposed alternate, the building official shall determine test procedures.

All tests shall be made by an approved agency. Reports of such tests shall be retained by the building official for the period required for the retention of public records.

104A.2.10 Cooperation of other officials and officers. The building official may request, and shall receive, the assistance and cooperation of other officials of this jurisdiction so far as is required in the discharge of the duties required by this code or other pertinent law or ordinance.

104A.2.11 Code revisions. The Building Official shall transmit to the Building Inspection Commission, at intervals not exceeding three years, recommendations for changes to this code, based on studies of the following:

- 1. Requests of the Board of Examiners for modifications from the code, and for approvals of alternate materials, alternate designs and methods of construction.**
- 2. Code changes recommended by the Board of Examiners.**
- 3. Code changes recommended by the Code Advisory Committee or other bodies subordinate to the Building Inspection Commission.**
- 4. Results obtained and problems encountered in legal actions taken to correct code violations.**
- 5. Changes or improvements in materials, methods of construction or design, and changes proposed by interested persons.**
- 6. Investigations of fire and structural damage to buildings, and of determination of unsatisfactory building performance.**
- 7. Periodic changes to the California Building Code and other State regulations which may affect this code.**
- 8. Administrative Bulletins and Code Rulings currently in effect.**
- 9. Violations of the code found on inspections or investigations.**

104A.3 Service of Notices.

104A.3.1 Notices sent. Whenever a notice is required to be given under this code, unless different provisions are otherwise specifically made, such notice may be given either by personal delivery to the person to be notified or by deposit in the United States mail in a sealed envelope, postage prepaid, addressed to the person to be notified at such person's last known business or residence address. Service by mail shall be deemed to be have been completed at the time of deposit in the United States mail.

104A.3.2 Proof of notice. Proof of giving any notice may be made by the certificate of any officer or

employee of the City and County of San Francisco or by affidavit of any person over the age of eighteen years, which shows service in conformity with the San Francisco Municipal Code or other provisions or law applicable to the subject matter concerned.

104A.4 Code Enforcement and Rehabilitation Fund.

104A.4.1 Establishment. There is hereby established in the Treasury of the City and County of San Francisco a special fund to be known and designated as the Code Enforcement and Rehabilitation Fund, into which shall be deposited all funds allocated by the State Controller from the Local Agency Code Enforcement and Rehabilitation Fund.

104A.4.2 Use of funds. The Code Enforcement and Rehabilitation Fund shall be used exclusively to defray costs incurred in the enforcement of local code provisions mandated by State law.

104A.5 Building Inspection Fund. All fees collected pursuant to this code shall be deposited into the Building Inspection Fund established by the City Controller pursuant to Section 10.117-78 of the San Francisco Administrative Code. This fund shall be used by the Department, subject to the approval of the Building Inspection Commission, to defray costs incurred for, but not limited to, personnel, supplies, and equipment used in evaluating the applications, maintaining files and records, and for disseminating information, reviewing plans and making inspections to determine compliance with the conditions of approvals. Any charges established by the Building Official or the Building Inspection Commission for copies of approvals, publications or other Department records shall be deposited into this fund.

104A.6.1 Definitions. For the purposes of this section, the following definitions shall apply:

DEDICATED TELEPHONE NUMBER means a telephone number for a recorded message in a language of limited English proficient residents. The recorded message shall advise callers as to what information they should leave on the message machine so that the Department may return the call with information about the notice in the requested language.

LANGUAGE OF LIMITED ENGLISH PROFICIENT RESIDENTS means each of the two languages other than English spoken most commonly by San Francisco residents of English proficiency as determined by the Planning Department based on its annual review of United States census and other data as required by San Francisco Administrative Code Section 91.2(j).

104A.6.2 Applicability of multiple language requirement. The requirements of Section 104A.6.3 shall apply to the following notices:

1. Notices required by Section 103A.3.3 that are mailed or personally served.
2. Notices required by Section 106A.3.2.2.1.
3. Notices required by Section 106A.3.2.3.
4. Notices required by Section 106A.4.6, Subsection 2.
5. Notices required by Section 106A.4.6, Subsection 3.
6. Notices required by Section 3408.3.2.

7. Any other notices required by the Building Code to be mailed or personally served to property owners or occupants adjacent to or near a property for which Building Department development approval is sought.

104A.6.3 Multiple language statement in notices. The Building Department shall prepare a cover sheet as specified below and include it with each notice of the type listed in Section 104A.6.2 that is mailed or personally served. For posted notices listed in Section 104A.6.2, the Department shall post the cover sheet next to the posted notice. The cover sheet shall contain the following statement, printed in each language of limited English proficient residents and, to the extent available Department resources allow, such other languages that the Department determines desirable, with the name of the language in which the statement is made, the time period for a decision on the matter and the dedicated telephone number for the language of the statement inserted in the appropriate blank spaces:

“The attached notice is provided under the Building Code. It concerns property located at the address shown on the attached notice. A hearing may occur, a right to request review may expire or a development approval may become final unless appealed within [insert days until a hearing or deadline for requesting review or appealing a decision]. To obtain information about this notice in [insert name of language] please call [insert dedicated telephone number]. Please be advised that the Building Department will require at least one business day to respond to any call. Provision of information in [insert name of language] is provided as a service by the Building Department and does not grant any additional rights or extend any time limits provided by applicable law.”

The Department shall maintain a dedicated telephone number for each language of limited English proficient residents. The Department shall place a return telephone call by the end of the following business day to each person who leaves a message concerning a neighborhood notice at a dedicated telephone number and, when the caller is reached, provide information to the caller about the notice in the language spoken by the caller.

SECTION 105A. BOARDS, COMMISSIONS AND COMMITTEES

105A.1 Board of Examiners.

105A.1.1 Establishment. There is hereby created a Board of Examiners who are qualified by experience and training to pass upon matters pertaining to building design and construction. The functions of the Board of Examiners shall be:

105A.1.1.1 To determine whether specific new materials, new methods and types of construction comply with the standards of safety established by this code, and to recommend the approval or disapproval of such new materials, new methods and types of construction.

105A.1.1.2 To determine whether variances from the requirements of this code should be approved for specific cases where new materials, new methods and types of construction are not involved, and where the enforcement of compliance therewith would result in unreasonable hardship.

105A.1.1.3 To recommend to the Building Official reasonable interpretations of the provisions of this code.

105A.1.1.4 To hear appeals from any Abatement Order of the Building Official involving construction methods, assemblies or materials or where safety is involved.

A copy of the findings of the Board of Examiners shall be forwarded to the Abatement Appeals Board.

Matters involving compliance with Chapters 16B and 16C and other related structural provisions of this code regulating the strengthening of unreinforced masonry bearing wall buildings shall be heard by the Board of Examiners as provided in Section 105A.1.

105A.1.2 Definition. The term “standard of safety,” as used in this section, shall mean the general degree of safety conforming to the provisions of this code as required to safeguard life or limb, health and public welfare.

105A.1.3 Intent. It is the intent of this section that new materials, new methods and types of construction which do not comply with the standards of safety established by this code shall in no event be approved; but that the requirements of this code, other than those involving such standards of safety, may be modified or waived under the circumstances set forth in this section.

105A.1.4 Membership. The Board of Examiners shall consist of 10 members, which shall include one plumbing member and one electrical member, who shall serve only when cases related to plumbing or electrical code issues are being considered, and one high-rise sprinkler member who shall serve only when cases related to high-rise sprinkler issues are being considered. All members are to be appointed by the Building Inspection Commission and shall serve at the Building Inspection Commission’s pleasure for a three-year term or until a successor is appointed. The present members shall be continued in office until the expiration of their terms.

In the event a vacancy occurs during the term of office of any member of the Board of Examiners, a new appointment shall be made in a manner similar to that described herein for new members.

The membership shall consist of:

- 1. A registered structural engineer.**
- 2. A registered mechanical engineer.**
- 3. A registered electrical engineer.**
- 4. A registered fire protection engineer.**
- 5. A licensed general contractor.**
- 6. A licensed architect.**
- 7. A building trades representative.**
- 8. As the plumbing member, a licensed plumbing contractor.**
- 9. As the electrical member, a licensed electrical contractor.**
- 10. As a high-rise sprinkler member, one building owner representative.**

The terms “registered” and “licensed” shall be understood to mean by the State of California. The Building Inspection Commission shall make such appointments after giving careful consideration to nominations made by technical associations and general contractor organizations including the

Consulting Engineers Association of California, the Structural Engineers Association of Northern California, the San Francisco District of the Associated General Contractors of California, the Plumbing and Mechanical Cooling Contractors of San Francisco, the San Francisco Electrical Contractors Association, the San Francisco Chapter of the American Institute of Architects, and the San Francisco Building Trades Council. Each member of the Board of Examiners shall receive compensation of \$125 per meeting attended.

The following shall constitute ex officio members of the Board of Examiners, without vote and without compensation: The Building Official, who shall act as Secretary of the Board of Examiners, and the Fire Marshal.

In the event a member cannot attend meetings of the Board of Examiners for a period of three or more consecutive meetings due to illness, work away from San Francisco, or any other valid reason, the Building Inspection Commission may appoint an alternate member representing the same profession or trade as the absent member and meeting the same registration or licensing requirements as the absent member. The appointment of such alternate need not require solicitation of nominees from the respective organizations. The alternate shall serve on the Board of Examiners until the return of the absent member or until the expiration of the absent member's term, whichever comes first. The compensation indicated in section 4 above shall be paid the alternate member for each meetings attended. The alternate member shall, during the time of service on the Board of Examiners, have all the rights, duties, and privileges of a duly appointed member of the Board of Examiners.

105A.1.5 Board of Examiners's authority with respect to applications for approval of materials, methods and types of construction. Where application has been made to the Building Official to approve new materials, new methods and types of construction which the applicant believes meet the standards of safety set by this code, and where the approval of such application has been denied by the Building Official, the Board of Examiners shall have authority, at the request of the applicant, to determine whether such materials, methods and types of construction comply therewith.

105A.1.5.1 The Board of Examiners shall adopt rules and specifications for examining and testing proposed materials and methods of construction. A copy of such rules and specifications shall be furnished to the applicant.

105A.1.5.2 The applicant shall cause to be made, at the applicant's expense, all reasonable tests and examinations required by the Board of Examiners to substantiate the applicant's claims that any proposed new materials, new methods and types of construction comply with the standards of safety established by this code.

105A.1.5.3 The Board of Examiners shall have power to call upon such experts as it deems necessary to consider and report upon the technical matters concerning such application. The engagement of the services of such experts shall be with the consent of and at the expense of the applicant, and the Board of Examiners shall have power to require security for the payment of such expense. Such expense shall be in addition to the required filing fees as set forth in Section 110A, Table 1A-K – Penalties, Hearings, Code Enforcement Assessments. Any official or employee of the City and County of San Francisco called upon by the Board of Examiners shall serve without compensation beyond their normal salary.

105A.1.5.4 The Board of Examiners shall certify the results of examinations and tests, together with its recommendation on the application, to the Building Official. If the Board of Examiners recommends approval, the Building Official shall thereupon approve the materials or methods of construction. The Board of Examiners shall have power to attach such conditions to its recommendations as it deems necessary in the interest of public safety, and the Building Official's

approval shall be granted subject to such conditions.

105A.1.6 Board of Examiners' authority with respect to applications for variances from code requirements. Where new materials, new methods and types of construction are not involved, the Board of Examiners shall have authority to consider the application for a permit, the approval of which would require a variance from the provisions of this code.

If the Board of Examiners finds that such variance will not result in a condition less safe and less desirable from the viewpoint of public welfare than would result from the enforcement of compliance with such provisions, it shall recommend to the Building Official the approval of such permit. Upon receipt of such recommendation, the Building Official shall approve such permit. The Board of Examiners may attach to such recommendations any conditions which public safety and welfare may require, and the Building Official in approving such permit shall incorporate such conditions therein.

105A.1.7 Application for consideration by Board of Examiners. All applications to the Board of Examiners shall be made in writing and shall be filed with the Secretary of the Board of Examiners. The Board of Examiners shall act upon each application without unreasonable or unnecessary delay. See Section 110A, Table 1A-K – Penalties, Hearings, Code Enforcement Assessments – for applicable fee.

105A.1.8 Procedure. The Board of Examiners shall establish reasonable rules and regulations for its own procedures not inconsistent with the provisions of this code and the Charter of the City and County of San Francisco. The Board of Examiners, by a majority vote, shall choose its officers, which shall consist of the President and Vice-President.

105A.1.9 Meetings. Meetings of the Board of Examiners shall be held at the call of the Secretary of the Board of Examiners and at such times and places as the Board of Examiners may determine. All meetings of the Board of Examiners shall be public meetings.

105A.1.10 Quorum. Four members of the Board of Examiners shall constitute a quorum, and action of the Board of Examiners shall require the affirmative votes of not less than three members. No member of the Board of Examiners shall pass upon any question in which the member, or any corporation in which the member is a shareholder or holds an interest.

105A.1.11 Decisions by resolution. Every decision and recommendation of the Board of Examiners shall be by resolution filed with the Building Official. A copy shall be mailed to the applicant. A copy shall also be sent to other interested bureaus or departments charged with the enforcement of this code. The Board of Examiners shall arrange for a subscription service to its agenda and decisions, the entire cost of which shall be borne by the subscribers.

105A.1.12 Record of meetings. The Board of Examiners shall maintain a tape recording of each meeting. Upon request, these tape recordings shall be made available for duplication by independent agencies with proper security afforded as determined by the Building Official. All costs of duplication shall be borne by the party requesting duplication.

105A.2 Abatement Appeals Board.

105A.2.1 Establishment. There is hereby established an Abatement Appeals Board, consisting of the seven members of the Building Inspection Commission, to pass upon matters pertaining to housing, building and construction.

105A.2.2 Membership. Members of the Abatement Appeals Board shall be the Building Inspection Commission who are appointed and serve for the terms as prescribed by the Charter of the City and County of San Francisco. The Building Official or designee shall act as Secretary to the Abatement Appeals Board.

105A.2.3 Powers. Except for cases involving disabled access, which shall be heard by the Access Appeals Commission, the Abatement Appeals Board shall have the power to hear and decide appeals from Orders of Abatement after public hearing by the Building Official of Building Inspection, and to hear direct appeals pursuant to Section 102A. See Section 110A, Table 1A-K – Penalties, Hearings, Code Enforcement Assessments – for applicable fee. The Abatement Appeals Board may uphold, modify or reverse such orders, provided that the public health, safety and public welfare are secured most nearly in accordance with the intent and purpose of this code and the San Francisco Housing Code.

105A.2.4 Procedure. The Abatement Appeals Board shall establish reasonable rules and regulations for its own procedures consistent with the provision of this code and the Charter of the City and County of San Francisco. The Abatement Appeals Board, by majority vote, shall choose its officers which shall consist of the President and Vice-President.

105A.2.5 Quorum. Four members of the Abatement Appeals Board shall constitute a quorum. Any action of the Abatement Appeals Board shall require the concurrence of four members. No member of the Abatement Appeals Board shall pass upon any case in which the member, or any corporation in which the member is a shareholder, or holds an interest.

105A.2.6 Hearings. All hearings of the Abatement Appeals Board shall be public hearings. Within 10 days after the filing of an appeal, the Abatement Appeals Board shall fix the time and place for a hearing, which shall not be more than 30 days after the date of filing. The notice of the hearing of such appeal shall be posted in a conspicuous place upon the property that is the subject of the appeal and shall be served upon the appellant and transmitted to the Building Official of Building Inspection at least 10 days prior to the date set for the hearing. Once an appeal is filed, the order of the Building Official shall be stayed until a decision is rendered.

For good cause shown, one continuance of a hearing may be granted by the Abatement Appeals Board; such continuance shall not exceed 60 days.

105A.2.7 Rehearing. The Abatement Appeals Board may rehear an appeal upon which a decision has been rendered, provided a request for a rehearing has been made in writing within 10 days of the date of issuance of the decision.

105A.2.8 Findings and decisions. The Abatement Appeals Board shall issue its findings and decisions no later than 10 days after the conclusion of the hearing. Such findings and decisions shall within five days thereafter be posted in a conspicuous place upon the property that is the subject of the appeal, served on the appellant, and transmitted to the Building Official.

105A.2.8.1. Failure of appellant to appear. In the event the appellant fails to appear at the hearing or if the Abatement Appeals Board fails to issue its findings and decisions within the time set forth above, or denies the appeal, the order of the Building Official shall be immediately effective from the date the order was issued; however the time that the matter was under appeal shall not be counted toward the time set in the order for compliance.

EXCEPTION: Except in cases of lack of quorum, failure of the Abatement Appeals Board to meet

any of the time periods specified herein shall result in the Building Official's order taking effect immediately.

105A.2.8.2 Life-safety hazards. In any appeal of a decision where the Abatement Appeals Board finds that there exists in, on, or near any building, structure or property, any condition constituting a serious and imminent hazard to the life, health, or safety of any person, structure, or property, any decision of the Abatement Appeals Board modifying the order of the Building Official shall provide for immediate protection of the public, and that work to correct each such hazard commence within 30 days and be completed within 90 days after service of such decision. With respect to violations which are not found by the Abatement Appeals Board to constitute a serious and imminent hazard, any decision of the Abatement Appeals Board modifying the order of the Building Official shall provide that the work to repair such violations commence within 60 days and be completed within a reasonable time, not to exceed 18 months.

105A.2.8.3 Moratorium – financial hardship. In any case of extreme financial hardship, the Abatement Appeals Board may grant a moratorium to correct conditions which are not serious and imminent hazards. Such a moratorium shall be granted only to an owner occupant of a single- or two-family dwelling where all such serious and imminent hazards, as found by the Building Official, have been corrected. The decision of the Abatement Appeals Board in any case in which a moratorium is granted shall contain the duration of the moratorium and the conditions for its termination. A copy of the decision granting a moratorium shall be recorded in the Assessor-Recorder's Office.

105A.2.8.4 Moratorium – displacement. Notwithstanding the provisions of this code and the San Francisco Housing Code, the Abatement Appeals Board, upon the written appeal of any person, may grant a moratorium from enforcement of an order of the Building Official made pursuant to Section 102A in order to prevent displacement of low and moderate income persons from affordable housing, if the Board finds that:

1. The Building Official's order from which the appeal is taken was issued after April 1, 1986; and
2. The property is a Group R, Division 1 building as defined in this code; and
3. The building was constructed prior to January 1, 1956; and
4. The condition does not constitute a serious and imminent hazard or a life hazard as defined in Section 213 of this code; and
5. The condition does not violate the Fire Code or any code other than this code and the San Francisco Housing Code; and
6. The condition does not affect adequate egress from the building; and
7. The condition does not endanger the life, limb, health, property, safety, or welfare of the public or the occupants of the building; and
8. Fifty percent or more of the households living in the building are paying annual rent equal to or less than 30 percent of the annual rent of low and moderate income as determined in Section 104A.4 of the Building Code; and
9. The abatement of the condition will have a reasonable probability of resulting in the

displacement of occupants who are of low and moderate income as defined above.

105A.2.8.5 Findings. The Board shall serve the Building Official, the property owner, and the person requesting the moratorium if other than the property owner, by sending a copy of its findings and decision by certified mail to such persons at their last known address. A copy of the findings and the decision granting a moratorium shall be recorded in the Assessor-Recorder's Office.

105A.2.8.6 Term of moratorium. The maximum term of the moratorium shall be 10 years from the date that the Board's findings and decision are served on the Building Official. At any time during the term of a moratorium under this section, any person may request that the Abatement Appeals Board extend the moratorium for one or more five-year periods by filing a written request with the Secretary of the Board. The Board shall hold a hearing on the request and shall issue separate findings and decisions regarding each request for an extension. The findings must address the nine criteria listed in this section. Any request for an extension of the moratorium shall be subject to the notice and hearing procedures of this section.

105A.2.8.7 Rescission of moratorium. At any time during the term of a moratorium, any person, including the Building Official, may request that the Abatement Appeals Board rescind the moratorium by filing a written request with the Board. The Board shall hold a hearing on the request and issue separate findings and decisions regarding each such request for a rescission. Any request for a rescission of the moratorium shall be subject to the notice and hearing procedures of this section.

105A.2.8.8 Violations listed. The moratorium shall apply only to those code violations expressly listed therein. All other violations which exist and are not so listed in the findings and decisions granting the moratorium shall be abated in accordance with Section 102A.

105A.2.8.9 Duration. Once the Board's order granting a moratorium is issued, the building is no longer considered a nuisance or a substandard building for the duration of the moratorium with respect to those code violations expressly listed in the Board's findings and decisions.

105A.2.9 Failure to comply. Upon the failure of any owner to comply with the order of the Building Official or the Abatement Appeals Board, the matter shall be referred within five days to the City Attorney's Office for appropriate legal action.

105A.2.10 Compensation. The members of the Abatement Appeals Board shall serve without compensation.

105A.3 Access Appeals Commission.

105A.3.1 Establishment; Composition; Purpose. Pursuant to the provisions of Section 19957.5 of the Health and Safety Code of the State of California, there is hereby established an Appeals Board to be known as the Access Appeals Commission composed of five members to hear written appeals brought by any person regarding action taken by the Department in the enforcement of the requirements of Part 5.5 (commencing with Section 19955), Division 13 of the Health and Safety Code of the State of California, including the exceptions contained in Section 19957 thereof, as well as action taken by the Department in the enforcement of the disabled access and adaptability provisions of this code.

105A.3.2 Appointments; Qualifications; Terms; Vacancies; Compensation. Members of the Access Appeals Commission shall be qualified and appointed as follows:

1. Two members of the Access Appeals Commission shall be persons with a physical disability,

two members shall be experienced in construction, and one member shall be a public member. All shall be appointed by the Building Inspection Commission and serve at its pleasure. The terms shall be staggered and the term of each member shall be four years. Members shall continue in office until the expiration of his or her term and until his or her successor is appointed and qualified.

2. Upon a vacancy occurring in the membership of the Access Appeals Commission and upon the expiration in the term of office of any member, a successor shall be appointed by the Building Inspection Commission. When a vacancy occurs for any reason other than the expiration of a term of office, the appointee to fill such vacancy shall hold office for the unexpired term of his or her predecessor. The members of the Access Appeals Commission shall be reimbursed at \$125 per meeting attended. The Building Official or his or her designated representative shall act as Secretary of the Access Appeals Commission, without vote and without additional compensation. The Department shall provide necessary staff service to the Access Appeals Commission.

105A.3.3 Powers and duties; Finality. The Access Appeals Commission shall conduct hearings on written appeals made under Section 105A.3.4 hereof. In hearing such appeals, the Access Appeals Commission may approve or disapprove the Department's interpretations of Part 5.5, Division 13 of the Health and Safety Code of the State of California and of the disability access and adaptability requirements of this code and actions taken by the Department to enforce said requirements and abate violations. All such approvals or disapprovals shall be final and conclusive as to the Department, in the absence of fraud or prejudicial abuse of discretion. See Section 110A, Table 1A-K – Penalties, Hearings, Code Enforcement Assessments – for applicable fee.

105A.3.4 Form of appeal–Action on. All appeals to the Access Appeals Commission shall be made in writing and shall be filed with the Secretary of the Access Appeals Commission. The Access Appeals Commission shall act upon each appeal without unreasonable or unnecessary delay.

105A.3.4.1 Rehearings. The Access Appeals Commission may rehear an appeal upon which a decision has been rendered upon motion of a member of the Access Appeals Commission and upon the affirmative vote of at least three of its members, provided that a request for a rehearing has been made in writing within 10 days of the date of the decision. See Section 110A, Table 1A-K – Penalties, Hearings, Code Enforcement Assessments – for applicable fee.

105A.3.5 Procedure. The Access Appeals Commission shall establish reasonable rules and regulations for its own procedure not inconsistent with the provisions of this code and the Charter of the City and County of San Francisco. The Access Appeals Commission, by a majority vote, shall choose its officers, other than the Secretary.

105A.3.6 Meetings. Meetings of the Access Appeals Commission shall be at such times as the Access Appeals Commission may determine. All meetings of the Access Appeals Commission shall be public meetings.

105A.3.7 Agenda and record. The Access Appeals Commission shall arrange for the maintenance of a record of its agenda, actions and recommendations which shall be available to the public upon request for the cost of reproduction.

105A.3.8 Decisions by resolution. Every decision and recommendation of the Access Appeals Commission shall be by resolution, which shall be retained as part of the Access Appeals Commission's official records. A copy shall be mailed to the appellant.

105A.3.9 Waiver of fee. An exemption from paying the Access Appeals Commission Filing Fees specified in Section 110A, Table 1A-K – Penalties, Hearings, Code Enforcement Assessments – may be granted upon the appellant’s filing with the Department a declaration of indigency under penalty of perjury. The declaration shall be made on a form provided by the Department and shall be accompanied by such documentary proof as the Building Official shall require.

105A.4 Code Advisory Committee.

105A.4.1 Establishment. There is hereby created a Code Advisory Committee consisting of seventeen members who are qualified by experience and training to pass upon matters pertaining to the development and improvement of the content of this code and the San Francisco Housing Codes and their related rules and regulations as well as provisions of other parts of the Municipal Code that the Building Official and the Building Inspection Commission determines have an impact on construction permits.

105A.4.2 Functions. Its functions shall be:

- 1. To review recommendations for code changes made by the Building Official the Building Inspection Commission pursuant to Section 104A.2.11.**
- 2. To develop, review and recommend code changes to the Building Official and the Building Inspection Commission.**
- 3. To review rules and regulations promulgated by the Building Official and the Building Inspection Commission pursuant to Section 104A.2.1.**
- 4. To recommend to the Building Official and the Building Inspection Commission, within 30 days after the effective date of a new edition of a code, which existing Section 104A.2 rules and regulations should remain in effect, be modified or be canceled.**

105A.4.3 Membership. The Code Advisory Committee shall consist of 17 members appointed by the Building Inspection Commission to serve at the Building Inspection Commission’s pleasure for a three-year term or until a successor is appointed and qualified.

105A.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 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 Building Official of the Department, who shall act as Secretary of the Code Advisory Committee, and the Fire Marshal.

105A.4.4 Procedure. The Code Advisory Committee shall establish reasonable rules for its own procedures not inconsistent with the provisions of this code and the Charter of the City and County of San Francisco. The Code Advisory Committee, by a majority vote, shall choose its officers, which shall consist of the Chairperson and the Vice-Chairperson.

105A.4.4.1 Quorum. A majority of the voting members of the Code Advisory Committee shall constitute a quorum. Any action taken by the Code Advisory Committee shall require an affirmative

vote of not less than a majority of the Code Advisory Committee members present and voting. No member of the Code Advisory Committee shall pass upon any question in which the member, the firm that employs the member or any corporation in which the member is a shareholder, holds a financial interest.

105A.4.4.2 Meetings. Meetings of the Code Advisory Committee shall be scheduled at a regular place and time but not less than once monthly. The exact time and place shall be established by the Code Advisory Committee in its rules and regulations of procedure. All meetings of the Code Advisory Committee shall be open to the public.

105A.4.4.3 Agenda and record. The Code Advisory Committee shall arrange for the maintenance of a record of its agenda, actions and recommendations which shall be available to the public upon request for the cost of reproduction.

105A.6 Structural Advisory Committee.

105A.6.1 Establishment. There is hereby created a three-member Structural Advisory Committee, to advise the Building Official on matters pertaining to the design and construction of buildings with special features or special design procedures. Upon request by the Building Official, the engineer of record for such a project shall demonstrate to the Structural Advisory Committee how the structural concepts, designs, details, erection methods and quality control will produce a structure that would meet the intent of Section 101A.2.

105A.6.2 Members. For consideration of each building with such special features, the Structural Advisory Committee shall consist of members who are knowledgeable in the structural engineering and construction issues presented by those special features. Members shall be selected from a list of qualified engineers submitted by the Structural Engineers Association of Northern California and approved by the Building Official. One member shall be selected by the Building Official, one member shall be selected by the owner, and the third member shall be selected jointly. Compensation of the Structural Advisory Committee members shall be by the owner. However, when the project for which Committee review is required is located in the Edgemoor Mountain Slope Protection Area, as defined by Building Code Section 106A.4.1.2 or the Northwest Mt. Sutro Slope Protection Area as defined by Building Code Section 106A.4.1.3 or is subject to Committee review pursuant to the Slope Protection Act, Building Code Section 106A.4.1.4.5, (a) the Committee shall consist of a structural engineer, a geologist and a geotechnical engineer; (b) the Committee shall consult with an architect, who shall be a voting member of the Committee; (c) the selection of the Committee members shall be as follows: one member shall be selected jointly by the Building Official and the Director of Public Works, one member shall be selected solely by the Building Official and one member shall be selected by the Building Official and the owner from recommendations made by interested persons, including but not limited to residents of the neighborhood surrounding the project location; and (d) to the extent feasible, the Committee members should be selected from a list submitted by the Structural Engineers Association of Northern California.

105A.6.3 Report. The Structural Advisory Committee shall submit to the Building Official a written report which shall include professional opinions concerning, but not limited to, the following:

- 1. The validity and appropriateness of the structural design concepts and criteria.**
- 2. An evaluation of the structural design of the building or structure to determine its capability to perform satisfactorily beyond the elastic stresses stipulated by the code, with sufficient redundancy to accommodate overloads or failures of specific structural components.**

3. The constructability of proposed structural details and erection methods.

4. The sufficiency of the proposed inspection, testing and monitoring to be provided during prior to and during construction.

105A.8. Appellate Authority of the Building Inspection Commission. The appellate authority of the Building Inspection Commission is as set forth in Section D3.750-4 of the San Francisco Charter, as implemented by Chapter 77 of the San Francisco Administrative Code.

SECTION 106A – PERMITS

106A.1 Permits Required. Except as specified in Section 106A.2, no building or structure regulated by this code shall be erected, constructed, enlarged, altered, repaired, moved, improved, removed, converted or demolished unless a separate permit for each building or structure 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).

106A.1.1 Separate permits required. Where buildings or structures are constructed on top of a base structure, and such structures are likely to have their own addresses or functional identities, separate permits shall be required for the base structure and for each of the top buildings or structures.

106A.1.2 Permit and fees for grading, excavation, or filling of land. The valuation for the permit shall be based on the volume of material to be handled, and on a cost schedule posted in the Department. The permit issuance and plan review fees shall be the same as those for new construction. See Section 110A, Table 1A-A – Building Permit Fees, and Table 1A-B – Other Building Permit and Plan Review Fees. See Chapter 33 and Appendix Chapter 33 for general grading provisions. [Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-08]

106A.1.3 Permits and fees for subsidewalk space. A building permit shall be obtained for construction of subsidewalk space. The fee for said permit shall be the fee set for building permits. See Section 110A, Table 1A F – Specialty Permit Fees – for applicable fees.

Permits for the use of subsidewalk space, except for subsurface space used to connect a building, structure or property with the San Francisco Bay Area Rapid Transit district facilities, shall be granted after approval by the Building Official and the City Engineer. Permission for the use of subsurface space to connect with the San Francisco Bay Area Rapid Transit District facilities, shall be granted only as set forth in Section 106A.1.3.1. The City may reserve any part of the subsidewalk space for its own use or the use of the public. The Board of Supervisors reserves the right to suspend or annul the privilege of maintaining such subsidewalk space or to exact a license or rental for the use thereof. The granting of a permit to use the subsidewalk space shall carry with it the right to excavate the space and to build the necessary retaining walls. If the street in front of the building is paved, a deposit will be required of the subsidewalk space. See Section 110A, Table 1A-F – Specialty Permit Fees – for required deposit. The deposit will be refunded to the permittee upon the endorsement of the

permit issued therefor and a certificate from the Department of Public Works, Bureau of Engineering, certifying to the satisfactory condition of such roadway at the end of two years after the time the pavement was restored. Should the permittee fail to restore any pavement, the Director of the Department of Public Works may, after 10 days' notice in writing posted on the building, restore the pavement and deduct the cost of such restoration from the deposit. In lieu of the deposit required herein, a bond in the amount of the deposit may be accepted in the manner set forth in Article 8 of the San Francisco Public Works Code.

No permit shall hereafter be issued by any officer, board or commission of San Francisco to make use of the subsidewalk space within the street lines of Market Street between Steuart Street and Castro Street, except a permit may be granted for the use as subsidewalk space for the following:

1. The space lying contiguous to the property line and extending along a line parallel thereto and up to 22 feet distant therefrom wherever such space is located in Market Street between Steuart Street and Van Ness Avenue.
2. The space lying contiguous to the property line and extending along a line parallel thereto and up to 10 feet distant there from wherever such space is located in Market Street between Van Ness Avenue and Castro Street.

Due consideration shall be given to the needs and requirements for the use of subsidewalk space by public utilities.

The remainder of the subsidewalk space is hereby expressly reserved for public use.

106A.1.3.1 Subsurface Connection to San Francisco Bay Area Rapid Transit District Facilities. Permission to use subsurface space to connect any building or structure or premises with the San Francisco Bay Area Rapid Transit District facilities shall be first obtained from the Board of Supervisors of San Francisco by resolution, prior to filing a permit to construct the connection. The Board of Supervisors reserves the right to suspend or annul the permission to use any subsurface space to connect any building, structure or premises with the San Francisco Bay Area Rapid Transit District facilities or to exact a license or rental for the use thereof. Upon the Board of Supervisors passing a resolution approving the connection, an application for a building permit to construct the connection shall be filed with the Department. The application, together with plans and specifications, shall be referred for approval to the Planning Department, the Department of Public Works, Bureau of Engineering, and any other department having jurisdiction. If approved, the approvals shall be endorsed in writing on the application by the respective departments and bureaus. The Department shall issue a building permit when the application has been approved by the Building Official, and upon payment of all required permit fees. In addition to the building permit and plan checking fees, the deposit required in Section 106A.1.3 shall also be paid to the Department and refunded as set forth in Section 106A.1.3, provided that all work under the building permit has been satisfactorily completed.

106A.1.4 Permits and Fees for Moving Buildings.

106A.1.4.1 General. The applicant for a permit for moving a building shall pay a permit fee for documentation and inspection of the moving work. See Section 110A, Table 1A-F – Specialty Permit Fees – for applicable fee. A permit and plan review fee for work required at the building's new site shall be per Section 110A, Table 1A-A – Building Permit Fees, and Table 1A-B – Building Permit Application and Plan Review Fees.

106A.1.4.2 Permit application for new site. Before a permit may be issued for moving a building, a building permit must be obtained for the necessary alterations and additions to the building on the new site. The application for the alterations at the new site is to be accompanied by complete plans showing floor plans, elevations, plot plan, and such other information as contained in Section 106A.3.3 as may be required by the Building Official.

106A.1.5 Permit and Fees for Demolition of Buildings. A permit shall be required for demolishing any structure. See Section 110A, Table 1A-F – Specialty Permit Fees – and Section 110, Table 1A-L – Public Information – for applicable fees. See Section 3303 for general requirements.

106A.1.6 Permits and Fees for Chimneys, Flues. A flue permit shall be required to erect, construct, alter or repair any chimney or flue except when it is a Type 1 grease hood or is constructed of masonry. A separate flue permit shall be required for each flue or chimney. Grease and masonry flues and chimneys shall require building permits per Section 106A. See Section 110A, Table 1A-F – Specialty Permit Fees – for applicable fees.
[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-08]

106A.1.6.1 Permits for boiler flues. A boiler flue permit shall be required to:

1. Install, alter, or replace any boiler flue or section thereof;
2. Install any approved type heat reclaimer or other approved type device within a boiler gas flue.

106A.1.7 Permits and Fees for Temporary Buildings or Structures. A permit is required for the construction and erection of temporary reviewing stands, bleachers, grandstands and other miscellaneous structures. The Building Official may require that any temporary building or structure be inspected by a registered civil engineer and found to be in compliance with all provisions of this code before it is permitted to be used by the public. See Section 110A, Table 1A-F – Specialty Permit Fees – for applicable fee.

106A.1.8 Garage door permits and fees. A garage door permit shall be required for the installation of such doors in existing buildings. See Section 110A, Table 1A-F – Specialty Permit Fees – for applicable fee.

The provisions of this section shall not apply where structural alterations are made, or are required in connection with the installation of garage doors. This section also shall not apply to the alteration, repair, or replacement of garage doors in public garages. In all these cases, the permit and fee requirements of Sections 106A, 107A and 110A shall apply.

106A.1.9 Permits and Fees for Signs.

106A.1.9.1 General. A sign regulated under Chapter 31 shall not be erected or altered until a sign permit has been obtained for such work. Application for a permit shall be made at the Department on supplied forms. Where signs are illuminated by electric lighting, a separate permit shall be obtained as required in the Electrical Code. Replacement of copy on the face of a sign, without affecting the structural members or the attachment to a building, structure, or the ground, shall not require a sign permit.

106A.1.9.2 Permit fees. Permit fees for signs shall be based upon job valuation. See Section 110A, Table 1A-A – Building Permit Fees – for applicable fees.

106A.1.9.3 Plan review fees for signs. See Section 110A, Table 1A-A – Building Permit Fees – for applicable fee.

106A.1.10 Permit and fees for residential elevators and lifts.

106A.1.10.1 General. An elevator or lift regulated under Chapter 30 shall not be installed or altered until a building permit has been obtained for such work.

106A.1.10.2 Fees. The permit fees and plan review fees shall be those required in Section 110A, Tables 1A-A and 1A-B. The valuation shall be based on the total installation, including those portions, if any, which are regulated by the State.

106A.1.10.3 Exemption. Elevators regulated by the State of California are exempt from permits and the provisions of this code. However, the elevator shafts and enclosures, and any structural alterations or strengthening work to accommodate the installation, shall comply with the permit and other requirements of this code.

106A.1.11 Permit and fees for boilers. A separate building permit shall be required for a new boiler installation or replacement except where a building permit has been issued which included such work, the fee for which shall be the minimum fee per Section 110A, Table 1A-A – Building Permit Fees. In addition, a permit to operate the boiler is required and shall be charged a fee based on the schedule in Section 110A, Table 1A-M – Boiler Fees. The fee for renewal of a permit to operate shall be based on the same schedule. Such fee shall be paid whether or not a permit to operate is issued. All fees shall be paid at the time of application for permits. Any additional fees billed will be increased to twice the billed amount when payment is not received by the Department within 30 days of billing. Failure to pay required fees will result in cancellation of the issued permit to operate. See Chapter 10 of the Mechanical Code for boiler requirements.

106A.1.12 Permit and fees for change in occupancy or use. Whenever a change in occupancy or use is made, a building permit shall be required to legalize the changed use or occupancy. The fee shall be the minimum fee required for filing for a permit and must be secured prior to the change of occupancy.

In the event any alteration work is required, the alteration permit shall be considered sufficient for this requirement and no additional permit will be required or additional fee required for the change in use or occupancy except as set forth in Section 109A.8.

106A.1.13 Permits and fees for construction of an impervious surface in a front yard setback.

1. General. It shall be unlawful for any person, firm or corporation to commence or proceed with the construction of an impervious surface in a front yard setback area, other than a driveway as defined in the Planning Code Section 136(a)(30), unless a permit is first obtained. See Section 110A, Table 1A-F – Specialty Permit Fees – for applicable fee.

2. Referral to Planning Department. The Department shall refer all applications for a permit pursuant to this section to the Planning Department for a determination regarding the proposed construction's compliance with Sections 132(g) and 136(a)(30) of the Planning Code. The Department may not issue the permit unless Planning determines the proposed construction to be compliant.

3. Penalty for violation. Any person, firm or corporation violating the provisions of this Section shall be guilty of an infraction. Every violation determined to be an infraction is punishable by (1) a

fine not exceeding \$100 for a first violation, (2) a fine not exceeding \$200 for a second violation within one year, and (3) a fine not exceeding \$500 for a third violation within one year.

106A.2 Work Exempt from Permit. Exemptions from the permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. A building permit shall not be required for the following:

1. One-story detached accessory buildings or structures used as tool and storage sheds, playhouses and similar uses, provided the projected roof area does not exceed 100 square feet (9.29 m²).
2. Fences not over 6 feet (1829 mm) high located at the rear and side lot lines at the rear of the property, and all fences not over 3 feet (914.4 mm) in height.
3. Amusement devices not on fixed foundations.
4. Movable cases, counters and partitions not over 5 feet 9 inches (1753 mm) high.
5. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or III-A liquids.
6. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18 927 L) and the ratio of height to diameter or width does not exceed 2.1.
7. Platforms, sidewalks, walks and driveways when not part of an exit, and not more than 30 inches (762 mm) above grade and not over any basement or story below and which, for residential buildings required to be accessible to persons with disabilities, are not part of a required accessible route.
8. Painting, papering and similar finish work.
9. Temporary motion picture, television and theater stage sets and scenery.
10. Minor repairs to existing interior plaster or wallboard, except when part of a fire-resistive assembly.
11. Prefabricated swimming pools accessory to a Group R, Division 3 Occupancy in which the pool walls are entirely above the adjacent grade and if the capacity does not exceed 5,000 gallons (18 927 L).
12. State-owned buildings under the jurisdiction of the state fire marshal. Unless otherwise exempted, separate plumbing, electrical and mechanical permits will be required for the above-exempted items.
13. Reroofing without the installation, repair or removal of roof sheathing, if the total surface area of the roof reroofed in any 12-month period does not exceed 25 percent of the entire surface area of the roof.
14. Surface mounting of readily removable materials on interior walls.

15. Work performed on structures owned and occupied by the Federal or State government. This exemption shall not apply to privately operated structures erected on government-owned land, or to privately owned land or structures leased to the Federal or State government, or to structures owned and operated by State educational institutions unless such structures are owned and used exclusively for educational purposes or other uses related to the institution's educational purposes, such as student cafeterias or dormitories.

16. Installations or replacement of floor coverings in areas other than bathrooms and toilet rooms not requiring the removal of existing required flooring.

17. Repair and replacement of glazing in conformity with this code, and provided wire glass shall be replaced in kind.

18. Replacement of doors, except garage doors, in all occupancies, provided they are not part of fire-resistive assemblies required by this code.

19. Work performed on structures owned or leased by the City and County of San Francisco where the construction or modification of said structure is financed in whole or in part by the issuance of lease revenue bonds prior to July 1, 1989.

20. See Section 3107.1.1 for exempt signs.

21. See Section J103.2 for grading permit exemptions.

22. See Section 106A.1.10.3 for Elevators regulated by the state exemption.

106A.3.1 Application. To obtain a permit, the applicant shall first file an application therefor in writing on a form furnished by the code enforcement agency for that purpose. Every such application shall:

- 1. Identify and describe the work to be covered by the permit for which application is made.**
- 2. Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.**
- 3. For new buildings or structures, indicate the use or occupancy of all parts of the building or structure for which the proposed work is intended.**

For alteration work, indicate the proposed use or occupancy and the most current legal use or occupancy of all portions of the building or structure affected by or relevant to the proposed work.

4. Be accompanied by plans, diagrams, computations and specifications and other data as required in Section 106A.3.2.

5. State the valuation of any new building or structure or any addition, remodeling or alteration to an existing building.

6. Be signed by the owner, or the owner's authorized agent, who may be required to submit evidence to indicate such authority. Such agent shall be responsible for advising the owner of all conditions attached to the application by the various approving agencies.

7. Give such other data and information as may be required by the building official.
8. Include, when available, the name, address and telephone number of the owner or contractor. When applicable, State and City license numbers shall be indicated.
9. Contain an agreement by the owner of the premises to hold harmless the City and County of San Francisco and its officials and employees from all costs, liability and damages resulting, whether directly or indirectly, from use or occupancy of the sidewalk, street or subsidewalk space, or from anything in connection with the work included in the permit. The agreement shall run with the land and be binding on all of the owner's successors in title.

106A.3.1.1 Application processing. The application, plans, specifications and other information submitted shall be referred for such review and approval as is required under applicable ordinances and laws. Each such reviewing bureau, department or agency shall indicate in a manner determined by the Building Official its approval, approval with conditions, or disapproval.

106A.3.1.2 Transfer of application. Applications are transferable with payment of additional fees when the new owner submits a letter to the Department agreeing to all conditions of approval, stipulations and agreements contained on the application, per Table 1A-D.

106A.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, land surveyor, or an engineer, the Building Official 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, land surveyor, or engineer. The Building Official 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, land surveyor, 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, land surveyor, 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 Building Official, 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 Section 106A.3.2, the following requirements shall apply to: (a) 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 Edgemoor Mountain Slope Protection Area, created by Building Code Section 106A.4.1.2, and within the Northwest Mt. Sutro Slope Protection Area, created by Section 106A.4.1.3 and (b) application for construction on property subject to the Slope Protection Act created by Building Code Section 106A.4.1.4:

The Building Official may not waive the requirements for submittal documents set forth in Section 106A.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, land surveyor, 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 Building Official, 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. [Amended 2-9-2007 by Ord. 28-07; 11-7-2008 by Ord. No. 258-08; effective 12-18-08]

106A.3.2.1 Incomplete applications. The Department will not process an application which is not completely or properly filled out pursuant to the requirements of this section. When the submittal documents do not contain the information required by this the application shall not be accepted.

106A.3.2.2 Demolition. An application for a permit to demolish a building or structure shall not be deemed complete until (a) the applicant declares under penalty of perjury that every party who has a recorded interest in the property that is the subject of the application has been notified of the filing of the application. See Section 110A, Table 1A-L – Public Information – for fee to defray the cost of maintaining records of such declarations and other attendant costs and (b) the Department receives written notice from the Department of Environment that the Department of the Environment has approved the applicant’s waste diversion plan in accordance with Chapter 14 of the Environment Code.

106A.3.2.2.1 Demolition application and notification. Upon receipt of an application which would authorize the tearing down or demolition of a building or structure, the Department shall mail written notice to the owners of properties at least 300 feet (91.44 m) in every direction from the edge of the property on which the proposed demolition work will take place, as shown on the last annual tax roll, and shall provide notice to each residential tenant of the property that is the subject of the application and of the property immediately adjacent to such property. Said notice shall include the street address of the proposed work and the name and address of the property owner and, if known, of the contractor.

106A.3.2.2.2 Notice to interested parties. Any of the following organizations or groups may request notification of the receipt by the Department of an application for a demolition permit and of the issuance thereof:

- 1. Architectural or historic preservation or housing conservation groups.**
- 2. Recycling companies.**

Such request shall be in writing to the Department, on forms furnished by the Department. The organization or group shall specify the area(s) of the City and County of San Francisco for which notification is requested, and the Building Official shall establish the boundaries of such areas for purposes of such notification. Requests shall be made annually, within 30 days after July 1 of each year. See Section 110A, Table 1A-L – Public Information – for fees. Fees may be prorated by the

Department for any requests which are received at other times during the year.

106A.3.2.3 Substantial alterations – Notification, sign posting and affidavits. In addition to any other requirements for notice set forth in this code, the following shall apply:

Any person filing an application to substantially alter, as that term is defined by the Building Official, an apartment house or residential hotel (as defined in Section 41.4(p) of the San Francisco Administrative Code) that contains five or more dwelling units shall post a sign at least 15 inches by 15 inches (381 mm x 381 mm) in a conspicuous common area of the apartment house or residential hotel for at least 15 days with the following information: notice that the application has been made, the nature of the work to be performed, the means of obtaining information from the Department, and the procedure for appealing the issuance of building permits. In occupied residential unreinforced masonry buildings, required signs shall also include specified information provided by the Building Official. The applicant shall thereafter submit an affidavit signed under penalty of perjury stating that the sign has been posted as required by this section. See Section 110A, Table 1A-L – Public Information – for fee to defray the cost of maintaining records of said affidavits. The Building Official shall not approve the application until this affidavit is submitted. If there is reason to believe that the sign was not posted as required, the Building Official shall investigate the matter, shall provide the applicant an opportunity to respond to any complaint of noncompliance, shall determine whether the requirements of this section have been substantially met, and shall cancel an application or revoke the permit if it is determined they have not been substantially met.

106A.3.2.4 – Hazardous Wastes.

106A.3.2.4.1 Soil Sampling and Analysis Required. Applicants for any building or grading permit which involves the disturbance of at least 50 cubic yards (38.23 m³) of soil shall comply with the requirements for soil sampling and analysis of Article 22A of the Public Health Code when any part of the work will occur either bayward of the 1851 high-tide line as indicated on the Map of the City and County of San Francisco (adopted June 27, 1986) (see Figure 1A-1) which is maintained for public distribution by the Building Official, or in any area of the City and County of San Francisco where the Director of Public Health has reason to believe that the soils may contain hazardous wastes.

Note: Figure 1A-1 is included at the end of this chapter.

106A.3.2.4.2 Permit Approval. No building permit application subject to the requirements of this Section shall be approved until the Department receives written notification from the Director of Public Health that the applicant has complied with all applicable provisions of Article 22A of the Public Health Code, or that the requirements have been waived.

Exception:

1. The Building Official may issue a site permit pursuant to Section 106A.3.4.2 prior to the time an applicant complies with this Section.

2. Site permit addenda and other permit(s) may be issued to undertake soil sampling or mitigation measures to comply with this section.

106A.3.2.4.3 No Time Limits. For the purposes of completing the requirements of this Section, the time limitations set forth in Section 106A.3.7 of the San Francisco Building Code do not apply.

106A.3.2.4.4 Permit Notification. All building permits and grading permits issued by the Department of Building Inspection shall bear notice of the above requirements and of the owner's responsibility for

identifying and mitigating hazardous wastes.

106A.3.2.5 Hunters Point Shipyard.

106A.3.2.5.1 Compliance required. Applicants for any building or grading permit for Hunters Point Shipyard Parcel A, which involves the disturbance of at least 50 cubic yards (38.23 m³) of soil or the extraction or management of groundwater, except for purposes of environmental characterization shall comply with the requirements of Article 31 of the Health Code. Hunters Point Shipyard Parcel A is that area of the City and County of San Francisco shown on Figure 1-2 which is maintained for public distribution by the Building Official.

NOTE: A copy of Figure 1-2 is on file with the Clerk of the Board of Supervisors in File No. 041540.

106A.3.2.5.2 Permit approval. No building permit application subject to the requirements of this section shall be deemed to be complete until the Department receives written notification from the Director of Public Health that the applicant has complied with all applicable provisions of Article 31 of the Health Code. Approvals or conditions imposed in writing by the Department of Public Health shall become conditions of the permit issued by the Department, and violation of such approvals or conditions shall be deemed a violation of the permit.

EXCEPTION:

1. The Building Official may issue a site permit pursuant to Section 106A.3.4.2 prior to the time an applicant complies with this section.

2. Site permit addenda and other permit(s) may be issued to excavate soil or undertake soil sampling or implement other requirements of Article 31 of the Health Code.

106A.3.2.5.3 No time limits. For the purposes of completing the requirements of this section, the time limitations set forth in Section 106A.3.7 of the San Francisco Building Code do not apply.

106A.3.2.5.4 Permit notification. All building permits and grading permits issued by the Department of Building Inspection shall bear notice of the above requirements and of the permittee's responsibility to comply.

106A.3.2.6 Construction dust control. [Added 8-30-2008 by Ord. No. 176-08, effective 8-30-08]

106A.3.2.6.1 Dust control required. All applicants for a building, demolition, excavation, grading, foundation, or other permit required by this Code to construct a new building, to demolish a building, to substantially alter or to add to an existing building shall comply with the requirements for dust control and, in addition, for projects over a half acre the applicant will be required to submit a Dust Control Plan for approval by the San Francisco Health Department as set forth in Article 22B of the San Francisco Health Code.

106A.3.2.6.2 Permit approval. For projects of over one half acre in size, no building or other permit application subject to the requirements of this section shall be approved until the Department of Building Inspection receives either

(a) written notification from the Director of Public Health that the applicant either has a site-specific dust control plan for the project approved by the Director of Public Health or the Director of Public Health has waived the requirement or

(b) the applicant qualifies as an interior only tenant improvement project that will not produce exterior visible dust and therefore is exempt from complying with Article 22B of the San Francisco Health Code.

EXCEPTION: The Director may issue a site permit pursuant to Section 106A.3.4.2 prior to the time an applicant complies with this section.

106A.3.2.6.3 General dust control requirements.

(a) All site preparation work, demolition or construction activities within the City and County of San Francisco that have the potential to create dust or will expose or disturb more than 10 cubic yards or 500 square feet of soil shall comply with the requirements of this Section whether or not the activity requires a permit from the Department of Building Inspection.

(b) For projects over one half acre in size, the project sponsor shall designate a person or persons who will be responsible for monitoring compliance with dust control requirements. The designated person or persons shall be on the site or available by telephone or other means during all times that site preparation, demolition or construction activities may be in progress, including holidays and weekends. The name and telephone number where such person or persons may be reached at all times shall be provided to the Director and to the Director of Public Health prior to commencement of work on the project.

(c) The project sponsor and the contractor responsible for construction activities at the project site shall use the following practices to control construction dust on the site or other practices that result in equivalent dust control that are acceptable to the Director.

(1) Water all active construction areas sufficiently to prevent dust from becoming airborne. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water must be used if required by Article 21, Section 1100 et seq. of the San Francisco Public Works Code. If not required, reclaimed water should be used whenever possible.

(2) Provide as much water as necessary to control dust (without creating run-off) in any area of land clearing, earth movement, excavation, drillings, and other dust-generating activity.

(3) During excavation and dirt-moving activities, wet sweep or vacuum the streets, sidewalks, paths, and intersections where work is in progress at the end of the workday.

(4) Cover any inactive (no disturbance for more than seven days) stockpiles greater than ten cubic yards or 500 square feet of excavated materials, backfill material, import material, gravel, sand, road base, and soil with a 10 mil (0.01 inch) polyethylene plastic or equivalent tarp and brace it down or use other equivalent soil stabilization techniques.

(5) Use dust enclosures, curtains, and dust collectors as necessary to control dust in the excavation area.

106A.3.2.6.4 Large projects. If the project is over one half acre in size and the project does not qualify for an interior only tenant improvement project exemption or the Department of Public Health has not issued a waiver for a site-specific dust control plan for the project; construction, demolition, excavation, grading, foundation work, or other permitted activities may not commence until the owner or the owner's agent has submitted to the Department a copy of the Director of Public Health's written

approval of the dust control plan. All site preparation and construction activities on the job site shall comply with the general requirements for dust control and the site-specific dust control plan approved by the Director of Public Health. The failure to comply with all provisions of the approved site-specific dust control plan shall be considered a violation of this Code.

106A.3.2.6.5 Waiver of requirements for compliance for small sites; rescission of waiver. For sites less than a half acre in size:

(a) The Director may waive these requirements if the applicant demonstrates to the Director's satisfaction that the proposed site preparation, demolition or construction activities are unlikely to result in any visible windblown dust.

(b) If at any time, contrary to the applicant's assertions, the construction activities produce visible windblown dust, the Director may issue a written order rescinding the waiver. A copy of the rescission order shall be personally served on the owner of the property at the address on file with the Department of Building Inspection and posted on the job site.

(c) If the Director orders rescission of the waiver, the owner of the property and the contractor or other persons responsible for construction activities at the site shall comply immediately with the above dust control requirements.

106A.3.2.6.6 Permit notification. All building, demolition, excavation, grading, foundation, or other permit subject to this section issued by the Department of Building Inspection shall bear notice of the above requirements and of the owner's responsibility to control construction dust on the site.

106A.3.2.6.7 Violations. Upon receipt of complaints, the Director is authorized to administer and enforce all provisions of this Section and may enforce the provisions of this Section by any lawful means available for such purpose, including taking actions authorized pursuant to Section 103 of this Code.

106A.3.2.6.8 Fees. The Department shall determine and recommend to the Board of Supervisors the amount of fee that is required to compensate the Department for the costs of enforcing these dust control requirements.

106A.3.3 Information on plans and specifications. Plans and specifications shall be drawn to scale on substantial paper of a size not less than 11-inch by 17-inch (279.4 mm x 431.8 mm) and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and all relevant laws, ordinances, rules and regulations. Specific plans and information required shall include any of the following that is appropriate for the work being proposed:

1. The Assessor's block and lot number on the first sheet or page of each set of plans and other submittal documents.

2. A dimensioned plot plan showing sidewalk widths, street widths, lot lines, locations of proposed or existing buildings or structures on the property, and full widths, heights and setbacks of buildings on adjacent properties where their locations or heights affect the code requirements of the subject building or structure. Locations of parking or loading spaces and of aboveground hydrants and utility poles shall also be shown. The Building Official may require the owner to have the lot surveyed and staked by a registered land surveyor or registered civil engineer so that the proper location of the building on the lot may be determined. A copy of this survey shall be filed with the

application for the permit.

3. All existing and future finished grades for new buildings or structures and additions to existing buildings or structures, including official curb and street grades.

4. Complete dimensioned exterior elevations showing types of wall materials, locations and sizes of wall openings, roof heights and setbacks from property lines. The existing and future exterior grade profiles on each side of the building extending to any adjoining buildings, structures or properties which might be affected by this work shown on the elevations unless a topographic map prepared by a licensed surveyor is submitted.

5. Dimensioned architectural floor plan for each floor, basement and roof unless the floor plans are identical. The scale shall be not less than 1/8 inch (3.175 mm) to 1 foot (304.8 mm) unless otherwise permitted by the Building Official. The floor plan shall show the gross area of each use area on each floor, and the total area of each floor. Structural, mechanical and other detailed information shall not be superimposed unless the resultant floor plans are clearly legible and understandable.

6. For alteration work, all existing partitions and construction that are to be removed or altered and all that are to remain unchanged.

7. Identification on the architectural floor plans of the use or occupancy classifications of all new and existing areas of the building.

8. Cross-sections as necessary, including information on location and depth of footings of adjacent buildings or structures which might be affected by this work.

9. Information regarding all architectural and structural materials to be installed in the building.

10. Details of all fire-resistive assemblies and elements, and provisions for maintaining the integrity of fire-resistive assemblies or elements where penetrated.

11. Information regarding the installation, location and support of building utilities, including plumbing systems, and electrical equipment, wiring and systems.

12. Structural plans and calculations detailing all components of the vertical load carrying system, including joists, beams, girders, columns, bearing walls and locations and depths of footings. Connection details and cross-sections to show how the loads are transferred and carried from the roof to the foundation. Live load clearly designated on the plan for each use area.

13. Structural plans and calculations detailing all elements of the lateral force resisting system, including horizontal and vertical diaphragms, connections and details that completely identify the lateral force load path from the roof to the foundation.

14. Special inspection and structural observation program required by Sections 106A.3.5, 1704 and 1709.

15. Geotechnical report when work involves significant grading, excavation or fill, or uses special foundations; or when the site is included in the State of California Seismic Hazard Zones Map, Special Soils Map or other area identified by the Building Official. See Appendix J, for additional grading permit requirements.

16. Hydraulic design drawings and calculations for sprinkler systems and standpipes.
17. Information on plans demonstrating compliance with energy conservation requirements.
18. Information on plans demonstrating compliance with applicable sound transmission requirements.
19. Information on plans demonstrating compliance with applicable disabled access requirements.
20. Information on plans demonstrating compliance with water conservation and reclamation requirements.
21. Landscaping and irrigation plans, when required by the Planning Department, Department of Public Works or other agencies.
22. Photographs when required by the Planning Department or other agencies.
23. For a building that is an unsafe structure as defined in Section 102A, sufficient information to show how all unsafe conditions will be corrected.
24. All other information necessary for determining compliance with applicable codes and regulations.
[Amended 6-29-2009 by Ord. No. 107-09, effective 7-30-2009]

106A.3.4 Architect or engineer of record.

106A.3.4.1 General. When it is required that documents be prepared by an architect or engineer, the building official may require the owner to engage and designate on the building permit application an architect or engineer who shall act as the architect or engineer of record. If the circumstances require, the owner may designate a substitute architect or engineer of record who shall perform all of the duties required of the original architect or engineer of record. The building official shall be notified in writing by the owner if the architect or engineer of record is changed or is unable to continue to perform the duties.

The architect or engineer of record shall be responsible for reviewing and coordinating all submittal documents prepared by others, included deferred submittal items, for compatibility with the design of the building.

106A.3.4.2 Site permit. A site permit may be issued for the construction or major alteration, as that term is defined by the Building Official, of a building or structure upon approval of preliminary drawings and before the entire working drawings and specifications of the building or structure have been completed and submitted for approval.

Such preliminary drawings and specifications shall clearly indicate the nature, character and extent of the work proposed. The application procedure shall comply with Sections 106A.1 through 106A.4 except for the completeness of plans. The permit issuance fees and plan review fees shall be as set forth in Section 110A, Table 1A-A – Building Permit Fees, and Table 1A-B – Other Building Permit and Plan Review Fees, and shall be calculated on the basis of the total valuation of the work. No construction work shall be done under the site permit. Construction may proceed after the

appropriate addenda have been issued. In no case shall construction exceed the scope of the issued addenda.

Site Permit must be issued prior to submittal of 1st addendum.

Plans for construction may be divided and submitted in accordance with an addenda schedule submitted on the site permit drawings or on the first addendum drawings. See Section 110A, Table 1A-B – Other Building Permit and Plan Review Fees – for applicable fee.

The holder of such permit and addenda shall proceed with approved addenda work at the permittee's own risk, without assurance that approvals for the remaining addenda or for the entire building or structure will be granted.

Each addendum must be approved and issued before work shown on that addendum may commence. The time allowed for review, approval and issuance of all addenda is governed by the maximum time allowed per Section 106A.4.4 and Table B – Maximum Time Allowed to Complete All Work Authorized by Building Permit. The extension times may be applied upon payment of fee per Section 110A, Table 1A-J – Miscellaneous Fees. If all required addenda are not approved and issued by the maximum time allowed, the site permit, all previously approved addenda, and all remaining addenda shall be deemed to be canceled. When a site permit has been canceled, an alteration work application shall be required to resume processing. The provisions of Section 107A.3.3 shall apply to such alteration work application.

[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008]

106A.3.5 Inspection and observation program. When special inspection is required under Chapter 17, the architect or engineer of record shall prepare an inspection program that shall be submitted to the building official for approval prior to issuance of the building permit. The inspection program shall designate the portions of the work that require special inspection and the name or names of the individuals or firms who are to perform the special inspections, and indicate the duties of the special inspectors.

The special inspector shall be employed by the owner, the engineer or architect of record, or an agent of the owner, but not the contractor or any other person responsible for the work.

When structural observation is required under Chapter 17, the inspection program shall name the individuals or firms who are to perform structural observation and describe the stages of construction at which structural observation is to occur.

The inspection program shall include samples of inspection reports and provide time limits for submission of reports.

106A.3.6 Permit facilitator. Any permit applicant may use the services of a Permit Facilitator. The Permit Facilitator shall be under the jurisdiction of the Building Official. The duties of the Permit Facilitator include distributing permit application submittals to various review disciplines, departments or agencies; and providing the project sponsor with a single point of contact regarding permit application status, procedures or requirements. The fee for such service shall be per Table 1A-B – Other Building Permit and Plan Review Fees – and shall be paid upon filing of a permit application.

[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008]

106A.3.7 Application Expiration. The Building Official may hold in abeyance or reject any

application, plans, or specifications filed which in the Building Official’s opinion, do not provide the necessary information in a clear and concise manner as required in Section 106A.3.3, and shall cancel such an application upon the expiration of the time period set forth per Table A.

At the time the application has been deemed acceptable for building plan review by the Department of Building Inspection, any corrections, additional information, plans or documents that are necessary to complete the processing by any of the enforcing agencies shall be submitted and approved within the following time limitations:

TABLE A – APPLICATION EXPIRATION

Valuation	Time Limitation	Extension Limitation
\$1.00 to \$1 million	360 calendar days	360 calendar days
Over \$1 million	720 calendar days	360 calendar days

The time limitation shall apply until the application has been approved and permit is issued. A one-time extension per Table A may be granted by the Building Official at any point during the approval process, upon written request by the applicant and payment of fee. Additional extensions may be granted by the Building Official prior to extension expiration. See Section 110A, Table 1A-J – Miscellaneous Fees – for applicable fee. In the event an extension of time extends the life of an application beyond the effective date of the adoption of a new code, the Building Official may require that all or part of the application be subject to the provisions of the new code and payment of an additional plan review fee per Table 1A-A – Building Permit Fees. In the event the application has not been approved and issued within 21 days before the end of the stated time period in Table A, the Department shall notify the applicant that the application will be canceled in 21 days unless the application is extended. An application which exceeds the stated or extended time period after such notice shall be deemed canceled without further action by the Department.

EXCEPTIONS:

1. For applications resulting from enforcement actions initiated by the Building Official to abate code violations, the above time limits shall be reduced to 30 days and 10 days, respectively. The Building Official may grant an extension for hardship or procedural error. Upon cancellation, such cases shall be referred to the City Attorney for legal action.

2. The above time limits shall not apply to applications which are subject to the work without permit investigation fee per Section 110A, Table 1A-K – Penalties, Hearings, Code Enforcement Assessments. Such applications shall be canceled only through specific action by the Building Official. [Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008; 6-29-2009 by Ord. No. 107-09, effective 7-30-2009]

106A.3.8 Disapproval of application. Any application that does not meet the requirements of this code or any other laws, ordinances or regulations enforced by any interested departments or agencies shall be disapproved by the Building Official or upon request by the applicant. If such a request is not made, the application shall be held in abeyance and then canceled as provided for in Section 106A.3.7.

106A.3.8.1 Withdrawal of application. Applications filed for permits may be withdrawn by the owner, provided that no part of the work proposed on the application has been performed.

106A.4 Permits Issuance.

106A.4.1 Issuance. The application, plans, specifications, computations and other data filed by an applicant for a permit shall be reviewed by the building official. Such plans may/shall be reviewed by other departments of this jurisdiction to verify compliance with any applicable laws under their jurisdiction. If the Building Official finds that the work described in an application for a permit and the plans, specifications and other data filed therewith conform to the requirements of this code and other pertinent laws and ordinances, and that the fees specified in Section 107 have been paid, the building official shall issue a permit therefor to the applicant.

When the building official issues the permit where plans are required, the building official shall endorse in writing or stamp the plans and specifications APPROVED. Such approved plans and specifications shall not be changed, modified or altered without authorizations from the building official, and all work regulated by this code shall be done in accordance with the approved plans.

The building official may issue a permit for the construction of part of a building or structure before the entire plans and specifications for the whole building or structure have been submitted or approved, provided adequate information and detailed statements have been filed complying with all pertinent requirements of this code. The holder of a partial permit shall proceed without assurance that the permit for the entire building or structure will be granted.

106A.4.1.1 Transfer of Permit. Permits are transferable without payment of fees per Table 1A-D when the new owner submits a letter to the Department agreeing to all conditions of approval, stipulations and agreements contained on the approved application.

106A.4.1.2 Edgell Mountain Slope Protection Area.

106A.4.1.2.1 Creation. There is hereby created the Edgell Mountain Slope Protection Area, which is generally bounded by Garcia Avenue, Vasquez Avenue, Kensington Way and Ulloa Street and traversed by Edgell Way. The Edgell Mountain Slope Protection Area is comprised of the following Assessor's Block Numbers: 2875, 2876, 2923, 2933, 2934, 2935, 2936A and 2936B. Heightened review of certain permit applications, as provided in this section, shall be made in this area.

106A.4.1.2.2 Purpose. Because landslides, earth movement, ground shaking and subsidence are likely to occur on or near the Edgell Mountain Slope Protection Area, causing severe damage and destruction to public and private improvements, the Board of Supervisors finds that the public health, safety and welfare is best protected if the Building Official of Building Inspection causes permit applications within the Edgell Mountain Slope Protection Area for either (1) construction of new buildings or structures or (2) alterations that involve a substantial increase in the envelope of an existing building or structure, to be peer reviewed for structural integrity and effect on hillside stability. The requirements herein for projects in the Edgell Mountain Slope Protection Area are in addition to all other applicable laws and regulations, including any and all requirements for environmental review under the California Environmental Quality Act; compliance with the requirements contained herein does not excuse a project sponsor from compliance with any other applicable laws and regulations.

106A.4.1.2.3 Mandatory review by Structural Advisory Committee and other City officials. All permit applications submitted to the Central Permit Bureau for construction of new buildings or structures or alterations that involve a substantial increase in the envelope of an existing building or structure (as determined by the Building Official) within the Edgehill Mountain Slope Protection Area shall be submitted to and reviewed by the Structural Advisory Committee, as defined by Building Code Section 105A.6. No permits for such properties located within the Edgehill Mountain Slope Protection Area shall be issued unless and until the Building Official has consulted with and received a written communication from representatives of the Department of Planning, Department of Public Works and Fire Department, each of whom has made a visit to the site for which the project is proposed, and the Building Official has received a written report from the Structural Advisory Committee concerning the safety and integrity of the proposed design and construction. As part of its review, the Structural Advisory Committee shall consider the effect that construction activity related to the proposed project will have on the safety and stability of the Edgehill Mountain Slope Protection Area.

106A.4.1.2.4 Mandatory denial by Building Official. In the event that the Structural Advisory Committee determines that there is a reasonable likelihood that the proposed design and construction would result in unsafe conditions or would increase the likelihood of hillside instability, and such unsafe conditions or instability cannot be mitigated to the satisfaction of the Structural Advisory Committee, the Building Official shall deny the permit. The Building Official's decision to deny the permit is appealable only to the Board of Appeals. [Amended 2-9-2007 by Ord. 28-07]

106A.4.1.3 Northwest Mt. Sutro Slope Protection Area.

106A.4.1.3.1 Creation. There is hereby created the Northwest Mt. Sutro Slope Protection Area, which is generally bounded on the east by Crestmont Drive and its undeveloped northern extension, on the south along Oak Park to its intersection with Christopher Boulevard, west to Warren Drive, north along Warren Drive to the 6th Avenue and Kirkham Street intersection, and Kirkham Street in an easterly direction to its end at the undeveloped extension of Crestmont Drive. The Northwest Mt. Sutro Slope Protection Area is comprised of the following Assessor's Block Numbers: 1850, 1851, 2635, 2636, 2638, 2674, 2675, 2676, 2677, and 2686. Heightened review of certain permit applications, as provided in this section, shall be made in this area.

106A.4.1.3.2 Purpose. Because landslides, earth movement, ground shaking and subsidence are likely to occur on or near the Northwest Mt. Sutro Slope Protection Area, causing severe damage and destruction to public and private improvements, the Board of Supervisors finds that the public health, safety and welfare is best protected if the Building Official of Building Inspection causes permit applications within the Northwest Mt. Sutro Slope Protection Area for either (1) construction of new buildings or structures or (2) alterations that involve a substantial increase in the envelope of an existing building or structure, to be peer reviewed for structural integrity and effect on hillside stability. The requirements herein for projects in the Northwest Mt. Sutro Slope Protection Area are in addition to all other applicable laws and regulations, including any and all requirements for environmental review under the California Environmental Quality Act; compliance with the requirements contained herein does not excuse a project sponsor from compliance with any other applicable laws and regulations.

106A.4.1.3.3 Mandatory review by Structural Advisory Committee and other City officials. All permit applications submitted to the Central Permit Bureau for construction of new buildings or structures or alterations that involve a substantial increase in the envelope of an existing building or structure (as determined by the Building Official) within the Northwest Mt. Sutro Slope Protection Area shall be submitted to and reviewed by the Structural Advisory Committee, as defined by

Building Code Section 105A.6. No permits for such properties located within the Northwest Mt. Sutro Slope Protection Area shall be issued unless and until the Building Official has consulted with and received a written communication from representatives of the Department of Planning, Department of Public Works and Fire Department, each of whom has made a visit to the site for which the project is proposed, and the Building Official has received a written report from the Structural Advisory Committee concerning the safety and integrity of the proposed design and construction. As part of its review, the Structural Advisory Committee shall consider the effect that construction activity related to the proposed project will have on the safety and stability of the Northwest Mt. Sutro Slope Protection Area.

106A.4.1.3.4 Mandatory denial by Building Official. In the event that the Structural Advisory Committee determines that there is a reasonable likelihood that the proposed design and construction would result in unsafe conditions or would increase the likelihood of hillside instability, and such unsafe conditions or instability cannot be mitigated to the satisfaction of the Structural Advisory Committee, the Building Official shall deny the permit. The Building Official's decision to deny the permit is appealable only to the Board of Appeals. [Added 2-9-2007 by Ord. No. 28-07]

106A.4.1.4. The Slope Protection Act. This Section of the San Francisco Building Code shall be known as the Slope Protection Act.

106A.4.1.4.1. Creation. The Slope Protection Act shall apply to all property within San Francisco that falls within certain mapped areas of the City, except those properties already subject to the Edgehill Mountain Slope Protection Area or the Northwest Mt. Sutro Slope Protection Area. For purposes of this Section "property" shall mean a legal lot of record. Heightened review of certain permit applications, as provided in this section, shall be given to all property subject to this Act.

106A.4.1.4.2. Purpose. Because landslides, earth movement, ground shaking and subsidence are likely to occur on or near steeply sloped properties and within other defined areas causing severe damage and destruction to public and private improvements, the Board of Supervisors finds that the public health, safety and welfare is best protected if the Building Official causes permit applications for the construction of new buildings or structures and certain other construction work on property subject to the Slope Protection Act to undergo additional review for structural integrity and effect on slope stability. The requirements for projects subject to the Slope Protection Act are in addition to all other applicable laws and regulations, including any and all requirements for environmental review under the California Environmental Quality Act; compliance with the requirements contained herein does not excuse a project sponsor from compliance with any other applicable laws and regulations.

106A.4.1.4.3. Scope. Properties are subject to these requirements where any portion of the property lies within the areas of "Earthquake-Induced Landslide" in the Seismic Hazard Zone Map, released by California Department of Conservation, Division of Mines and Geology, dated November 17, 2000, or amendments thereto; or within the "Landslide Hazard Areas" mapped as "Landslide Locations" in Figure 4 of the San Francisco Seismic Safety Investigation report prepared by URS/John A. Blume & Associates, Engineers, June 1974, or any successor map thereto.

Proposed construction work that is subject to these requirements includes the construction of new buildings or structures having over 1000 square feet of new projected roof area and horizontal or vertical additions having over 1000 square feet of new projected roof area. In addition, these requirements shall apply to the following activity or activities, if, in the opinion of the Director, the proposed work may have a substantial impact on the slope stability of any property: shoring, underpinning, excavation or retaining wall work; grading, including excavation or fill, of over fifty (50) cubic yards of earth materials; or any other construction activity.

106A.4.1.4.4. Mandatory submittal of reports and geotechnical engineering review. All permit applications submitted to the Department of Building Inspection for construction subject to the Slope Protection Act shall include report(s) prepared and signed by both a licensed geologist and a licensed geotechnical engineer identifying areas of potential slope instability, defining potential risks of development due to geological and geotechnical factors, and drawing conclusions and making recommendations regarding the proposed development. These reports shall undergo design review by a licensed geotechnical engineer. Such design review shall verify that appropriate geological and geotechnical issues have been considered and that appropriate slope instability mitigation strategies, including drainage plans if required, have been proposed.

106A.4.1.4.5. Structural Advisory Committee and Mandatory denial by Building Official. After reviewing all submitted information pursuant to Section 106A.4.1.4.4, the Director, in his or her sole discretion, may require that the permit application be subject to review by a Structural Advisory Committee, as defined by Building Code Section 105A.6. When subject to such Structural Advisory Committee review, no permits shall be issued unless and until the Building Official has consulted with and received a written communication from representatives of the Department of Planning, Department of Public Works and Fire Department, each of whom has made a visit to the site for which the project is proposed, and the Building Official has received a written report from the Structural Advisory Committee concerning the safety and integrity of the proposed design and construction. As part of its review, the Structural Advisory Committee shall consider the effect that construction activity related to the proposed project will have on the safety and stability of the property subject to the Slope Protection Act and properties within the vicinity of such property.

In the event that the Building Official establishes a Structural Advisory Committee, and such Committee determines that there is a reasonable likelihood that the proposed design and construction would result in unsafe conditions or would increase the likelihood of hillside instability, and such unsafe conditions or instability cannot be mitigated to the satisfaction of the Committee, the Building Official shall deny the permit. The Building Official's decision to deny the permit is appealable only to the Board of Appeals.

106A.4.1.4.6. Regulations to implement the Slope Protection Act. The Building Official is hereby authorized to adopt rules, regulations, administrative bulletins, or other written guidelines to assist the Department in implementing this Section, including, but not limited to, requirements for applicants to demonstrate that a project site is not subject to the Slope Protection Act.
[Added 11-7-2008 by Ord. No. 258-08; effective 12-18-2008]

106A.4.2 Retention of approved construction documents. One set of approved construction documents shall be provided to the party obtaining the permit. The owner shall be responsible for keeping these documents on the building site at all times and making them available for inspection and use by the inspector during such construction until final inspection has been made; failure to do so shall result in stoppage of work. The approved construction documents shall not be changed, modified or altered without authorization from the Building Official; all work shall be done in accordance with these documents.

One set of approved construction documents for all building permits shall be retained by the Department in reproducible form as public records.

106A.4.3 Validity of permit. The issuance of a permit or approval of plans and specifications shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or

of any other applicable laws and regulations. Permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid.

The issuance of a permit based on plans, specifications and other data shall not prevent the Building Official from thereafter requiring the correction of errors in said plans, specifications and other data, or from preventing building operations being carried on thereunder when in violation of this code or other applicable laws and regulations.

106A.4.4 Permit Expiration. Every permit issued by the Building Official under the provisions of this code, unless an extension of time has been specifically approved by the Building Official, shall expire by limitation and become null and void when the time allowed in Table B is reached, or when any of the following circumstances is applicable:

1. For Building Official-initiated code compliance permits, the work shall start within 30 days from the date of such permit.
2. If the building or work authorized is suspended or abandoned at any time after the work has started, for a period as follows:
 - 2.1 Thirty days for Building Official-initiated code compliance permits.
 - 2.2 One-hundred-eighty days for all other permits.
3. An extension of time from the stated periods may be permitted for good reason, provided such requests for an extension are submitted to the Building Official in writing prior to the end of the time period accompanied by payment of a fee. Unless approved by the Building Official, no more than one extension of time may be granted.
 - 3.1 For all other permits, see Table B – Maximum Time Allowed to Complete All Work Authorized by Building Permit. The maximum time allowed for Building Official-initiated code compliance permits shall be 12 months for all permits exceeding \$25,000 total valuation.
4. 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 Building Official, accompanied by payment of a fee. If there is a permit for a replacement structure, the demolition permit shall expire concurrently with the permit for that replacement structure.
5. The Building Official 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 Building Official may reduce the time periods set forth in this section as they apply to a second application and permit required by the Building Official 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 Building Official is hereby authorized to establish alternate procedures and extensions of time from cancellation pursuant to Section 106A.4.1 and from expiration pursuant to this section; provided, however, that the Building Official, in establishing alternate procedures and extension of time, shall proceed as expeditiously as possible toward abatement of the violations.

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.

TABLE B – MAXIMUM TIME ALLOWED TO COMPLETE ALL WORK AUTHORIZED BY BUILDING PERMIT

Valuation	Time Allowed (1)	Extension Limitation
\$1.00 to \$100,000	360 days	360 days
\$100,001 to \$2,499,999	1,080 days	360 days
\$2,500,000 and above	1,440 days	360 days

NOTES:

(1) For site permits with a valuation of \$2,500,000 or more, the time allowed to complete work authorized by the building permit may be increased by 50 percent. For site permits with a valuation less than \$2,500,000, use Table B.

106A.4.4.1 Commencement of work on permit expired due to work not started. Before work can be commenced on an expired permit on which no work was performed, a new application shall be filed and a new permit shall be obtained. If not more than one year has elapsed since the expiration of the original permit, the applicant is eligible for reduced fee on the new permit. See Section 110A- Table 1A-B — Commencement of Work Not Started. All other applicable fees in Section 110A - Table 1A-A or any other table in this code, shall be collected in the full amount. To qualify for the reduced fees, the original approved plans and specifications in the possession of the owner shall be submitted with the new application, together with a notarized certification that there are no changes made on those plans and specifications.

In the event a refund has been granted upon the request of the applicant prior to the commencement of the work, the provisions of this section shall not apply and a new permit shall be applied for and all fees will be required to be paid.

106A.4.4.2 Recommencement of work on permit expired due to work not completed. An alteration permit shall be secured for the work not completed. See Section 110A, Table 1A-F — Specialty Permit Fees — for applicable fee to defray cost of certifying site conditions. The permit fee shall be based upon the valuation of the uncompleted work. When the permit is for completing the work as shown on the original approved plans, no additional plan review fee shall be required.

[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008; 6-29-2009 by Ord. No. 107-09, effective 7-30-2009]

106A.4.5 Suspension or revocation. The building official may, in writing, suspend or revoke a permit issued under the provisions of this code whenever the permit is issued in error or on the basis of incorrect information supplied, or in violation of any ordinance or regulation of any of the provisions of this code.

Any permit issued for which less than the correct permit and plan checking fees were paid shall be considered an invalid permit and shall be suspended until the complete bill of fees has been paid. Failure to pay the correct fees shall be sufficient grounds for denial of a temporary permit of occupancy or a permit of occupancy.

106A.4.6 Notice of permit issuance. Within 24 hours after the issuance of a building permit authorizing the types of work described below, notice of such issuance shall be given in the manner set forth below.

1. For permits to demolish or erect a building or structure, or to move a structure to a new site, the permittee shall obtain from the Department a sign containing the following information: permit number; filing date; address and phone number of the agency to contact for information regarding permit issuance; the date of permit issuance; address and phone of agency to contact to appeal issuance of permit; name, address and phone number of permittee.

For unreinforced masonry buildings, additional information shall be provided, as required by the Building Official.

See Section 110A, Table 1A-L – Public Information – for applicable fee.

The permittee shall cause the sign to be erected on the site of the property to which the application applies.

Location of sign. The sign shall be clearly visible to passing motorists and passing pedestrians. In the case of moved buildings, the sign shall be posted at the site onto which the building is to be moved. The minimum dimensions shall be 30 inches by 30 inches (762 mm x 762 mm), unless the permit relates to a vacant site or a vacant building, in which case the Building Official may require a sign up to 8 feet (2.438 m) wide and 4 feet (1.219 m) high upon a determination that the larger sign will provide better public notice. If a larger sign is required, the permittee shall provide it, and it shall contain the information set forth above. The sign required herein shall be installed as follows: The bottom edge of the sign shall be at least 6 feet (1.829 m) above grade; the face of the sign shall be parallel to the main street frontage and shall be located 5 feet (1.524 m) or less from the street property line; the sign shall be attached to one or more posts substantially embedded into the ground in order to withstand wind or other load factors, or may be attached to an existing front building wall. The background color of the sign shall be white, and the color of the text shall be black; the letter size of the first line shall be a minimum of 8 inches (203.2 mm) high; the size and style of the text shall be such that the message is clear and legible from a distance of 10 feet (3.048 m) to a viewer with normal vision.

Duration of sign posting. The permittee shall cause the sign to be erected within 24 hours after a permit is issued. The sign shall remain posted until either the conclusion of the hearing on the permit before the Board of Appeals or the time for filing such appeal has lapsed without an appeal being filed. Work under a demolition permit shall not begin until 15 days after the date on which the permit is issued.

Revocation for noncompliance. The Building Official shall, after providing the permittee an opportunity to respond to any complaint of noncompliance, revoke any permit where the applicant has not substantially complied with the provisions of this section or Section 106A.3.2.3 requiring notice of permit application and issuance.

The requirements contained in this code relating to notice are not intended to give any right to any person to challenge in any administrative or judicial proceeding any action for which notice is given if

such person would not otherwise have the legal right to do so.

2. For a permit which would authorize a structural addition to an existing building, the Department shall mail written notice to the owners of properties immediately adjacent to the subject building as shown on the current tax roll. See Section 110A, Table 1A-L – Public Information – for applicable fee.

3. For a permit which would authorize the demolition or moving of a building or structure, written notice shall be mailed to the owners of properties within 300 feet (91.44 m) in every direction from the edge of the property on which the proposed demolition work will take place, or from which the building will be moved. Owners notified shall be as shown on the last annual tax roll. Notice to interested organizations or groups shall be made as provided in Section 106A.4 of this code.

4. For changes in occupancy per this code, notice shall be provided as specified in Part III, Section 6 of the San Francisco Municipal Code. See Section 110A, Table 1A-L – Public Information – for applicable fee.

106A.4.7 Additional work, permit required. When an approved permit has been issued, a separate permit for alteration work shall be required for any change in work or additional work as set forth hereafter. The fees for such additional work shall be as set forth in Section 110A, fee tables, based on the difference in the valuation between the changed work and that of the original permit. The valuation shall be not less than \$1. Situations which require a separate permit include the following:

1. Construction differing from the approved construction documents sufficiently to require revised plans or additional plans to be submitted to the Department for approval, including changes in partition layout that impact other code requirements, changes in framing directions, spans, and locations of concentrated loads, and changes in types of materials used. See Section 110A, Table 1A-F – Specialty Permit Fees – for the assessment for this type of additional work.

2. Changes proposed to any building or structure which alter the exterior dimensions more than 6 inches (152.4 mm) either in vertical or horizontal dimension, alter the visual appearance through changes in exterior wall materials or windows, change the number of residential dwelling units or decrease the amount of off-street parking provided.

3. Value of additional work or of changes exceeding 10 percent of the valuation of the approved permit work or \$50,000 whichever is the lesser amount.

4. A change in occupancy or use, as defined in this code.

5. A change in the construction type of any portion of the building.

6. An unusual condition requiring a permit procedure to protect the interest of the public.

A separate alteration permit shall not be required where the change or additional work is required by the Board of Appeals as a condition of approving an appealed permit; however, revised plans and plan review fees, including back check fees, shall be required for any such change or additional work. The Board of Appeals may require, as a condition of approval, that revised plans be submitted to the Board for review.

106A.4.8 Replacement of approved construction documents. When the permit holder's set of approved construction documents is not available as required by Section 106A.4.2, a duplicate set of

documents shall be submitted to the Department along with a notarized certification that such documents are identical to the approved construction documents except for notations by City agencies. The Department shall then copy such notations from its retained set to the duplicate set and shall stamp the duplicate set APPROVED.

See Section 110A, Table 1A-L – Public Information – for applicable fee.

106A.4.9 Preapplication plan review or inspection. When a party wishes to discuss specific design issues or submit preliminary designs for review and comment by the Department prior to formal application for a permit, a request for preapplication plan review must be submitted in writing to the Building Official. See Section 110A, Table 1A-B – Other Building Permit and Plan Review Fees – for applicable fees. Payment of the minimum fee must be submitted with the letter of request.

In cases where on-site discussion with a field inspector is desired, the same request requirements apply. See Section 110A, Table 1A-G – Inspections, Surveys and Reports – for applicable fee. [Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-08]

106A.4.10 Review of mechanical plans. When an application for a permit contains a mechanical component (separate from or in addition to energy conservation design) sufficient in scope or complexity to require review by a mechanical specialist, a fee for this service shall be assessed and is payable before issuance of the permit. See Section 110A, Table 1A-B – Other Building Permit and Plan Review Fees – for applicable fee. [Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008]

106A.4.11 Review of electrical plans. When an application for a permit contains an electrical component (separate from or in addition to energy conservation design) sufficient in scope or complexity to require review by an electrical specialist, a fee for this service shall be assessed and is payable before issuance of the permit. See Section 110A, Table 1A-B – Other Building Permit and Plan Review Fees – for applicable fee. [Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008]

106A.4.12 Review of plumbing plans. When an application for a permit contains a plumbing component sufficient in scope or complexity to require review by a plumbing plan reviewer, a fee for this service shall be assessed and is payable before issuance of the permit. See Section 110A, Table 1A-B – Other Building Permit and Plan Review Fees – for applicable fee. [Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008]

106A.4.13 Premium plan review. At the request of the applicant and upon payment of an additional fee per Table 1A-B – Other Building Permit Application and Plan Review Fees, building permit applications shall be reviewed by the Department of Building Inspection within a guaranteed plan review time set by the Building Official. This building plan review time will be less than normal turnaround times and will be developed on a case-by-case basis depending on the scope of work and the quality of completeness of the submittal documents. At or before the due date of the guaranteed building plan review time, a thorough set of plan review comments and/or corrections will be sent to the applicant for response. Premium Plan Review does not guarantee plan review times during the recheck process, nor building permit approval and issuance. If the Department fails to complete its plan review within the guaranteed plan review time, the additional fee paid shall be refunded to the applicant upon written request by the applicant. This service is offered for plan review by the Department of Building Inspection only and does not commit any other City agencies or departments to the turnaround times. [Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008]

SECTION 107A – FEES

107A.1 General. Fees shall be assessed in accordance with the provisions of this section or shall be as set forth in the fee schedule adopted by the jurisdiction.

107A.1.2 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 State mandated fees and record retention fees. 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 set forth in this chapter.

[Amended 6-29-2009 by Ord. No. 107-09, effective 7-30-2009]

107A.2 Permit Issuance Fees. The minimum permit fee per Section 110A, Table 1A-A – Building Permit Fees – shall be paid at the time an application for a building permit is issued. The New Construction Permit Fee Schedule applies to new buildings or structures. The Alteration Permit Fee Schedule applies to alterations, repairs, additions or other work on an existing building or structure, or to the modification of the scope of an approved permit as required by Section 106A.4.7.

The determination of value or valuation under any of the provisions of this code shall be made by the Building Official. The value to be used in computing the permit issuance and plan review fees shall be the final valuation upon completion of all construction work for which the permit is issued, as well as all finish work, painting, roofing, mechanical, electrical, plumbing, heating, air conditioning, elevators, fire-extinguishing systems and all other permanently installed equipment and construction, even though other permits to perform such work may be required.

The valuation shall be calculated at the time of permit issuance according to a cost schedule posted in the office of the Department or by actual construction cost, whichever is greater. The valuation shall be recalculated at the time of any addenda and/or revision issuance. Any additional fees due resulting from the recalculation of valuation shall be paid prior to addenda and/or revision issuance. The cost schedule shall be adjusted annually based on construction cost data reported by Marshall and Swift, Valuation Engineers. Contractor overhead and profit shall be reflected in the schedule. The Building Inspection Commission is authorized to waive the annual cost schedule adjustment if it determines that increasing the fees will exceed the cost of providing the services for which the fees are paid.

[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008]

107A.3 Plan Review Fees.

(a) When submittal documents are required by Section 106A.3.2, a plan review fee shall be paid at the time of filing an application for a permit for which plans are required pursuant to Section 106A.3.2. Said plan review fee shall be based on the valuation determined by Section 107A.1. See Section 110A, Table 1A-A – Building Permit Fees – for applicable fee.

The plan review fees specified in this section are separate fees from the permit issuance fees specified in Section 107A.2 and are in addition to the permit fees.

When submittal documents are incomplete or changed so as to require additional plan review or when the project involves deferred submittal items as defined in Section 106A.3.4.2, an additional plan

review fee shall be charged as shown in Section 110A, Table 1A-B – Other Building Permit and Plan Review Fees.

(b) If a project involves voluntary seismic retrofit upgrades to soft-story, wood-frame buildings, as defined by the Building Official, the applicant for said project shall be exempt from the proportionate share of plan review fees specified under this Chapter that is related to such retrofit work, provided all permit conditions and timelines are met.

[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008; 3-19-2010 by Ord. No. 54-10, effective 4-18-2010]

107A.3.1 Reduced plan review fee. A reduced plan review fee shall be collected for reviewing submittal documents identical to those filed within one year of the original approved construction documents for which the full plan review fee was paid. For this purpose, plans may be considered identical when they contain only such minor differences as exterior finishes, or if they are identical but opposite hand. See Section 110A, Table 1A-B – Other Building Permit and Plan Review Fees – for the second and each subsequent set of identical submittal documents within the stated time period. To obtain this reduction, the applicant shall submit a copy of the original approved construction documents for which the full plan review fee was paid.

When the submittal documents are substantially changed from those that were previously approved, an additional full plan review fee shall be charged. See Section 110A, Table 1A-B – Other Building Permit and Plan Review Fees – for applicable fee.

[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008]

107A.3.2 Tenant improvement work. An application for tenant improvement work shall state at the time of filing whether the permit is to include the partition and other improvement work for the entire building. If this work is not to be included, the valuation shall be reduced accordingly. The installation of such work shall then require permits for alteration work, the fees for which shall be in accordance with Section 110A, Table 1A-A – Building Permit Fees.

107A.3.3 Improvement Work. When the application is for first-time improvement work in a new building and the valuation of such work was included in the valuation of the original building permit, the valuation for each alteration permit for part or all of such work shall be shown as \$500, and the permit fee shall be collected accordingly.

107A.3.4 Site Permit and Addenda Fees. The permit fee for projects submitted under the site permit and addenda process shall be based on Section 110A, Table 1A-A – Building Permit Fees and additional fees as stated in Table 1A-B – Other Building Permit and Plan Review Fees. Twenty-five percent of the plan review fee shall be paid at the time of site permit application submittal, and shall be credited toward the final plan review fee payment at the time of the first construction addendum submittal as determined by the Building Official. One hundred percent of the permit issuance fee shall be paid at the time of the first construction addendum issuance as determined by the Building Official.

[Added 7-18-2008 by Ord. No. 122-08, effective 8-18-2008; 6-29-2009 by Ord. No. 107-09, effective 7-30-2009]

107A.4 Expiration of Plan Review. (See Section 106A.3.7.)

[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008]

107A.5 Investigation Fees: Work Without a Permit. Whenever any work, for which a permit is required under the provisions of this code, has been started without a permit and where no specific

additional fees are imposed as penalties as provided in this chapter, a special investigation shall be made before a permit may be issued for such work. See Section 110A, Table 1A-K – Penalties, Hearings, Code Enforcement Assessments – for applicable fee. Where only a portion of the work has been commenced without a permit, the investigation fee shall be based upon the portion of the work done without a permit. The cost of any penalty for any work done, in conjunction with the investigation fee, shall be borne by the owner.

The owner or owner’s agent may appeal the amount of the investigation fee if they can provide just cause, such as unfamiliarity with this code or demonstrable negligence on the part of one of their employees.

Appeals of such investigation fee shall be filed with the Board of Appeals in the manner provided in Part III of the San Francisco Municipal Code. Such filing shall be subject to the fees and rules of the Board of Appeals. The Board of Appeals, in re-viewing the appeal of the investigation fee assessed for doing work without a permit, may reduce the amount of said fee, but in no case shall such reduced investigation fee be less than two times the amount of the permit fee as called for in Section 110A, Table 1A-A – Building Permit Fees – of this code.

EXCEPTION: For non-residential uses the Building Official may reduce the investigation fee to two times the amount of the permit fee as called for in Section 110A, Table 1A-A – Building Permit Fees – of this code for work that was constructed prior to the current building ownership, provided that substantiating documentation is provided.

107A.6 Fee Refunds. When no work has been done and the project has been abandoned or the permit expired per Section 106A.4.4, by limitation, a portion of the building issuance fee paid shall be refunded upon written request of the owner when such request is made within six months of permit expiration. See Section 110A, Table 1A-R – Refunds – for applicable refund.
[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008; 6-29-2009 by Ord. No. 107-09, effective 7-30-2009]

107A.6.1 Plan review fees. When an application is withdrawn, the plan review fee paid may be partially refunded upon written request in the case no site inspection had been made by Department personnel, and plan review had not started within any division of the Department. See Section 110A, Table 1A-R – Refunds – for applicable refund. For other cases, the amount of refund, if any, shall be determined by the Building Official, based on the amount of permit processing work already completed on the application at the time it was withdrawn. Requests for refunds must be made within 30 days of withdrawal by the applicant to the Building Official.
[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-08]

107A.6.2 Fees in error. If the Building Official determines that an error has been made in the assessment of fees, a refund for the portion determined to be in error may be made upon written request by the applicant. See Section 110A, Table 1A-R – Refunds – for applicable refund.

107A.7 Strong Motion Instrumentation Program Fee. Pursuant to the provisions of Section 2705 of the Public Resources Code of the State of California, a fee shall be assessed for all building permits except demolitions. See Section 110A, Table 1A-F – Specialty Permit Fees – for applicable fee. All such fees collected shall be handled in accordance with the provisions of Section 2706 of said Public Resources Code.
[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008]

107A.7.1 Strong Motion Revolving Fund. That portion of the strong motion instrumentation fee retained by the Department as provided for in Section 2705 of the Public Resources Code of the State of California shall be deposited into a special Strong Motion Revolving Fund established by the City Controller. Funds from this revolving fund shall be used, subject to the approval of the Building Official and the Building Inspection Commission, to defray personnel and equipment costs incurred in carrying out the State mandate. The Strong Motion Revolving Fund shall continue from year to year, and shall not be included in the Cash Reserve Fund.

107A.7.2 California Building Standards Commission Administration Fee. Pursuant to the provisions of California Health and Safety Code Sections 18930.5, 18931.6, 18931.7 and 18938.39 relating to building materials, cities and counties are required to assess a fee for all building permits. See Section 110A, Table 1A-J for applicable fee. All such fees shall be handled in accordance with the provisions of Section 18931.7 of said Health and Safety Code.
[Added 6-29-2009 by Ord. No. 107-09, effective 7-30-2009]

107A. 7.2A California Building Standards Commission Fund. That portion of the fee assessed pursuant to Section 107A.7.2 relating to building materials that is retained by the Department of Building Inspection shall be deposited into the California Building Standards Commission Fund established by the City Controller. Funds from this category 2 fund shall be used, subject to the approval of the Building Official and the Building Inspection Commission, for administrative costs and code enforcement education, including but not limited to, certification in the voluntary construction inspector certification program. The California Building Standards Commission Fund shall continue from year to year and shall not be included in the Cash Reserve Fund.
[Added 6-29-2009 by Ord. No. 107-09, effective 7-30-2009]

107A.7.3 Technology Surcharge on Permits. A technology surcharge is hereby established on the cost of permit applications that the Department of Building Inspection processes for all departments and bureaus of the City and County of San Francisco. The surcharge proceeds are to be used solely for the implementation and maintenance of the City-wide Permit and Project Tracking System. The funds shall continue from year to year and shall not be included in the Cash Reserve Fund. See Section 110A, Table 1A-J for the applicable surcharge.
[Added 6-29-2009 by Ord. No. 107-09, effective 7-30-2009]

107A.8 Delinquent Fees/Dishonored Checks. Permits will not be issued to any person having outstanding or delinquent balances or dishonored checks on file with the Department of Building Inspection.

107A.9 Survey. A building survey may be requested when a building inspector's assistance is desired to establish code compliance of existing or proposed construction. See Section 110A, Table 1A-G – Inspections, Surveys and Reports – for applicable fees.
[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008]

107A.10 Building Numbers and Fees. Every person shall obtain an official street number assignment at the time the person files a permit application or establishes a new parcel and shall place the numbers so assigned on the building in such a position that the number is easily visible to approaching emergency vehicles. The numerals shall not be less than 4 inches (101.6 mm) in height with a minimum stroke width of ½ inch (12.7mm) and shall be a contrasting color to the background. All numbers must be made of substantial and permanent material and must be so affixed as not to be easily effaced or removed. Any additional or changed numbers assigned to a building shall be subject to the provisions of this section. See Section 110A, Table 1A-J – Miscellaneous Fees – for applicable fee.

[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008; 6-29-2009 by Ord. No. 107-09, effective 7-30-2009]

107A.11 Fees for Reproduction of Reports, Records and Documents for the Public.

107A.11.1 General. In order to provide for the cost of reproducing inspection reports, records, documents and other material in the Department files for the public, including but not limited to records on microfilm, a fee shall be required, payable in advance. Fees shall be chargeable to all persons, as well as City departments; when such reproduction is in response to subpoenas of records, the attorney requesting such records shall pay the fees. All fees collected shall be deposited into the Building Inspection Fund.

107A.11.2 Reproduction fees. The fees shall be determined based upon the number of pages, type of record, size of microfilm reproduced and the number of copies required. All costs of reproduction shall require the pickup of said reproduced material at the office of the Department unless costs of delivery are provided. The Building Official may make any other rules or regulations necessary to provide for the reproduction of material consistent with the intent of this section. See Section 110A, Table 1A-L – Electrostatic Reproduction – for applicable fees.

107A.12 Fees for Services and Regulatory Functions of the Department. Fees for all services and regulatory functions of the Department as established in various chapters of the San Francisco Municipal Code shall be imposed pursuant to Section 110A et seq.

107A.13 Development Impact and In-Lieu Fees

107A.13.1 Definitions. (a) The following definitions shall govern interpretation of this Section:

- (1) “City” shall mean the City and County of San Francisco.
- (2) “Department” shall mean the Department of Building Inspection.
- (3) “Development fee” shall mean either a development impact fee or an in-lieu fee. It shall not include a fee for service or any time and material charges charged for reviewing or processing permit applications.
- (4) “Development impact fee” shall mean a fee imposed on a development project as a condition of approval by the various departments and agencies of the City and levies against development projects by the San Francisco Unified School District under Section 17620 of the California Education Code and other provisions of State law to mitigate the impacts of increased demand for public services, facilities or housing caused by the development project that may or may not be an impact fee governed by the California Mitigation Fee Act (California Government Code Section 66000 et seq.)
- (5) “Development impact requirement” shall mean a requirement to provide physical improvements, facilities or below market rate housing units imposed on a development project as a condition of approval to mitigate the impacts of increased demand for public services, facilities or housing caused by the development project that may or may not be governed by the California Mitigation Fee Act (California Government Code Section 66000 et seq.).
- (6) “Development project” shall mean a project that is subject to a development impact or in-lieu fee or development impact requirement.
- (7) “First certificate of occupancy” shall mean either a temporary certificate of occupancy or a Certificate of Final Completion and Occupancy as defined in San Francisco Building Code Section 109A, whichever is issued first.
- (8) “First construction document” shall mean the first building permit issued for a development project or, in the case of a site permit, the first building permit addendum issued or other document that authorizes construction of the development project. Construction document

shall not include permits or addenda for demolition, grading, shoring, pile driving, or site preparation work.

- (9) “In-lieu fee” is a fee paid by the project sponsor in lieu of complying with a City requirement that is not a development impact fee within the meaning of the Mitigation Fee Act.
- (10) “Neighborhood Infrastructure Seed Fund” shall mean the fund or funds established by the Controller’s Office for the purpose of collecting the 20 percent pre-paid portion of the development fees intended to fund pre-development work on any neighborhood infrastructure project funded by any of the six neighborhood infrastructure impact development fees listed in Subsection 107A.13.13.1. In addition, third-party grant monies or loans may also be deposited into this fund for the purpose of funding pre-development or capital expenses to accelerate the construction start times of any neighborhood infrastructure project funded by any of the six neighborhood infrastructure impact development fees listed in Subsection 107A.13.13.1.
- (11) “Project sponsor” or “sponsor” shall mean an applicant seeking approval for construction of a development project subject to this Section, such applicant’s successor and assigns, and/or any entity which controls or is under common control with such applicant.
- (12) “Unit” shall mean the Department’s Development Fee Collection Unit.

107A.13.2 Collection by Department. The Department shall be responsible for collecting all development impact and in-lieu fees, including (a) fees levied by the San Francisco Unified School District if the District authorizes collection by the Department, and (b) fees levied by the San Francisco Public Utilities Commission, if the Commission’s General Manager authorizes collection by the Department, deferral of payment of any development fee, and/or resolution of any development fee dispute or appeal in accordance with this Section 107A.13.

107A.13.3 Timing of development fee payments and satisfaction of development impact requirements.

- (a) All development impact or in-lieu fees owed for a development project shall be paid by the project sponsor prior to issuance of the first construction document; provided, however, that the project sponsor may elect to defer payment of said fees under Section 107A.13.3.1.
- (b) Any development impact requirement shall be completed prior to issuance of the first certificate of occupancy for the development project.

107A.13.3. Fee Deferral Program: Development Fee Deferral Surcharge. A project sponsor may elect to defer payment of any development impact or in-lieu fee collected by the Department to a due date prior to issuance by the Department of the first certificate of occupancy; provided, however, that the project sponsor shall pay 15 percent of the total amount of the development fees owed prior to issuance of the first construction document. If a project is subject to one of the six neighborhood infrastructure impact development fees listed in Subsection 107A.13.3. 1.1, the project sponsor shall pay 20 percent of the total amount of the development fees owed prior to issuance of the first construction document. These pre-paid funds shall be deposited as provided in Subsection 107A.13.3.1. 1 below:

- This option to defer payment may be exercised by (1) submitting a deferral request to the Department on a form provided by the Department prior to issuance of the first construction document, and (2) agreeing to pay a Development Fee Deferral Surcharge. This deferral option shall not be available to a project sponsor who paid the fee prior to the operative date of July 1, 2010 and shall expire on July 1, 2013 unless the Board of Supervisors extends it.

107A.13.3.1.1. Deposit of pre-paid portion of deferred development fees. If a development project is not subject to one of the six neighborhood infrastructure impact fees listed below, the pre-paid portion

of the development fees shall be deposited into the appropriate fee account. If there is more than one fee account, the pre-paid portion of the fees shall be apportioned equally.

If a development project is subject to one of the six neighborhood infrastructure impact development fees listed below, the entire 20 percent development fee pre-payment shall be deposited in the appropriate neighborhood infrastructure impact fee account. These pre-paid funds shall be dedicated solely to replenishing the Neighborhood Infrastructure Seed Fund for that specific neighborhood infrastructure impact fee account. In no event shall a neighborhood infrastructure impact fee specific to one Area Plan be mixed with neighborhood infrastructure impact fees specific to a different Area Plan. If the 20 percent development fee pre-payment exceeds the total amount owed for the neighborhood infrastructure impact fee account, the remaining pre-paid portion of the 20 percent development fee pre-payment shall be apportioned equally among the remaining applicable development fees.

The neighborhood infrastructure development fees subject to the 20 percent pre-payment provision of this Subsection 107A.13.3.1.1 are as follows: (1) the Rincon Hill Community Infrastructure Impact Fee, as set forth in Planning Code Section 418.3(b)(1); (2) the Visitacion Valley Community Facilities and Infrastructure Fee, as set forth in Planning Code Section 420.3(b); (3) the Market and Octavia Community Infrastructure Fee, as set forth in Planning Code Section 421.3(b); (4) the Balboa Park Community Infrastructure Impact Fee, as set forth in Planning Code Section 422.3(b); (5) the Eastern Neighborhoods Infrastructure Impact Fee, as set forth in Planning Code Section 423.3(b); and (6) the Van Ness and Market Neighborhood Infrastructure Impact Fee, as set forth in Planning Code Section 424.3(b)(ii).

107A.13.3.2 Payment of development fees; payment and calculation of Development Fee Deferral Surcharge. Except for any pre-paid fees, all deferred development fees remaining unpaid shall be paid in full prior to issuance of the first certificate of occupancy at the end of the deferral period. The Development Fee Deferral Surcharge shall be paid when the deferred fees are paid and shall accrue at the Development Fee Deferral Surcharge Rate.

The Development Fee Deferral Surcharge Rate shall be calculated monthly by the San Francisco Treasurer's Office as a blended interest rate comprised of 50% of the Treasurer's yield on a standard two-year investment and 50% of the Annual Infrastructure Construction Cost Inflation Estimate published by the Office of the City Administrator's Capital Planning Group and approved by the City's Capital Planning Committee consistent with its obligations under Section 409(b) of the San Francisco Planning Code. The Treasurer's yield on a standard two-year investment shall be 60% of the Two-Year U.S. FNMA Sovereign Agency Note Yield-to-Maturity and 40% of the Current Two-Year U.S. Treasury Note Yield-to-Maturity as quoted from the close of business on the last open market day of the month previous to the date when a project sponsor elects to defer the development fees owed on a development project. The annual Infrastructure Construction Cost Inflation Estimate shall be updated by the Office of the City Administrator's Capital Planning Group on an annual basis, in consultation with the Capital Planning Committee, with the goal of establishing a reasonable estimate of construction cost inflation for the next calendar year for a mix of public infrastructure and facilities in San Francisco. The Capital Planning Group may rely on past construction cost inflation data, market trends, and a variety of national, state and local commercial and institutional construction cost inflation indices in developing their annual estimates for San Francisco. The San Francisco Treasurer's Office shall publish the blended rate on its website at the beginning of each month, commencing on March 1, 2010. The accrual of any deferred development fees begins on the first day that a project sponsor elects to defer development fees, but never later than immediately after issuance of the first construction document. The Development Fee Collection Unit shall calculate the final Development Fee Deferral Surcharge by multiplying the total development fees otherwise due

prior to issuance of the construction document by the Development Fee Deferral Surcharge Rate by the actual day count of the entire Development Fee Deferral Period, which shall be the number of days between the project sponsor's election to defer to final payment of the deferred development fees. The Development Fee Deferral Surcharge shall be apportioned among all development fee funds according to the ratio of each development fee as a percentage of the total development fees owed on the specific project.

107A.13.4 Development Fee Collection Unit. There shall be a Development Fee Collection Unit established within the Department. The Unit's duties include: (1) receiving and organizing information from various City agencies concerning the amount of development fees owed or specific development impact requirements imposed under various sections of the San Francisco Municipal Code or other legal authority, (2) working with the project sponsor and relevant agencies to resolve any disputes or questions concerning the development fees or development impact requirements applied to specific development projects, (3) ensuring that the first construction document, or first certificate of occupancy if the project sponsor elects to defer payment, is not issued prior to payment of all development fees that are due and owing, (4) confirming with the Planning Department that any outstanding development impact requirements are satisfied prior to issuance of the first certificate of occupancy for projects subject to such requirements, (5) generating Project Development Fee Reports, (6) processing any development fee refunds, (7) publishing and updating the Citywide Development Fee Register, (8) initiating lien proceedings to collect any unpaid development impact or in-lieu fees, and (9) performing such other duties as the Building Official requires. The fee for the Department's services shall be as provided in Section 107A.13.14.

107A.13.5 Citywide Development Fee Register. The Unit shall publish a Citywide Development Fee Register that lists all current San Francisco development impact and in-lieu fees. The Unit shall update the Register whenever a development impact or in-lieu fee is newly enacted, rescinded or amended. The Unit shall make the Register available to the public upon request, including but not limited to posting it on the Department's website.

107A.13.6 Required City Agency or Department Notice to Development Fee Collection Unit. Prior to issuance of any building or site permit for a project, any department or agency responsible for calculating a development fee collected by the Unit or imposing a development impact requirement shall send written or electronic notification to the Development Fee Collection Unit that (i) identifies the development project, (ii) lists which specific development fees and/or development impact requirements are applicable and the legal authorization for their application, (iii) specifies the amount of the development fee or fees that the department or agency calculates is owed to the City or that the project sponsor has elected to satisfy a development impact requirement through the direct provision of public benefits, and (iv) lists the name and contact information for the staff person at each agency or department responsible for calculating the development fee or monitoring the development impact requirement.

107A.13.7 Project Development Fee Report. Prior to the issuance of the building or site permit for a development project that owes a development fee or fees or is subject to development impact requirements, and at any time thereafter, the Development Fee Collection Unit shall prepare and provide to the project sponsor, or any member of the public upon request, a Project Development Fee Report. The Report shall: (i) identify the development project, (ii) list which specific development fees and/or development impact requirements are applicable and the legal authorization for their application, (iii) specify the amount of the development fee or fees that the department or agency calculates is owed or that the project sponsor has elected to satisfy a development impact requirement through the direct provision of physical improvements, (iv) list the name and contact information for the staff person at each agency or department responsible for calculating the development fee or

monitoring the development impact requirement, and (v) state whether the development fee or fees are due and payable prior to issuance of the first construction document or whether the project sponsor has requested deferral under Section 107A.13.3.1, and note the status of payment. A copy of the Project Development Fee Report shall always be made available to the project sponsor immediately prior to issuance of the site or building permit for a development project subject to any development fee or fees to provide adequate notice of the proposed development fee or fees. The Development Fee Collection Unit shall not issue a Final Development Fee Report and the respective site or building permit for a development project until it has received written confirmation from the First Source Hiring Administration (FHSA) that the project sponsor has executed a first source hiring agreement(s) with the FHSA consistent with Administrative Code Section 83.11.

107A.13.8 Failure to give notice of a development fee owed or development impact requirement. The failure of the Unit or a fee-assessing department or agency to give any notice of a development fee owed or development impact requirement shall not relieve the project sponsor of the obligation to pay the development fee when it is due. The procedure set forth in this Section is not intended to preclude enforcement of the development fee or development impact requirements pursuant to any other section of this Code, the Planning Code or other parts of the Municipal Code or under the laws of the State of California.

107A.13.9 Development fee dispute resolution; appeal to Board of Appeals.

107A.13.9.1 Procedure for resolution by Development Fee Collection Unit. If a dispute or question arises concerning the accuracy of the final Project Development Fee Report, including the mathematical calculation of any development fee listed thereon, the Development Fee Collection Unit shall attempt to resolve it in consultation with the department or agency affected by the disputed fee and the project sponsor. A person protesting the accuracy of the Report must submit the issue or issues in writing to the Unit with a copy to the department or agency whose development fee is in dispute. Any public notice of the issuance of the building or site permit shall notify the public of the right to request a copy of the Project Development Fee Report and of the right of appeal to the Board of Appeals under Section 107A.13.9.2.

107A.13.9.2 Appeal to Board of Appeals.

- (a) If the Development Fee Collection Unit is unable to resolve the dispute or question, the project sponsor or a member of the public may appeal the Project Development Fee Report to the Board of Appeals within 15 days of the issuance of the building or site permit under Article 8 et seq. of the San Francisco Business & Tax Regulations Code.**
- (b) In cases where a project sponsor is not using the site permit process and is required to pay a development fee or fees prior to issuance of the development project's building permit, and chooses not to defer payment under Section 107A.13.3.1, the sponsor may pay a disputed fee under protest and file an appeal within 15 days of the issuance of the permit.**
- (c) In order to appeal to the Board of Appeals under this Section, a project sponsor appellant must first have attempted to resolve the dispute or question by following the procedure in Section 107A.13.9.1. Evidence of this prior attempt must be submitted to the Board of Appeals in order for the Board to accept the appeal. Members of the public may file an appeal under this Section without providing such evidence.**
- (d) Promptly after an appeal has been filed, the Board of Appeals shall notify the department or agency whose development fee or development impact requirement is at issue of the fact that**

an appeal has been filed and the date scheduled for hearing. A representative of the Department of Building Inspection and of the department or agency whose development fee or development impact requirement is in dispute must be present at the appeal hearing.

- (e) In hearing any appeal of the Project Development Fee Report, the Board's jurisdiction is strictly limited to determining whether the mathematical calculation of the development fee or the scope of a development impact requirement is accurate and resolving any technical disputes over the use, occupancy, floor area, unit count and mix, or other objective criteria that calculation of the challenged development fee or development impact requirement is based upon.**
- (f) If a decision by the Board of Appeals requires a refund of all or any portion of the disputed development fee, the refund shall be processed promptly by the Development Fee Collection Unit under Section 107A.13.11. If a decision requires a new determination regarding the scope of a development impact requirement, such new determination shall be made by the relevant City agency or department prior to issuance of the first certificate of occupancy. Where the Board determines that an additional amount of the fee or fees is due and owing, the additional amount shall be paid prior to issuance of the first certificate of occupancy for the development project.**

107A.13.10 Violation of this Section deemed a violation of the Building Code. In addition to the lien proceedings authorized Section 107A.13.14, a violation of this Section 107A.13 shall be deemed a violation of the Building Code and subject to the provisions of Section 103A and any investigation or other fees authorized under other sections of this Code to compensate the Department for the cost of abating violations.

I 07A.13.11 Development fee refunds. Upon notification by the property owner or project sponsor and confirmation by the applicable department or agency that a fee refund is due, the Unit shall process the refund. The fee for processing the refund shall be as set forth in Table 1A-D – Other Building Permit and Plan Review Fees.

107A.13.12 Development fee information a public record. Any notice of development fees due or development impact requirements imposed sent to the Development Collection Unit by any fee-assessing departments and agencies, the Project Development Fee Report issued by the Unit, and any development fee refunds or development impact requirement revisions made are a matter of public record.

107A.13.13 Administrative fee. The fee for services provided by the Department under this Section 107A.13 shall be the Standard Hourly Rate for Administration set forth in Table 1A-D of this Code. The administrative fee is payable within 30 days' of the Department's notice that payment is due.

107A.13.14 Administrative procedures. The Building Official is empowered to adopt such administrative procedures as he or she deems necessary to implement this Section. Such administrative procedures shall be generally consistent with the procedural requirements set forth in this Section 107A.

107A.13.15 Wrongful Issuance of First Construction Document or Certificate of Occupancy; assessment lien; notice. In addition to any other remedy established in this Code or under other authority under the laws of the State of California, if DBI inadvertently or mistakenly issues the first construction document or first certificate of occupancy, whichever applies, for a development project

that has not paid a development fee that is due and owing and payment has not been received within 30 days following notice that payment is due, or, in the case where a sponsor has elected to satisfy a development impact requirement through direct provision of physical improvements and where non-compliance with any such requirement is not corrected within 30 days following notice, the Department shall initiate proceedings in accordance with Article XX of Chapter 10 of the San Francisco Administrative Code to make the entire unpaid balance of the fee that is due, including interest at the rate of one and one-half percent per month or fraction thereof on the amount of unpaid fee, a lien against all parcels used for the development project. The penalty fee provisions of this section shall also apply to projects that have elected to provide physical improvements in lieu of paying a development fee, as if they had elected to pay the relevant development fee.

The Department shall send all notices required by Article XX to the owner or owners of the property and to the project sponsor if different from the owner. The Department shall also prepare a preliminary report, and notify the owner and sponsor of a hearing by the Board of Supervisors to confirm such report at least ten days before the date of the hearing. The report shall contain the owner and sponsor's names, a description of the development project, a description of the parcels of real property to be encumbered as set forth in the Assessor's Map Books for the current year, a description of the alleged violation of this Section, and shall fix a time, date, and place for hearing. The Department shall mail this report to the sponsor and each owner of record of the parcels of real property subject to the lien.

Any notice required to be given to an owner or sponsor shall be sufficiently given or served upon the owner or sponsor for all purposes in this Section if personally served upon the owner or sponsor or if deposited, postage prepaid, in post office letterbox addressed to the owner or sponsor at the official address of the owner or sponsor maintained by the Tax Collector for the mailing of tax bills or, if no such address is available, to the sponsor at the address of the development project, and to the applicant for the site or building permit at the address on the permit application.

Except for the release of the lien recording fee authorized by Administrative Code Section 10.237, all sums collected by the Tax Collector under this Section shall be held in trust by the Treasurer and deposited in the City's appropriate fee account.

SECTION 108A – INSPECTIONS

108A.1 General. All construction or work for which a permit is required shall be subject to inspection by the building official, and all such construction or work shall remain accessible and exposed for inspection purposes until approved by the building official. In addition, certain types of construction shall have continuous inspection by special inspectors as specified in Section 1701.

Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the jurisdiction shall not be valid.

It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the building official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection. In the absence of evidence as to the proper location of the lot on which a building is to be erected, for which a building permit has been or may be issued, the Building Official may require the owner to have the lot surveyed and staked by a registered land surveyor, or registered civil engineer, so that the

proper location of the building on the lot may be determined. A copy of this survey shall be filed with the application for the permit.

108A.2 Inspection Record Card. Any work requiring a permit shall not begin until the permit holder or the permit holder's agent posts an inspection record "Job Card," on the site. This card shall be issued at the time of permit issuance by the Department. The card must be posted in a conspicuous, readily accessible location to allow inspectors to make necessary entries; it must remain on the job site until a final inspection of all work stated in that permit has been completed. After final inspection, the card may be removed and retained as part of the building owner's record.

108A.3 Inspection Requests. It shall be the duty of the person doing the work authorized by a permit to notify the building official that such work is ready for inspection. The building official may require that every request for inspection be filed at least one working day before such inspection is desired. Such request may be in writing or by telephone at the option of the building official.

It shall be the duty of the person requesting any inspections required by this code to provide access to and means for inspections of such work.

108A.3.1 Off-hour inspections. Those desiring inspections outside normal business hours (7:30 a.m. to 4:00 p.m., Monday through Friday, excluding legal holidays) may avail themselves of this service by prior arrangement and prepayment. See Section 110A, Table 1A-G – Inspections, Surveys and Reports – for applicable fee.

[Amended 6-29-2009 by Ord. No. 107-09, effective 7-30-2009]

108A.3.2 Permits by other departments. Those applying for permits issued by other City departments which require an inspection, certification or report by the Department as a condition of issuance of said permits shall apply to the Department for said inspection, certification or report and pay a fee at the Department of Building Inspection. See Section 110A, Table 1A-G – Inspections, Surveys and Reports – for applicable fee.

108A.4 Approval Required. No work shall be done on any part of the building or structure beyond the point indicated in each successive inspection without first obtaining the approval of the Building Official. Such approval shall be given only after an inspection shall have been made of each successive step in the construction as indicated by each of the inspections required in Section 108A.5. Any portions which do not comply with the provisions of this code and with the approved construction documents shall be corrected, and no such portion shall be covered or concealed until approved.

108A.5. Required Inspections.

108A.5.1 General. The structural framework of any part of any building or structure shall not be covered or concealed without first obtaining the approval of the building official.

Protection of joints and penetrations in fire-resistive assemblies shall not be concealed from view until inspected and approved.

108A.5.2 Foundation inspection. Inspection shall be made after excavations for footings is complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to inspection. All materials for the foundation shall be on the job site; however, where concrete is ready mixed in accordance with approved nationally recognized standards, the concrete need not be on the job site. Where the foundation is to be constructed of approved treated wood, additional inspections may be required by the building official.

108A.5.3 Concrete slab or under-floor inspection. Inspection shall be made after all in-slab or under-floor reinforcing steel building service equipment, conduit, piping accessories and other ancillary equipment items are installed, before any concrete is placed or floor sheathing installed, including the subfloor.

108A.5.4 Reinforcing steel. Inspection shall be made when reinforcing steel is in place in walls, floor and roof framing and other concrete members, and before any concrete is poured or placed. All reinforcing steel shall be visible for inspection.

108A.5.5 Structural steel. Inspection shall be made when structural steel framework, or any structural steel member of a building, is in place and before being covered or concealed in any manner.

108A.5.6 Frame inspection. Inspection shall be made after the roof, roof deck or sheathing, all framing, fire blocking and bracing are in place and all conduits, plumbing pipes, chimneys and vents to be concealed are complete and the rough electrical, plumbing, and heating wires, conduits, plumbing pipes and ducts are approved.

108A.5.7 Lath or gypsum board inspection. Inspection shall be made after all lathing and gypsum board, interior and exterior, are in place, but before any plastering is applied or before gypsum board joints and fasteners are taped and finished.

108A.5.8 Fire-rated suspended ceilings. Inspection shall be made after the installation of the hangers, lighting fixtures and air diffusers, the protective fixture boxes and main suspended ceiling members and before the ceiling is installed.

108A.5.9 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 109A for certificate of occupancy requirements.

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

108A.6 Special Inspections. For special inspections, see Chapter 17.

108A.7 Other Inspections. In addition to the called inspections specified above, the building official may make or require other inspections of any construction work to ascertain compliance with the provisions of this code and other laws which are enforced by the code enforcement agency.

108A.7.1 Concealed work. Whenever any work for which called inspections are required is covered or concealed without inspection, or whenever work is performed and concealed without a permit, and in cases where it is necessary to determine if the building or parts thereof are considered unsafe due to any of the conditions as set forth in Section 102A, the Building Official may require that such work be exposed for examination. The work of exposing or recovering or reconstructing such portions of the building or structure shall not entail expense to the City and County of San Francisco or any of its officials or employees, but shall be at the expense of the owner.

108A.8 Reinspection. A reinspection fee shall be assessed for each inspection or reinspection made necessary by any of the following conditions:

1. When such portion of work for which inspection is called is not complete.
2. When corrections called for are not made.
3. When the inspection record “Job Card” is not properly posted on the work site.
4. When the approved plans are not readily available to the inspector.
5. For failure to provide access on the date for which inspection is requested.
6. For deviating from plans requiring the approval of the Building Official.

The first reinspection for failure to comply with requirements shall not be assessed a reinspection fee. All subsequent reinspections on a job for the same or subsequent errors or omissions shall be charged a reinspection fee.

Subsequent to inspector determination of reinspection fee requirements, no required or requested inspections shall be made nor shall the job be given a Certificate of Final Completion and Occupancy or final approval until the required fees are paid at the Central Permit Bureau. See Section 110A, Table 1A-G – Inspections, Surveys and Reports – for applicable fee.

SECTION 109A – CERTIFICATE OF OCCUPANCY; AMENDED CERTIFICATE OF OCCUPANCY FOR EXISTING BUILDING

109A.1 Use and Occupancy. No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made until the building official has issued a certificate of final completion and occupancy or an amended certificate of final completion and occupancy therefor as provided herein, or otherwise has been approved for use by the Department of Building Inspection.

Issuance of a certificate of final completion and occupancy or an amended certificate of final completion and occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Certificates presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. It shall be the duty of the Police Department, when called upon by the Building Official, to enforce this provision. [Amended 6-26-2009 by Ord. No. 103-09, effective 7-27-2009]

109A.2 Change in Occupancy or Use. Changes in the character or use of a building shall not be made except as specified in Section 3406 of this code.

A Certificate of Final Completion and Occupancy shall be required for changes in use or occupancy as set forth in Section 3406, except for Group R-1 and R-2 Occupancies; Group R-1 and R-2 Occupancies shall be subject to the requirements of Sections 109A.7 and 109A.8.

109A.3 Certificate Issued. The Building Official shall issue Certificates of Final Completion and Occupancy for buildings or structures erected or enlarged; for each change in occupancy classification in any building, structure or portion thereof; and for buildings or structures seismically upgraded in accordance with the provisions of this code. An Amended Certificate of Final Completion and Occupancy shall be issued for an existing building where there is an increase in the number of legal

dwelling units resulting in a change of occupancy. The Amended Certificate of Occupancy shall indicate the date the first certificate of occupancy and any subsequent certificates of occupancy for the building or structure were issued. If there is no original certificate of occupancy, the Amended Certificate of Occupancy shall refer to the date of initial construction on file in the records of the Department. The provisions of this section shall not be available for use in RH-1 or RH-1(D) zoning districts, nor shall it apply to any residential dwelling that is inconsistent with existing law.

EXCEPTION: For Group R-1 and R-2 Occupancies, see Sections 109A.7 and 109A.8.
[Amended 6-26-2009 by Ord. No. 103-09, effective 7-27-2009]

109A.4 Temporary Certificate. Temporary Certificates of Occupancy may be issued if the Building Official finds that no substantial hazard will result from occupancy of any building, or portion thereof, before the same is completed and satisfactory evidence is submitted that the work could not have been completed prior to occupancy. The request for such temporary certificate shall be in writing, and no occupancy of the building shall be made until such certificate is issued. Such temporary certificate shall be valid for a period not to exceed 12 months, unless an extension of time is approved by the Building Official. See Section 110A, Table 1A-G – Inspections, Surveys and Reports – for applicable fee.

109A.5 Posting. No requirements.

109A.6 Revocation. The building official may, in writing, suspend or revoke a certificate of occupancy or an amended certificate of occupancy issued under the provisions of this code whenever the certificate is issued in error, or on the basis of incorrect information supplied, or when it is determined that the building or structure or portion thereof is in violation of any ordinance or regulation or any of the provisions of this code.

[Amended 6-26-2009 by Ord. No. 103-09, effective 7-27-2009]

109A.7 Certificate or Amended Certificate of Final Completion and Occupancy, Group R-1 and R-2 Occupancy. Before the Department may issue a Certificate of Final Completion and Occupancy for a newly-erected building or structure, an Amended Certificate of Final Completion and Occupancy for an existing building pursuant to Section 109A.3, or Apartment House / Hotel License, a written report of compliance with applicable codes, standards and regulations and any conditions of approval to the building, structure or property shall be obtained from those agencies having jurisdiction. An Amended Certificate of Final Completion and Occupancy issued for changes to an existing building shall indicate the date the first certificate of occupancy and any subsequent certificates of occupancy for the building or structure were issued. If there is no original certificate of occupancy, the Amended Certificate of Occupancy shall refer to the date of initial construction on file in the records of the Department.

Where any permit for the building, structure or property was appealed to the Board of Appeals and the Board imposed conditions on appeal, the Department may not issue a Certificate of Final Completion and Occupancy, an Amended Certificate of Final Completion and Occupancy, or Apartment House / Hotel License until it determines that the conditions have been met. A copy of the Certificate of Final Completion and Occupancy or Amended Certificate of Final Completion and Occupancy shall be forwarded to the Board of Appeals.

[Amended 6-26-2009 by Ord. No. 103-09, effective 7-27-2009]

109A.8 Group R-1 and R-2 Occupancy, Apartment House / Hotel License. A license shall be required for every Group R-1 and R-2 Occupancy structure. The license shall be obtained by paying the necessary fees as set forth in Section 110A, Table 1A-P – Apartment House and Hotel License Fees.

The Apartment House / Hotel License is not transferable, and a new license must be applied for by the new owner within 30 days of change of ownership.

The Apartment House / Hotel License shall not be construed as authority to violate, cancel, alter or set aside any of the provisions or requirements of any laws or ordinances of the City and County of San Francisco, nor shall such issuance thereafter prevent requiring corrections of errors or of violations of any applicable law or ordinance of the City and County of San Francisco.

SECTION 110A. SCHEDULE OF FEE TABLES.

SCHEDULE OF FEE TABLES:

- 1A-A Building Permit Fees**
- 1A-B Other Building Permit and Plan Review Fees**
- 1A-C Plumbing/Mechanical Permit Issuance and Inspection Fees**
- 1A-D Standard Hourly Rates**
- 1A-E Electrical Permit Issuance and Inspection Fee Schedule**
- 1A-F Specialty Permit Fees**
 - 1. Bleachers Permit Fee Table**
 - 2. Chimney and Flue Permits**
 - 3. Demolition Permit Fee Table**
 - 4. Extra Permit Work**
 - 5. Garage Door Permits**
 - 6. Grading Permits**
 - 7. House Moving Permit Fee**
 - 8. Recommencement of Work Not Completed**
 - 9. Reroofing Permits**
 - 10. Strong Motion Instrumentation Program Fee**
 - 11. Subsidewalk Construction**
 - 12. Construction of Impervious Surface in Front Yard Setback Area**
- 1A-G Inspections, Surveys and Reports**
 - 1. Standard Inspection Fee**
 - 2. Off-Hours Inspection**
 - 3. Pre-Application Inspection**
 - 4. Reinspection Fee**
 - 5. Report of Residential Records (3R)**
 - 6. Survey of Nonresidential Buildings**
 - 7. Survey of Residential Buildings For Any Purpose or Condominium Conversion**
 - 8. Temporary Certificate of Occupancy**
- 1A-H Sign Permit Fees**
- 1A-I Reserved**
- 1A-J Miscellaneous Fees**
 - 1. Building Numbers**
 - 2. Extension of Time: Application Cancellation and Permit Expiration**
 - 3. Product Approvals**
- 1A-K Penalties, Hearings, Code Enforcement Assessments**
 - 1. Abatement Appeals Board Hearing, Filing Fee**
 - 2. Board of Examiners Filing Fees**
 - 3. Building Official's Abatement Orders**
 - 4. Emergency Order**
 - 5. Exceeding the Scope of the Approved Permit**
 - 6. Access Appeals Commission Filing Fee**
 - 7. Lien Recordation Charges**
 - 8. Work without Permit: Investigation Fee; Penalty**
 - 9. Building Commission Hearing Fees**
 - 10. Additional Hearings required by Code**
- 1A-L Public Information**
 - 1. Public Notification and Record Keeping Fees**
 - 2. Demolition**

- 3. **Notices**
- 4. **Reproduction and Dissemination of Public Information**
- 5. **Replacement of Approved Plans/Specifications**
- 6. **Records Retention Fee**
- 1A-M **Boiler Fees**
- 1A-N **Energy Conservation**
- 1A-O **Reserved**
- 1A-P **Apartment House and Hotel License Fees**
- 1A-Q **Hotel Conversion Ordinance Fees**
- 1A-R **Refunds**
- 1A-S **Unreinforced Masonry Building Retrofit**

SECTION 110A – SCHEDULE OF FEE TABLES

TABLE 1A-A – BUILDING PERMIT FEES

	NEW CONSTRUCTION ¹		ALTERATIONS ^{1,2}		NO PLANS ^{1,2}
TOTAL VALUATION	PLAN REVIEW FEE	PERMIT ISSUANCE FEE	PLAN REVIEW FEE	PERMIT ISSUANCE FEE	PERMIT ISSUANCE FEE
\$1.00 To \$2,000.00	\$141.17 for the First \$500.00 plus \$5.83 for each additional \$100.00 or fraction thereof, to and including \$2,000.00	\$60.50 for the First \$500.00 plus \$2.50 for each additional \$100.00 or fraction thereof, to and including \$2,000.00	\$155.75 for the First \$500.00 plus \$3.15 for each additional \$100.00 or fraction thereof, to and including \$2,000.00	\$66.75 for the First \$500.00 plus \$1.35 for each additional \$100.00 or fraction thereof, to and including \$2,000.00	\$180.00 for the First \$500.00 plus \$4.00 for each additional \$100.00 or fraction thereof, to and including \$2,000.00
\$2,001.00 To \$50,000.00	\$228.62 for the First \$2,000.00 plus \$14.00 for each additional \$1,000.00 or fraction thereof, to and including \$50,000.00	\$98.00 for the First \$2,000.00 plus \$6.00 for each additional \$1,000.00 or fraction thereof, to and including \$50,000.00	\$203.00 for the First \$2,000.00 plus \$19.11 for each additional \$1,000.00 or fraction thereof, to and including \$50,000.00	\$87.00 for the First \$2,000.00 plus \$8.19 for each additional \$1,000.00 or fraction thereof, to and including \$50,000.00	\$240.00 for the First \$2,000.00 plus \$5.83 for each additional \$1,000.00 or fraction thereof, to and including \$50,000.00
\$50,001.00 To \$200,000.00	\$900.62 for the First \$50,000.00 plus \$9.33 for each additional \$1000.00 or fraction thereof, to and including \$200,000.00	\$386.00 for the First \$50,000.00 plus \$4.00 for each additional \$1000.00 or fraction thereof, to and including \$200,000.00	\$1,120.28 for the First \$50,000.00 plus \$11.43 for each additional \$1000.00 or fraction thereof, to and including \$200,000.00	\$480.12 for the First \$50,000.00 plus \$4.90 for each additional \$1000.00 or fraction thereof, to and including \$200,000.00	\$519.84 for the First \$50,000.00 plus \$2.86 for each additional \$1000.00 or fraction thereof, to and including \$200,000.00
\$200,001.00 To \$500,000.00	\$2,300.12 for the First \$200,000.00 plus \$6.53 for each additional \$1000.00 or fraction thereof, to and including \$500,000.00	\$986.00 for the First \$200,000.00 plus \$2.80 for each additional \$1000.00 or fraction thereof, to and including \$500,000.00	\$2,834.78 for the First \$200,000.00 plus \$9.33 for each additional \$1000.00 or fraction thereof, to and including \$500,000.00	\$1,215.12 for the First \$200,000.00 plus \$4.00 for each additional \$1000.00 or fraction thereof, to and including \$500,000.00	N/A

	NEW CONSTRUCTION ¹		ALTERATIONS ^{1,2}		NO PLANS ^{1,2}
TOTAL VALUATION	PLAN REVIEW FEE	PERMIT ISSUANCE FEE	PLAN REVIEW FEE	PERMIT ISSUANCE FEE	PERMIT ISSUANCE FEE
\$500,001.00 To \$1,000,000.00	\$4,259.12 for the First \$500,000.00 plus \$5.83 for each additional \$1,000.00 or fraction thereof, to and including \$1,000,000.00	\$1,826.00 for the First \$500,000.00 plus \$2.50 for each additional \$1,000.00 or fraction thereof, to and including \$1,000,000.00	\$5,633.78 for the First \$500,000.00 plus \$6.42 for each additional \$1,000.00 or fraction thereof, to and including \$1,000,000.00	\$2,415.12 for the First \$500,000.00 plus \$2.75 for each additional \$1,000.00 or fraction thereof, to and including \$1,000,000.00	N/A
\$1,000,001.00 To \$5,000,000.00	\$7,174.12 for the First \$1,000,000.00 plus \$5.13 for each additional \$1,000.00 or fraction thereof, to and including \$1,000,000.00	\$3,076.00 for the First \$1,000,000.00 plus \$2.20 for each additional \$1,000.00 or fraction thereof, to and including \$1,000,000.00	\$8,843.78 for the First \$1,000,000.00 plus \$5.83 for each additional \$1,000.00 or fraction thereof, to and including \$1,000,000.00	\$3,790.12 for the First \$1,000,000.00 plus \$2.50 for each additional \$1,000.00 or fraction thereof, to and including \$1,000,000.00	N/A
\$5,000,001.00 And Up	\$27,694.12 for the First \$5,000,000.00 plus \$4.90 for each additional \$1,000.00 or fraction hereof	\$11876.00 for the First \$5,000,000.00 plus \$2.10 for each additional \$1,000.00 or fraction thereof	\$32,163.78 for the First \$5,000,000.00 plus \$5.48 for each additional \$1,000.00 or fraction thereof	\$13,790.12 for the First \$5,000,000.00 plus \$2.35 for each additional \$1,000.00 or fraction thereof	N/A

NOTES:

1. These permit fees do not include other fees that may be required by other Departments: Public Works, Planning, Fire, Public Health, etc., nor do they include plumbing, electrical or mechanical permit fees unless so stated in the other fee tables.

2. A surcharge of \$5.00 shall be added to those alteration permits sought for buildings classified as R3 (one/two-family dwelling) and E3 (licensed day care) that were constructed prior to 1979 to implement the interior lead safe work practices provisions of Section 3425 et seq. of this code.

TABLE 1A-B – OTHER BUILDING PERMIT AND PLAN REVIEW FEES

1. Plan Review Fees Not Covered in Table 1A-A:	Plan Review Hourly Rate - Minimum One Hour
2. Back Check Fee:	Plan Review Hourly Rate - Minimum One Hour
3. Commencement of work not started:	See SFBC Section 106A.4.4.1 Note: Compliance with additional codes is required.
a. Building, Plumbing, Mechanical, or Electric Permit Fee:	75% of current fee
b. Plan Review Fee:	100% of current fee
4. Permit Facilitator Fee:	Plan Review Hourly Rate Hourly - Minimum Three Hours See SFBC Section 106A.3.6
5. Pre-application Plan Review Fee:	Plan Review Hourly Rate - Minimum Two Hours Per Employee
6. Reduced Plan Review Fee:	50% of the Plan Review Fee
7. Sign Plan Review Fee:	See Table 1A-A – Building Permit Fees
8. Site Permit Fee:	25% of Plan Review Fee based on Table 1A-A. Minimum fee \$500.00
9. Premium Plan Review Fee – Submitted application:	50% of Plan Review Fee plus \$1,000.00
10. Premium Plan Review Fee – Over the counter building plan review by appointment:	50% of Plan Review Fee plus \$400.00
11. Other Services:	Hourly Rates per Table 1A-D

NOTES:

- 1. See Table 1A-D-Standard Hourly Rates.**
- 2. “Back check” is defined as: (1) that time spent reviewing applicant-initiated revisions to plans that do not effect the valuation, scope or size of the project; or (2) any additional plan review performed on required corrections to plans beyond the standard review process, as determined by the Building Official. Plan review required for applicant-initiated revisions effecting valuation, scope, or size or project may be assessed a new plan review fee in addition to the initial plan review fee as determined by the Building Official.**

[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-08]

TABLE 1A-C – PLUMBING/MECHANICAL PERMIT ISSUANCE AND INSPECTION FEES

- A. Permit applicants shall show a complete itemization of the proposed scope of work and select the appropriate fee category**
- B. A separate permit is required for each structure, condominium unit, existing apartment unit, high-rise office floor, suite, or tenant space**
- C. Standard hourly issuance/inspection rates will apply for installations not covered by the fee categories below**
- D. Fees shall be paid in full prior to approval for occupancy, job card signature, gas tags, or final signoff, as applicable.**
- E. See Table 1A-R for refund policy**

1. Permit Issuance Fees by Category:

CATEGORY 1P	Single Residential Unit – water service, sewer replacement, single plumbing fixture installation, shower pan installation, or kitchen or bathroom remodels	\$160.00
CATEGORY 1M	Single Residential Unit – mechanical gas appliance (furnace, hydronic heat, heat pump)	\$150.00
CATEGORY 2PA	Plumbing installation for residential construction with 6 or less dwelling units or guest rooms; without underground plumbing installation (includes water, gas, waste, and vent)	\$275.00
CATEGORY 2PB	Plumbing installation for residential construction with 6 dwelling units or guest rooms or less; with underground plumbing installation (includes water, gas, waste, and vent)	\$400.00
CATEGORY 2M	Mechanical gas appliances for residential construction with 6 dwelling units or guest rooms or less	\$240.00
CATEGORY 3PA	7 – 12 Dwelling Units	\$575.00
CATEGORY 3PB	13 – 36 Dwelling Units	\$1,150.00
CATEGORY 3PC	Over 36 Dwelling Units	\$4,800.00
CATEGORY 3MA	7 – 12 Dwelling Units	\$575.00
CATEGORY 3MB	13 – 36 Dwelling Units	\$1,150.00
CATEGORY 3MC	Over 36 Dwelling Units	\$4,800.00
CATEGORY 4PA	Fire sprinklers – one and two family dwelling units	\$150.00

CATEGORY 4PB	Fire sprinklers – 3 or more dwelling units or guest rooms, commercial and office – per floor	\$250.00
CATEGORY 5P/5M	Office, mercantile & retail buildings: New or Tenant Improvements; heating/cooling equipment to piping connected thereto – per tenant or per floor, whichever is less	\$325.00
CATEGORY 6PA	Restaurants (New and Remodel) fee includes 5 or less drainage and or gas outlets – no fees required for public or private restroom	\$311.00
CATEGORY 6PB	Restaurants (New and Remodel) fee includes 6 or more drainage and/or gas outlets – no fees required for public or private restroom	\$880.00
CATEGORY 8	New Boiler installations over 200kbtu	\$275.00
CATEGORY 9P/M	Surveys	\$300.00
CATEGORY 10P/M	Condominium Conversions	\$365.00
BOILER MAINTENANCE PROGRAM	(Permit to Operate – PTO) See Table 1A-M – Boiler Fees for additional boiler-related fees.	\$52.00
2.	Standard inspection fees Reinspection or additional inspection per SFBC Section 108A.8	Hourly Inspection Rate

A permit may include more than one category, and each category will be charged separately.

[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-08]

TABLE 1A-D – STANDARD HOURLY RATES

1. Plan Review	\$187.00 per hour
2. Inspection	\$170.00 per hour, \$180.00 per hour for OSHPD inspection
3. Administration	\$104.00 per hour, with a minimum charge of \$52.00 for 30 minutes or less.

[Added 7-18-2008 by Ord. No. 122-08, effective 8-18-2008]

TABLE 1A-E – ELECTRICAL PERMIT ISSUANCE AND INSPECTION FEE SCHEDULE

- A. Permit applicants are required to itemize the proposed scope of work and select the appropriate category and fee amount.**
- B. Separate permits are required for each structure, condominium unit, existing dwelling unit (except in R3 occupancies), common area, commercial office floor or individual tenant space.**
- C. Standard hourly permit issuance and inspection rates shall apply for installations not covered by this fee schedule.**
- D. Fees shall be paid in full prior to obtaining: occupancy approval, job card signature, permission to energize, or final signoff, as applicable.**
- E. For the purpose of fee calculation: appliances and utilization equipment, each count as one outlet or device in addition to receptacles, switches, and light outlets.**

See Table 1A-R for refund policy.
See Table 1A-J for permit extensions.

Category 1

General Wiring: Residential Buildings up to 10,000 sq. ft.

Up to 10 outlets and/or devices	\$160.00
11 to 20 outlets and/or devices	\$240.00
Up to 40 outlets and/or devices, includes up to 200 Amp service upgrade	\$300.00
* More than 40 outlets and/or devices	\$420.00
* Buildings of 5,000 to 10,000 sq. ft.	\$600.00

Category 2

General Wiring: Nonresidential Buildings & Residential Buildings over 10,000 sq. ft.

Up to 5 outlets and/or devices	\$240.00
6 to 20 outlets and/or devices	\$360.00
* Areas up to 2,500 sq. ft.	\$480.00
* 2,501 to 5,000 sq. ft.	\$720.00
* 5,001 to 10,000 sq. ft.	\$1,200.00
* 10,001 to 30,000 sq. ft.	\$2,400.00
* 30,001 to 50,000 sq. ft.	\$4,800.00

* 50,001 to 100,000 sq. ft.	\$7,200.00
* 100,001 to 500,000 sq. ft.	\$14,400.00
* 500,001 to 1,000,000 sq. ft.	\$32,400.00
* More than 1,000,000 sq. ft.	\$64,800.00
* Includes Category 3 & 4 installations in new buildings or major remodel work	

Category 3

Service Distribution and Utilization Equipment, Includes: Generators, UPS, Transformers and Fire Pumps

(Use Category 3 for installations separate from the scope of work in Categories 1 or 2)

225 amps rating or less	\$240.00
250 to 500 amps	\$360.00
600 to 1000 amps	\$480.00
1,200 to 2,000 amps	\$720.00
More than 2,000 amps	\$960.00
600 volts or more	\$960.00
150 kva or less	\$240.00
151 kva or more	\$360.00
Fire Pump installations	\$480.00

Category 4

Installations of Fire Warning and Controlled Devices

(Use Category 4 for installations separate from the scope of work in Categories 1 or 2)

Up to 2,500 sq. ft.	\$240.00
2,501 to 5,000 sq. ft.	\$360.00
5,001 to 10,000 sq. ft.	\$720.00
10,001 to 30,000 sq. ft.	\$1,200.00
30,001 to 50,000 sq. ft.	\$2,400.00
50,001 to 100,000 sq. ft.	\$4,800.00
100,001 to 500,000 sq. ft.	\$7,200.00
500,001 to 1,000,000 sq. ft.	\$16,200.00
More than 1,000,000 sq. ft.	\$32,400.00

Fire Warning and Controlled Devices (Retrofit Systems)

Buildings of not more than 6 dwelling units	\$360.00
Buildings of not more than 12 dwelling units	\$480.00
Buildings with more than 12 dwelling units and non-residential occupancy	
Building up to 3 floors	\$720.00
4 – 9 floors	\$1,440.00
10 – 20 floors	\$2,400.00
21 – 30 floors	\$4,800.00
More than 30 floors	\$7,200.00

Category 5

Miscellaneous Installations

Remodel / Upgrade of Existing Hotel Guest / SRO Rooms

Up to 6 rooms	\$300.00
Each additional group of 3 rooms	\$150.00

Data, Communications, and Wireless Systems

10 cables or less	Exempt
11 to 500 cables	\$170.00
Each additional group of 100 cables	\$25.00

Security Systems, 10 components or less **\$170.00**

Each additional group of 10 components **\$10.00**

Includes installations and devices that interface with life safety systems; excludes installations in R3 Occupancies

Office Workstations, 5 or less **\$170.00**

Each additional group of 10 workstations **\$50.00**

Temporary Exhibition Wiring, 1 to 100 booths (1 inspection) **\$240.00**

Each additional group of 10 booths **\$25.00**

Exterior Electrical Sign	\$170.00
Interior Electrical Sign	\$170.00
Each Additional Sign, at the same address	\$40.00
Garage Door Operator (Requiring receptacle installation)	\$170.00
Quarterly Permits	\$375.00
Maximum five outlets in any one location	
Survey, per hour or fraction thereof	\$170.00
Survey, Research, and Report preparation, per hour or fraction thereof	\$300.00
Witness Testing: life safety, fire warning, emergency, and energy management systems	
Hourly Rate	\$170.00
Additional hourly rate	\$170.00
Off-hour inspections: (two hour minimum)	\$340.00
Additional off-hourly rate	\$255.00
Energy Management, HVAC Controls, and Low-Voltage Wiring Systems	
1 – 10 floors (3 inspections)	\$480.00
Each additional floor	\$50.00
Solar Photovoltaic Systems	
10 KW rating or less	\$170.00
Each additional 10 KW rating	\$100.00
Standard Hourly Inspection Rate	See Table 1A-D

[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008; 6-29-2009 by Ord. No. 107-09, effective 7-30-2009]

TABLE 1A-F – SPECIALTY PERMIT FEES

1. Bleachers Permit Fee:	See Table 1A-A for New Construction Fees
2. Chimney and Flue Permit Fee:	See Table 1A-A for New Construction Fees
3. Demolition Permit Fee:	See Table 1A-A for New Construction Fees
4. Extra Permit Work: (exceeding scope)	2 times the standard fees for work remaining to be done or not covered in original permit scope
5. Garage Door Permit Fee:	
Each garage door in an existing building	\$160.00
6. Grading Permit Fee:	See Table 1A-A for New Construction Fees
7. House Moving Permit Fee:	Standard Hourly Inspection Rate - Minimum 3 Hours
8. Recommencement of Work Not Completed:	Standard Inspection Fee per Table 1A-G; See also Table 1A-B – Commencement of Work Not Started
9. Reroofing Permit Fee:	\$160.00 for Single-Family homes and duplexes \$240.00 for all others
10. Strong Motion Instrumentation Program Fee:	
Group R Occupancies of 3 stories or less, except hotels and motels	0.00013 times the valuation
Hotels and motels, all buildings greater than 3 stories, all occupancies other than Group R	0.00024 times the valuation
Minimum fee	\$1.60
11. Subsidewalk Construction Permit Fee:	
Construction	See Table 1A-A for New Construction Fees
12. Construction of impervious surface in the required front and setback area	\$160.00

[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-08]

TABLE 1A-G – INSPECTIONS, SURVEYS AND REPORTS

1. Standard Hourly Rate	See Table 1A-D
2. Off-hours inspection	Standard Hourly Inspection Rate - Minimum Two Hours plus permit fee
3. Pre-application inspection	Standard Hourly Inspection Rate - Minimum Two Hours
4. Re-inspection fee	Standard Hourly Inspection Rate
5. Report of residential records (3R)	\$100.00
6. Survey of nonresidential buildings:	Standard Hourly Inspection Rate - Minimum Two Hours
7. Survey of residential buildings for any purpose or Condo Conversions:	
Single unit	\$1,750.00
Two to four units	\$2,300.00
Five + units	\$2,300.00 plus Standard Hourly Inspection Rate
Hotels:	
Includes 10 guestrooms	\$1,750.00
11 to 20 guestrooms	\$2,300.00 plus \$42.50 per guestroom over 11
8. Temporary Certificate of Occupancy	Standard Hourly Inspection Rate - Minimum Two Hours

[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-08]

TABLE 1A-H – SIGN PERMIT FEES

Nonelectric and electric sign permit fee – See Table 1A-A for New Construction Fees

NOTE: See also Table 1A-E for required Electrical Sign Permits and Inspections

[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-08]

TABLE 1A-I – RESERVED

TABLE 1A-J – MISCELLANEOUS FEES

1.	Central Permit Bureau Processing Fee for Miscellaneous Permits from other disciplines	Standard Administration Hourly Rate - Minimum One-Half Hour
2.	Building numbers (each entrance)	\$104.00 NEW ADDRESSES \$210.00 CHANGE OF EXISTING ADDRESS
3.	Extension of time: application cancellation and permit expiration:	
	Each application extension (in plan review)	\$160.00 plus 20% of All Plan Review Fees
	Each permit extension	\$160.00 plus 10% of All Permit Issuance Fees
4.	Product approvals:	
	General approval - initial or reinstatement	Standard Hourly Plan Review Rate - Minimum Three Hours
	General approval - modification or revision	Standard Hourly Plan Review Rate - Minimum Three Hours
	General approval - biannual renewal	Standard Hourly Plan Review Rate - Minimum Three Hours
5.	Technology surcharge on the cost of permit applications processed by the Department of Building Inspection for all departments and bureaus of the City and County of San Francisco	2% of permit cost
6.	California Building Standards Commission Fee	Pursuant to the provisions of California Health and Safety Code Sections 18930.5, 18931.6, 18931.7 and 18938.39
7.	Vacant building - Initial and annual registration fee	Standard Inspection Hourly Rate - Minimum Four and One-Half Hours

[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008; 6-29-2009 by Ord. No. 107-09, effective 7-30-2009; 8-27-2009 by Ord. 194-09, effective 9-26-2009]

TABLE 1A-K – PENALTIES, HEARINGS, CODE ENFORCEMENT ASSESSMENTS

1.	Abatement Appeals Board hearing, filing fee	\$170.00 per case
2.	Board of Examiners filing fees:	
	Each appeal for variance from interpretation of code requirements	Standard Hourly Plan Review Rate - Minimum Two Hours
	Each appeal for approval of substitute materials or methods of construction	Standard Hourly Plan Review Rate - Minimum Four Hours
3.	Building Official’s abatement orders	Standard Hourly Plan Review Rate - Minimum Two Hours
4.	Emergency order	Standard Hourly Plan Review Rate - Minimum Two Hours
5.	Exceeding the scope of the approved permit	2 times the issuance fee
6.	Access Appeals Commission:	
	Filing fee	Standard Hourly Plan Review Rate - Minimum Two Hours per appeal
	Request for a rehearing	Standard Hourly Plan Review Rate - Minimum Two Hours
7.	Lien recordation charges	\$187.00 or 10 percent of the amount of the unpaid balance, including interest, whichever is greater
8.	Work without permit: investigation fee:	
	Building, Electrical, Plumbing or Mechanical Code violations	9 times the Permit Issuance Fee plus the original permit fee
9.	Building Inspection Commission hearing fees:	
	Notice of appeal	Standard Hourly Plan Review Rate - Minimum Four Hours
	Request for jurisdiction	Standard Hourly Plan Review Rate - Minimum Four Hours
	Request for rehearing	Standard Hourly Plan Review Rate - Minimum Two Hours
10.	Additional Hearings required by Code	Standard Hourly Plan Review Rate - Minimum Four Hours

[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008]

TABLE 1A-L – PUBLIC INFORMATION

1. Public notification and record keeping fees:	
Structural addition notice	Standard Administration Hourly Rate - Minimum One-Half Hour
Affidavit record maintenance	\$15.00
Posting of notices (change of use)	Standard Administration Hourly Rate - Minimum One-Half Hour
Requesting notice of permit issuance (each address) per year	Standard Administration Hourly Rate - Minimum One-Half Hour
30-inch by 30-inch (762 mm by 762 mm) sign	\$15.00
2. Demolition:	
Notice of application and permit issuance by area/interested parties:	
1 area(1 area = 2 blocks)	\$104.00 per annum
3. Notices:	
300-foot (91.44 m) notification letters	Standard Administration Hourly Rate - Minimum One and One-Half Hour
Residential tenants notification	Standard Administration Hourly Rate - Minimum One-Half Hour
4. Reproduction and dissemination of public information:	
Certification of copies:	
1 to 10 pages	\$15.00
Each additional 10 pages or fraction thereof	\$3.50
Electrostatic reproduction:	
Each page photocopy	\$0.10
35mm duplicards from roll film	\$3.50
Microfilm hard copy prints:	
8 1/2 inch by 11 inch (215.9 mm by 279.4 mm) copy from 16mm roll film	\$3.50
24 inch by 18 inch (609.6 mm by 457.2 mm) copy from 35mm roll film	\$5.00
“Half-sized” copy from 35mm roll film	\$6.00
8 1/2 inch by 11 inch (215.9 mm by 279.4 mm)copy from 16mm frame in aperture card or microfiche jacket	\$3.00
Minimum microfilm reproduction charge	\$6.50

- 5. Replacement of approved construction documents:**
 - Each sheet of plans** **\$5.25**
 - Each 50 pages of specifications or fraction thereof** **\$15.00**
- 6. Records Retention Fee (per page of Plans)** **\$3.00**

[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008; 6-29-2009 by Ord. No. 107-09, effective 7-30-2009]

TABLE 1A-M – BOILER FEES

Permit to install or replace	See Table 1A-C - Category 8
Permit to operate (certificate issued)	Standard Administration Hourly Rate - Minimum One-Half Hour
Renew permit to operate (certificate issued)	Standard Administration Hourly Rate - Minimum One-Half Hour
Replacement of issued permit to operate	Standard Administration Hourly Rate - Minimum One-Half Hour
Connection to utility company provided steam (includes permit to operate)	Standard Administration Hourly Rate - Minimum One-Half Hour
Boiler Maintenance Program	\$52.00

Renewal required:

- 1. Low-pressure boilers every 12 months. (See definition of low-pressure boilers in Chapter 2.)**
- 2. Water heaters when alteration or replacement permits are issued.**

[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008]

TABLE 1A-N – ENERGY CONSERVATION

	INITIAL INSPECTION	COMPLIANCE INSPECTION
Single-family dwellings and two-family dwellings	\$170.00	\$85.00
Apartment houses and residential hotels:		
Up to 20 rooms	\$255.00	\$127.50
Each additional 10 rooms or portion thereof	\$85.00	\$52.00
Energy reports and certificates:		\$52.00
Filing fee for appeals:		\$104.00
Certification of qualified energy inspector:		\$200.00

TABLE 1A-O – RESERVED

TABLE 1A-P – RESIDENTIAL CODE ENFORCEMENT AND LICENSE FEES

1. One- and Two-family dwelling unit fees:	\$52.00 per rental unit
2. Apartment house license fees:	
Apartment houses of 3 to 12 units	\$326.00 per annum
Apartment houses of 13 to 30 units	\$488.00 per annum
Apartment houses of more than 30 units	\$488.00 and \$55.00 for each additional 10 units or portion thereof
3. Hotel license fees:	
Hotels of 6 to 29 rooms	\$256.00 per annum
Hotels of 30 to 59 rooms	\$470.00 per annum
Hotels of 60 to 149 rooms	\$584.00 per annum
Hotels of 150 to 200 rooms	\$660.00 per annum
Hotels of more than 200 rooms	\$660.00 and \$55.00 for each additional 25 rooms or portion thereof

[Amended 6-26-2009 by Ord. No. 105-09, effective 7-27-2009; 6-29-2009 by Ord. No. 107-09, effective 7-30-2009]

TABLE 1A-Q – HOTEL CONVERSION ORDINANCE FEES

Annual unit usage report	\$104.00
1. Appeal of initial or annual status determination:	Standard Inspection Hourly Rate pursuant to Section 110A of this code shall apply for Department Inspector’s work on such request plus fees for Hearing Officer
2. Challenge to claims of exemption:	
Usage report	\$52.00
Claim of exemption based on low-income housing	\$340.00
Claim of exemption based on partially completed conversion	\$510.00
3. Complaint of unlawful conversion	\$52.00
Determination by Department of Real Estate and cost of independent appraisals	Actual costs
4. Initial unit usage report	\$340.00
5. Permit to convert	\$510.00
6. Request for hearing to exceed 25% tourist season rental limit:	
Inspection staff review - standard hourly inspection fee	Standard Inspection Hourly Rate
Statement of exemption - Hearing Officer fee	\$340.00
7. Unsuccessful challenge:	
Usage report:	
Inspection staff review - standard hourly inspection fee	Standard Inspection Hourly Rate
Statement of exemption - Hearing Officer fee	\$340.00
Request for winter rental:	
Standard hourly inspection fee	Standard Inspection Hourly Rate

[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008; 6-29-2009 by Ord. No. 107-09, effective 7-30-2009]

TABLE 1A-R – REFUNDS

Partial or complete refunds of only those fees contained herein will be given, provided the applicant meets the refund requirements of the applicable section of this code. No other fees are refundable, except as follows:

1. Application or Permit Issuance Fee:

Building, plumbing, electrical or mechanical permit issuance fee

Amount paid less \$160.00 or actual costs, whichever is greater. No refunds given after work started.

Plan Review Fees (each)

**Amount determined by the Building Official less \$160.00
No Refund due after application deemed acceptable for Department of Building Inspection Plan Review**

2. Miscellaneous Fees:

**Amount paid less \$52.00
No refunds less than \$52.00**

If the Building Official determines that an error has been made in the assessment of fees, a refund for the portion determined to be in error may be made upon written request by the applicant.

[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-2008; 6-29-2009 by Ord. No. 107-09, effective 7-30-2009]

**TABLE 1A-S – UNREINFORCED MASONRY BEARING WALL
BUILDING RETROFIT**

Review of Inventory Form (Section 1604B.2.1)	Standard Plan Review Hourly Rate - Minimum Two Hours
Review of the summary of the engineering report (Section 1604B.2.3)	Standard Plan Review Hourly Rate - Minimum Two Hours
Board of Examiners_filing fees (Section 105A7.4):	
Each appeal for a variance from or interpretation of code requirements	Standard Plan Review Hourly Rate - Minimum Two Hours
Each appeal for the approval of substitute materials or methods of design or construction (Section 105A.7.3)	Standard Plan Review Hourly Rate - Minimum Four Hours

[Amended 7-18-2008 by Ord. No. 122-08, effective 8-18-08]

FIGURE 1A-I
1851 HIGH-TIDE LINE MAP



MAP
OF THE
CITY AND COUNTY OF
SAN FRANCISCO

DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

FRANK H. MOSS JR.
CITY ENGINEER

1985

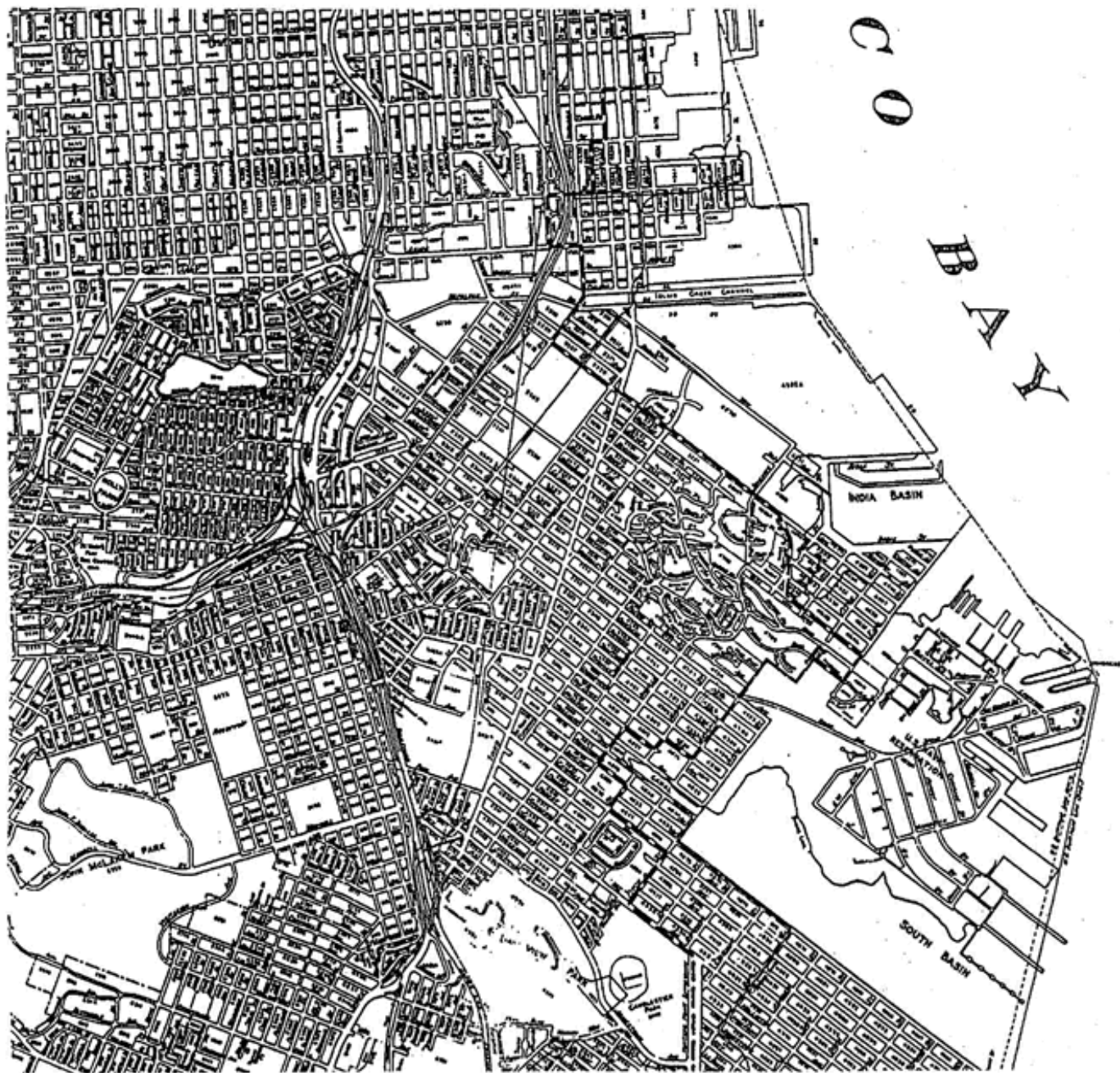
SCALE OF FEET
1" = 100'

A. J. BEIS
Designer
Map drawn by
A. J. BEIS
& others
1985

LEGEND

High-Tide Line as indicated on the "Official Map of the City of San Francisco", compiled by Wm. M. Eddy, City Surveyor, Jan. 15, 1851, also known as "Eddy Red Line Map" - recorded Jan. 21, 1873 in Map Book "W" of Page 41 is shown hereon and is intended to be the limit of applicability of the requirements of Article 20 of the San Francisco Municipal Code for soil sampling and analysis to determine the presence of hazardous wastes. (Ordinance 253-86 approved June 27, 1986)

High-Tide Line as indicated on "Map of the Salt Marsh and Tide Lands and Lands Lying Under Water south of Second Street and Situate in the City and County of San Francisco," prepared by Order of the Tide Land Commissioners, approved March 30, 1868 - recorded January 21, 1975 in Map Book "W" at pages 46 and 47 is shown hereon and is intended to be the limit of applicability of the requirements of Article 20 of the San Francisco Municipal Code for sampling and analysis to determine the presence of hazardous wastes. (Ordinance 253-86 approved June 27, 1986)



Chapter 2
DEFINITIONS

SECTION 202 – DEFINITIONS

202 Add this definition as follows:

KITCHEN. That portion in a residential dwelling unit that is a room or area used for cooking, food storage and preparation and washing dishes, including associated counter tops and cabinets, refrigerator, stove, ovens and floor area.

202 revise this definition as follows:

STORY, FIRST, For Large family day care, the first story shall be the floor used for residential occupancy nearest to the street level which provides primary access to the building. [DSA-AC] See Chapter 11B, Section 1102B.

Chapter 3
USE AND OCCUPANCY CLASSIFICATION

No San Francisco Building Code Amendments

Chapter 4
SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY

SECTION 406 – MOTOR-VEHICLE-RELATED OCCUPANCIES

406.1.3 Add the following third paragraph at the end of the section:

406.1.3 Garages and Carports

Ventilation shall be provided as follows: Natural ventilation shall be required, and such space shall be provided with ventilation outlets in the walls or exterior doors. The total net area of such ventilation outlets shall be 200 square inches (0.129 m²) for a space up to 1,000 square feet (92.903 m²) in area and shall be increased 30 square inches (0.0194 m²) for each additional 200 square feet (18.58 m²) of floor area up to maximum floor area of 3,000 square feet (278.709 m²).

SECTION 425 – SPECIAL PROVISIONS FOR LICENSED 24-HOUR CARE FACILITIES IN A GROUP R-2.1, R-3.1, R-4

425.3 Add the following section:

425.3.5 [CRC R325.3.2] For detached one- and two-family dwellings, and townhouses not more than three stories above grade plane in height with a separate means of egress, buildings housing protective social-care homes or in occupancies housing inmates who are not restrained need not be of one-hour fire-resistive construction when not more than two stories in height. In no case shall individual floor areas exceed 3,000 square feet (279 m²). The fire-resistive protection of the exterior walls shall not be less than one hour where such walls are located within 5 feet (1524 mm) of the property line. Openings within such walls are not permitted. Openings within non-rated walls need not be protected.

446 Add the following section:

SECTION 446 – FENCES

446.1 Fences. Fences on any property containing a Group R Occupancy shall not be higher than 10 feet (3.048 m). Fences located less than 10 feet (3.048 m) from any public sidewalk shall not be higher than 10 feet (3.048 m) unless they are of open-type materials such as chain link fabric. Fence height shall be measured from the level of general existing adjacent ground of the general area prior to the improvement of the properties. A fence or railing placed on top of the retaining wall shall be measured from the top of the wall.

Fences constructed wholly or in part of barbed wire are prohibited, except when permitted with the express written permission of the Building Official, and the Fire Department in the following situations:

- 1. On top of a fence more than 7 feet (2.134 m) high, protecting a dangerous or hazardous area.**
- 2. Within a private area, enclosed by a seven-foot-high (2.134 m) fence, such that entry to the area is limited by the outer, nonbarbed fence.**

3. In special instances for localized protection, and in areas within or atop a building to isolate dangerous conditions.

Chapter 5
GENERAL BUILDING HEIGHTS AND AREAS

No San Francisco Building Code Amendments

Chapter 6
TYPES OF CONSTRUCTION

No San Francisco Building Code Amendments

Chapter 7
FIRE AND SMOKE PROTECTION FEATURES

SECTION 705 – EXTERIOR WALLS

705.2.3 Revise the exception as follows:

Exception: Type VB construction **when protected with 1 hour construction on the underside** shall be allowed for combustible projections in R-3 occupancies with a fire separation distance greater than or equal to 2 feet.

SECTION 707 – FIRE BARRIERS

707.1 Add a second paragraph to this section as follows:

Information technology rooms shall be in accordance with the Fire Code and Electrical Code. See Administrative Bulletin AB-060.

SECTION 709 – FIRE PARTITIONS

709.4 Add exception to list of exceptions as follows:

- 7. Non-bearing fire partitions separating group B tenant spaces in fully sprinklered high-rise office buildings are not required to extend beyond the underside of a ceiling that is not part of a fire-resistance-rated assembly. A wall is not required in attic or ceiling spaces above tenant separation walls.**

Chapter 7A [SFM]
MATERIALS AND CONSTRUCTION METHODS FOR EXTERIOR WILDFIRE EXPOSURE

No San Francisco Building Code Amendments

Chapter 8
INTERIOR FINISHES

No San Francisco Building Code Amendments

Chapter 9
FIRE PROTECTION SYSTEMS

SECTION 901 – GENERAL

901.4 Add a second paragraph as follows:

Notwithstanding any other provisions of the California Building Code or other codes or regulations, Fire Department connections shall have 3-inch (76.2 mm) National Standard hose threads.

SECTION 902 – DEFINITIONS

902.1 Revise the first sentence following two definitions under STANDPIPE SYSTEM:

STANDPIPE SYSTEM, CLASSES OF. Standpipe classes are as follows:

Class I system. A system providing ~~2½-inch (64 mm)~~ **3" (76.2 mm)** hose connections to supply water for use by fire departments and those trained in handling heavy fire streams.

Class III system. A system providing 1-1/2-inch (38 mm) hose stations to supply water for use by building occupants and ~~2½-inch (64 mm)~~ **3" (76.2 mm)** hose connections to supply a larger volume of water for use by fire departments and those trained in handling heavy fire streams.

SECTION 903 – AUTOMATIC SPRINKLER SYSTEMS

903.2.8 Revise exceptions 3 and 4 as follows:

3. Pursuant to Health and Safety code Section 13113 **existing** occupancies housing ambulatory children only, none of whom are mentally ill or mentally retarded, and buildings or portions thereof in which such children are housed are not more than two stories in height, and buildings or portions thereof housing such children have an automatic fire alarm system activated by approved smoke detectors.

4. Pursuant to Health and Safety code section 13143.3 **existing** occupancies licensed for protective social care which house ambulatory clients only, none of whom is a child (under the age of 18 years), or who is elderly (65 years of age or over).

903.2.8 Add the following section:

903.2.8.1 [CRC R313.1] Townhouse automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed in townhouses.

Exception. An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing townhouses that do not have an automatic residential fire sprinkler system installed.

903.2.8.1.1 [CRC R313.1.1] Design and installation. Automatic residential fire sprinkler systems for townhouses shall be designed and installed in accordance with Section 903.3.1.3 unless a different standard is required by other provisions of this code.

903.2.8 Add the following section:

903.2.8.2 [CRC R313.2] One- and two-family dwelling automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed in one- and two-family dwellings.

Exception. An automatic residential fire sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with an automatic residential fire sprinkler system installed.

903.2.8.2.1 [CRC R313.2.1] Design and installation. Automatic residential fire sprinkler systems shall be designed and installed in accordance with Section 903.3.1.3 unless a different standard is required by other provisions of this code.

Table 903.2.11.6 Add a new line to the end of the Table as follows:

TABLE 903.2.11.6
ADDITIONAL REQUIRED SUPPRESSION SYSTEMS

SECTION	SUBJECT
3202.3.4	Pedestrian Walkways over Public Streets

SECTION 905 – STANDPIPE SYSTEMS

905.3.4 Revise this section as follows:

905.3.4 Stages. Stages greater than 1,000 square feet in area (93 m²) shall be equipped with a Class III wet standpipe system with 1-1/2 inch and ~~2 1/2 inch (38 mm and 64 mm)~~ **3 inch (38 mm and 76.2 mm) hose connections on each side of the stage.**

SECTION 907 – FIRE ALARM AND DETECTION SYSTEMS

907.2.9.1 Revise Item 3 as follows:

3. The building contains more than ~~4~~ **6 dwelling units or sleeping units.**

907.2.9.1 Revise Item 4 as follows:

4. Congregate living facilities or congregated residences ~~with more than 16 occupants~~ **three or more stories in height or having an occupant load of 11 or more.**

907.2.9.4 Add the following section:

907.2.9.4 Automatic smoke detection system. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.6 shall be installed throughout all interior corridors serving sleeping units.

Exceptions:

1. An automatic smoke detection system is not required in buildings that do not have interior corridors serving sleeping units and where each sleeping unit has a means of egress door opening directly to an exit or to an exterior exit access that leads directly to an exit.

2. An automatic smoke detection system is not required in buildings when all of the following conditions are met:

2.1 The building is equipped throughout with a supervised automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

2.2 The notification devices will activate upon sprinkler water flow; and

2.3 At least one manual fire alarm box is installed in an approved location.

907.2.11.5 Add a second paragraph as follows:

Group R-3 congregate living facilities having an occupant load of 6 or more shall be provided with a manual fire alarm system.

912 Add the following section:

912.6 Number of Connections Required. Sprinkler systems requiring a 4-inch (101.6 mm) or larger water service shall have two or more inlet connections as necessary to meet hydraulic demand.

Chapter 10
MEANS OF EGRESS

SECTION 1001 – ADMINISTRATION

1001.1 Add second and third paragraphs as follows:

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

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 1008 – DOORS, GATES AND TURNSTILES

1008.1.2 Revise item 4 as follows:

4. Other than the main egress door at the primary entry, doors within or serving a single dwelling unit in Groups R-2 and R-3.

SECTION 1009 – STAIRWAYS

1009.4.5 Modify the first sentence of the first paragraph as follows:

For all occupancies except R-3 one and two family dwellings and townhouses the radius of curvature at the leading edge of the tread shall be not greater than 9/16 inch (14.3 mm)..

1009.4.5 Add a second paragraph as follows:

For R-3 one and two family dwellings and townhouses, the radius of curvature at the nosing shall be no greater than 9/16 inch (14mm). A nosing not less than $\frac{3}{4}$ inch (19 mm) but not more than 1 $\frac{1}{4}$ inches (32 mm) shall be provided on stairways with solid risers. The greatest nosing projection shall not exceed the smallest nosing projection by more than $\frac{3}{8}$ inch (9.5 mm) between two stories, including the nosing at the level of floors and landings. Beveling of nosings shall not exceed $\frac{1}{2}$ inch (12.7 mm). Risers shall be vertical or sloped under the tread above from the underside of the nosing above at an angle not more than 30 degrees (.051 rad) from the vertical. Open risers are permitted, provided that the opening between treads does not permit the passage of a 4-inch diameter (102 mm) sphere.

Exceptions:

- 1. A nosing is not required where the tread depth is a minimum of 11 inches (279 mm).**
- 2. The opening between adjacent treads is not limited on stairs with a total rise of 30 inches (762 mm) or less.**

SECTION 1010 – RAMPS

1010.2 Add second exception as follows:

Exception 2: For R-3 one and two family dwellings and townhouses, where it is technically infeasible to comply because of site constraints, ramps may have a maximum slope of one unit vertical in eight horizontal (12.5 percent)

SECTION 1011 – EXIT SIGNS

1011.1 Add the following sentence after the exceptions:

Doorways or other openings leading to a fire escape, except within individual dwelling units, shall be provided with a sign reading “FIRE ESCAPE” in letters not less than 6 inches (152 mm) high, in high contrast with the background.

SECTION 1013 – GUARDS

1013.3 Revise exception 1 as follows:

1. For occupancies other than R-3 and Townhouses, from a height of 36 inches (914 mm) to 42 inches (1067 mm), guards shall not have openings which allow passage of a sphere 4 3/8 inches (111 mm) in diameter.

SECTION 1014 – EXIT ACCESS

1014.2 Add item 6 as follows:

6. [Reference CRC R311.1] For one- and two- family dwellings and townhouses, means of egress is allowed to pass through rooms and intervening spaces except garages.

1014.4 Add a section as follows:

1014.4 [Reference CRC R311.4] Vertical egress. For habitable levels or basements in R-3 occupancies or townhouses that are located more than one story above or more than one story below an egress door, the maximum travel distance from any occupied point to a stairway or ramp that provides egress from such habitable level or basement shall not exceed 50 feet (15240 mm).

**Chapter 10A
SECURITY REQUIREMENTS**

SECTION 1001A – SCOPE

1001A.1 General. This chapter shall apply to all Group R, Division 1 and R, Division 2 Occupancies.

1001A.2 Apartment Houses. Apartment houses (Group R, Division 1 and R, Division 2 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 chapter. For the purpose of this chapter, any building open to the public and offering accommodations to transient persons for compensation shall be considered as a hotel or motel.

SECTION 1002A – DEFINITIONS

For the purpose of this chapter, certain terms are defined as follows:

AUXILIARY LOCKING DEVICE is a secondary locking system added to the primary locking system to provide additional security.

BURGLARY-RESISTANT GLAZING MATERIALS are materials which are defined in ANSI/UL Standard 972.

DEADBOLT is a lock bolt which must be actuated by a key, a knob or thumb-turn and when projected becomes locked against return by end pressure, and does not have spring action, as a latch bolt does. A **SINGLE CYLINDER DEADBOLT** is a deadbolt lock which is activated from the outside by a key and from the inside by a knob, thumb-turn lever or similar mechanism. A **DOUBLE CYLINDER DEADBOLT** is a deadbolt which can only be activated by a key from both interior and exterior.

DEADLATCH or **DEADLOCKING LATCH BOLT** is a spring-actuated latch bolt having a beveled end and an incorporated plunger which, when depressed, automatically locks the projected latch bolt against return by end pressure.

PRIMARY LOCKING DEVICE is the single locking system on a door or window unit whose function is to prevent unauthorized intrusion.

WINDOW LOCKING DEVICE is part of a window assembly which is intended to prevent movement of the movable sash, and may be the sash lock or sash operator.

SECTION 1003A – GENERAL REQUIREMENTS FOR SECURITY

1003A.1 Clearances. The clearance between the door and the frame and between meeting edges of doors swinging in pairs shall not exceed 1/8 inch (3.2 mm). The clearance between the door and the floor with either flush or raised sill shall be not more than 3/4 inch (19.1 mm).

1003A.2 Door Assemblies. Excluding main entry doors, all exterior swinging doors, and swinging interior and exterior entry doors, including assemblies and related hardware, which are directly accessible from the ground level or by stairs or by ramp, or from roof areas, or parking lot, or garage areas, shall meet the requirements of Grade 20 of ANSI/ASTM F476, Standard Test Methods for Security of Swinging Door Assemblies.

All such doors shall be self-closing continuously locked, and openable from the interior with no special effort or knowledge or key. Where electrically operated locks are used, they must be self-latching and locking and shall have manual release capability from the interior requiring no special effort or knowledge or key.

1003A.2.1 Main entrance. All main entry doors, including electrically operated main entry doors, shall be provided with a primary locking device. "Main entry doors" shall be defined as exterior doors leading directly into the lobby, registration areas or employee entrances.

1003A.2.2 Viewer. Each door shall be provided with a minimum 135-degree viewer which does not have sighting capability when viewed from the outside. Mounting height shall not exceed 58 inches (1473 mm).

1003A.3 Fire-Rated Door Assemblies. Fire-rated door assemblies shall meet the requirements of Grade 20, ANSI/ASTM F476.

1003A.4 Glazing. All glazing within 40 inches (1016 mm) of any locking mechanism of exterior and interior dwelling unit doors shall be of safety glass or burglar-resistant glazing. This requirement shall not exempt the swinging door assembly standards of Grade 20 of ANSI/ASTM F476.

1003A.5 Metal Gates. Metal gates shall conform to the following:

1. Latch bolt protected by a security plate.
2. Hinges, bolts, screws shall be nonremovable.
3. Areas within 40 inches (1016 mm) of latch mechanism protected by mesh screen or approved equal.
4. Interior release mechanism protected with cover.
5. For electrically operated locks, see Section 1003A.2.

1003A.6 Sliding Glass Doors. Sliding glass door assemblies shall be so designed that the door cannot be lifted from the track when the door is in a locked position.

In addition to the primary locking device, all sliding glass doors shall have an auxiliary locking device permanently mounted and not accessible from the exterior of the building but easily accessible from the interior.

1003A.7 Sliding Glass Windows. Sliding glass window assemblies shall be so designed that the moving panel cannot be lifted from the track while in a closed position.

1003A.8 Parking Areas. Parking space numbering shall not correspond to the guest room or dwelling unit number.

Exterior parking areas and access thereto shall be provided with a minimum of 1/2 footcandle (5.38 lx) of light on the parking surface when the area is unoccupied. Lighting devices shall be protected by weather- and vandalism-resistant covers.

SECTION 1004A – SPECIAL HOTEL AND MOTEL SECURITY REQUIREMENTS

1004A.1 Entry Doors to Guest Rooms.

EXCEPTION: Residential care facilities licensed by the State of California under Title 22 of the California Code of Regulations shall not be required to comply with the requirements of this subsection.

Locks shall be a combination of minimum 1/2-inch (12.7 mm) throw deadlatch with a minimum 1-inch (25.4 mm) deadbolt.

All locks shall be capable of locking out all keys, except the emergency keys for guest privacy while inside the room, and so constructed that both deadlatch and deadbolt are retracted simultaneously by a single knob or lever.

1004A.2 Communicating Door Between Guest Rooms. Communicating doors between guest rooms if not required to be fire-rated shall meet the requirements of Grade 20 of ANSI/ASTM F476 and be of minimum 1 3/8-inch (35 mm) bonded wood core or approved equal.

1004A.3 Roof Openings. All skylights leading directly to guest rooms, offices and enclosed commercial space shall be provided with burglary-resistant glazing as defined in Section 1002A.

1004A.4 Message and Key Box – Front Desk. The message and room key location at the front desk shall not be visible from public view so as to determine an unoccupied room.

SECTION 1005A – SPECIAL APARTMENT HOUSE AND CONDOMINIUM SECURITY REQUIREMENTS

1005A.1 Voice Communications. A two-way voice communication system shall be provided between the common entry door and all interior dwelling units. All systems shall provide direct communication.

1005A.2 Lighting. Lighting shall be a minimum of 1/2 footcandle (5.38 lx) of light on the ground surface from the street to the entry door. Lighting devices shall be protected by weather- and vandalism-resistant covers.

1005A.3 Master Keying. Exterior and main entrance door locks shall not be on any master key system.

1005A.4 Entry Doors. Entry doors and door assemblies shall comply with the following:

1005A.4.1 Locks shall be combination 1/2-inch (12.7 mm) throw deadlatch with a minimum 1-inch (25.4 mm) throw deadbolt, and so constructed that both the deadlatch and deadbolt retract simultaneously by knob or lever. The deadbolt shall have the ability to be thrown from the exterior.

1005A.5 Exit Doors. All exit doors from corridors to exit stairways and from interior stairwells and interior fire escapes shall meet the requirements of Grade 20 of ANSI/ASTM F476 and be continuously locked from the outside.

Locking devices shall be self-latching or self-locking and shall be openable from the interior with no special effort or knowledge or key. [See Section 1003.3.1.8.]

1005A.6 Glazed Openings. Glazed openings accessible from the ground level, by stairs, ramps, parking lots or garage areas, shall be with approved safety glass or burglar-resistant glazing as defined in Section 1002A. Protective iron grill work may only be installed where it does not interfere with the required means of egress.

1005A.7 Roof Openings. All skylights leading directly to interior corridors, stairwells, dwelling units and utility rooms shall be provided with burglary-resistant glazing as defined in Section 1002A.

1005A.8 Garage Doors. All doors of the sectional overhead, one-piece overhead, swing or sliding types used on the exterior of a building shall conform to the following standards:

1005A.8.1 Panels of wood doors shall be at least 5/16-inch (7.94 mm) thick, except sectional overhead doors may have panels 1/4-inch (6.35 mm) thick.

1005A.8.2 Aluminum doors shall be constructed of at least 0.025-inch (0.635 mm) thick sheet aluminum, riveted, welded or bolted to framing members at least 12 inches (305 mm) on center.

1005A.8.3 Steel doors shall be constructed of at least 0.023-inch (0.584 mm) thick galvanized steel, riveted, welded or bolted to framing members at least 12 inches (305 mm) on center.

1005A.8.4 Fiberglass sectional doors shall be constructed of formed fiberglass panels of density of at least 5 1/2 oz. per square foot (1678 g/m²), pressure sealed to aluminum framing members.

1005A.8.5 Overhead doors shall be made lockable by either:

For doors 16 feet (4877 mm) wide or less, a slide bolt - minimum diameter 3/8-inch (9.5 mm) minimum projection 1 1/2 inches (38 mm) - locking into the door jamb, capable of utilizing a padlock with a minimum 9/32-inch (7.14 mm) shackle. For doors over 16 feet (4877 mm) wide, except sectional doors, two slide bolt locks shall be required. Slide bolt assemblies shall be attached to the door with bolts which are nonremovable from the exterior.

Electrical operator with automatic locking capability, either inherently in the mechanism or as an added feature.

By at least one single-bar lock mounted in the end stile, with locking bar or bolt extending into the receiving guide a minimum of 1 inch (25.4 mm), and with minimum five-pin tumble operation. For doors over 16 feet (4877 mm) wide, except sectional doors, two single-bar locks shall be required.

Center locking-handle devices will require actuating straps to be enclosed by rigid conduits securely fastened to the door.

1005A.8.6 Swinging garage doors shall be lockable by a cylinder deadbolt.

1005A.8.7 Doors operated by electrical means shall be provided with manual release capability from the interior, requiring no special effort or knowledge or key.

1005A.8.8 Manually operated chain-driven garage doors shall require approval of the Authority Having Jurisdiction.

Chapter 11
RESERVED

No San Francisco Building Code Amendments

Chapter 11A
HOUSING ACCESSIBILITY

No San Francisco Building Code Amendments

Chapter 11B
ACCESSIBILITY TO PUBLIC BUILDINGS, PUBLIC ACCOMMODATIONS,
COMMERCIAL BUILDINGS AND PUBLICLY FUNDED HOUSING

No San Francisco Building Code Amendments

Chapter 11C
STANDARDS FOR CARD READERS AT GASOLINE FUEL-DISPENSING FACILITIES

No San Francisco Building Code Amendments

Chapter 12
INTERIOR ENVIRONMENT

SECTION 1203 – VENTILATION

1203.4 Add a second paragraph as follows:

In other than high-rise buildings, public corridors, public hallways and other public spaces having openings into adjoining dwelling units, guest rooms, or congregate residences within R-1 and R-2 Occupancies, shall be provided with natural ventilation by means of openable exterior openings with an area of not less than 1/25 of the floor area of such rooms or spaces with a minimum of 4 square feet (0.37 m²).

1203.4 Add a third paragraph as follows:

In lieu of required exterior openings for natural ventilation, a mechanical ventilating system may be provided. Such system shall be capable of providing two air changes per hour in public corridors, public hallways and other public spaces having openings into adjoining dwelling units, guest rooms, or congregate residences with R-2 occupancies, with a minimum of 7-1/2 cubic feet per minute (3-1/2 L/s) of outside air per occupant during such time as the building is occupied.

1203.5 Add a second paragraph as follows:

Newly constructed buildings containing ten or more dwelling units located within the Potential Roadway Exposure Zone and having a PM 2.5 concentration at the proposed building site greater than 0.2 ug/m3 attributable to Local Roadway Traffic Sources, pursuant to Article 38 of the San Francisco Health Code shall have ventilation systems designed and constructed to remove >80% of ambient PM 2.5 from habitable areas of dwelling units.

[Added 12-5-2008 by Ord. No. 281-08, effective 1-5-09]

SECTION 1205 – LIGHTING

1205.1 Add an exception after the first paragraph:

Exception: Guest rooms and habitable rooms (excluding kitchens) within a dwelling unit or congregate residence shall be provided with natural light by means of exterior glazed openings in accordance with Section 1205.2

1205.2.2 Add the following paragraphs after the Exceptions:

The depth of all structural projections, including balconies, decks, porches, rooms or roofs, shall not exceed 9 feet (2.134 m) when extending over exterior wall openings that provide required natural light or natural ventilation for spaces intended for human occupancy.

The height of a balcony, deck or porch shall not be less than 7 feet (2.134 m) measured from the floor to the lowest projection above.

1205.4 revise this section as follows:

1205.4 Stairway illumination. Stairways within dwelling units and exterior stairways serving a dwelling unit shall have an illumination level on tread runs **and landings** of not less than 1 foot-candle (11 lux). Stairs in other occupancies shall be governed by Chapter 10.

Exception: An artificial light source is not required at the top and bottom landing, provided an artificial light source is located directly over each stairway section.

Chapter 13
RESOURCE CONSERVATION (ENERGY EFFICIENCY)

No San Francisco Building Code Amendments

**Chapter 13A
COMMERCIAL WATER CONSERVATION**

SECTION 1301A – TITLE

This chapter shall be known as the “Commercial Water Conservation Ordinance.”

SECTION 1302A – INTENT

It is the intent of this chapter to conserve existing water supplies by managing the overall demand for water in commercial buildings, including tourist hotels and motels, by requiring the installation of water conservation devices in commercial buildings upon the occurrence of specific events and in any event no later than January 1, 2017.

SECTION 1303A – DEFINITIONS

For the purpose of this chapter, certain terms are defined as follows:

ACCESSIBLE means there is sufficient space in which to install the specified water and energy conservation measure without significant alteration to the structure. For ducts, plenums or pipes, “accessible” shall mean all ductwork, plenums or pipes located in mechanical rooms, on roofs and around all air handling units. In addition, pipes located above movable ceiling panels shall be considered accessible, but not ducts or plenums.

ACCESSIBLE ATTIC SPACE means a space between a ceiling joist and roof rafter where the vertical clear height from the top of the bottom chord of the truss or ceiling joist to the underside of the roof sheeting at the roof ridge is greater than 18 inches (957 mm).

BUILDING OCCUPANCY means OCCUPANCY as defined in Chapter 3 of this code and shall also, where practicable, include the primary business activity of the property as classified by Standard Industrial Classification (SIC).

BUILDING TYPE means the type of building construction, as defined in Chapter 6 of this code, and shall take into consideration whether the building is a high-rise building as defined by Section 403 of this code.

COMMERCIAL BUILDING means any privately owned building except those residential buildings and portions of mixed residential-commercial buildings that are subject to the energy or water conservation requirements of Chapter 12 or Chapter 12A of the San Francisco Housing Code (Residential Energy Conservation Ordinance and Residential Water Conservation Ordinance).

COST-EFFECTIVE means having a simple economic payback that does not exceed four years or the expected life of an energy conservation measure, whichever is shorter.

ESTABLISHED CONTRACTOR’S COST means the contractor’s fee, including labor and material, plus the engineer’s fee to do the required work, provided that the engineer’s fees do not exceed the schedule of fees provided by the Building Official.

PERMIT APPLICANT means the person listed on the building permit application as the owner or lessee of the building.

QUALIFIED INSPECTOR means an inspector defined in Section 1314A, who is authorized to perform a water conservation inspection.

QUALIFIED PROFESSIONAL means a person regularly engaged in the field of making repairs, adjustments and inspection of energy-using equipment contained in HVAC, lighting or service hot water systems.

SERVICE HOT WATER means the supply of hot water for domestic or commercial purposes other than comfort heating.

SIMPLE ECONOMIC PAYBACK means the time needed to recover a conservation investment on the basis of expected energy savings at current energy costs. Simple economic payback is expressed in years, and is calculated by dividing the established contractor's cost of a conservation measure by the estimated dollar savings in the first year. Available tax credits, incentives and future energy costs are not considered in the calculation.

WATER CONSERVATION INSPECTION means inspection of a commercial building for compliance with the requirements of this chapter.

SECTION 1304A – RULES AND GUIDELINES

1304A.1 Adopt Rules. The Building Official, in cooperation with the General Manager of the Public Utilities Commission and other advisors as the Building Official 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 1307A. The Building Official, in cooperation with the General Manager of the Public Utilities Commission, may amend these rules and guidelines from time to time after considering public input.

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

SECTION 1305A – CIVIL REMEDIES

1305A.1 Abatement. A commercial building shall constitute a nuisance under the terms of Section 102A of this code when the installation of a water conservation measure in a commercial building is required pursuant to this chapter and the water conservation measure has not been installed.

The nuisance shall be abated by civil action pursuant to procedures set forth in Section 102A of this code for unsafe buildings; provided, however, that in no event shall any violation constitute a misdemeanor.

SECTION 1306A – REQUIREMENTS

1306A.1 Building Additions. For building additions where the sum of concurrent building permits by the same permit applicant would increase the floor area of the space in a building by more than ten

percent, the permit applicant shall obtain a valid water conservation inspection and shall comply with the applicable water conservation measures required by this chapter as a condition for issuance of a Certificate of Final Completion and Occupancy by the Department upon completion of the addition.
1306A.1.1 Scope. This subsection shall apply to the entire building.

1306A.2 Building Alterations and Improvements.

1306A.2.1 For alterations or improvements where the total construction cost estimated in the building permit is greater than \$150,000, as a condition for issuance of a Certificate of Final Completion and Occupancy, or final permit sign off, by the Department upon completion of the alterations or improvements, the permit applicant shall obtain a valid water conservation inspection and shall install the applicable water conservation devices required by this chapter that serve the specific area of alteration or improvement.

1306A.2.2 Notwithstanding Section 1306A.2.1, for any alterations or improvements to a room containing any of the water conservation devices identified in Section 1313A, as a condition for issuance of a Certificate of Final Completion and Occupancy or final permit sign off by the Department upon completion of the alterations or improvements, the permit applicant shall install the applicable water conservation devices required by this chapter in that room.

1306A.3 On or before January 1, 2017, all commercial buildings shall be in compliance with this chapter, and the owner or the owner's authorized representative shall cause a water conservation inspection to be completed, and shall have a certificate of compliance on file with the Department for the entire building, or the entire portion of the mixed residential and commercial building that is subject to the required water compliance measures identified in Section 1313A.

SECTION 1307A – INFORMATIONAL BROCHURE

1307A.1 The Department shall make available to the public an informational brochure specifying the water conservation requirements.

SECTION 1308A – POSTPONEMENTS OF REQUIREMENTS

1308A.1 Postponement for Demolition. The duty of an owner or permit applicant to comply with inspection and water conservation requirements applicable to any portion of a building subject to this chapter shall be postponed for one year from the date of issuance of a demolition permit for said building. If the building is demolished and a certificate of completion is issued by the Department before the end of the one-year postponement, the requirements of this chapter shall not apply. If the building is not demolished after the expiration of one year, the provisions of this chapter shall apply, subject to appeal, even though the demolition permit is still in effect or a new demolition permit has been issued.

SECTION 1309A – EARLY COMPLIANCE WITH WATER CONSERVATION MEASURES

1309A.1 Early Compliance. To encourage early compliance with the requirements of this chapter, compliance pursuant to Section 1311A may be completed at any time before compliance would otherwise be required. In the event of early compliance, a water conservation inspection shall be completed and a certificate of compliance shall be filed with the Department in accordance with

Section 1311A.

SECTION 1310A – WATER CONSERVATION INSPECTIONS

1310A.1 Inspections. A water conservation inspection which satisfies the requirements of this chapter shall be performed as required by this chapter.

SECTION 1311A – PROOF OF COMPLIANCE WITH WATER CONSERVATION MEASURES

1311A.1 Inspection Form. The Department shall provide standardized forms, that may be paper and / or electronic 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 submitted to the Department in accordance with this Section.
[Amended 5-14-2009 by Ord. No. 77-09, effective 7-1-2009]

1311A.2 Certificate of Compliance. When all of the water conservation requirements have been met, a certificate of compliance shall be signed and submitted to the Department.
[Amended 5-14-2009 by Ord. No. 77-09, effective 7-1-2009]

1311A.3 Public Records. Water conservation inspection results and certificates of compliance shall be public information, shall be available for inspection by any interested person during regular business hours at the Department, and may be made available electronically via the internet.
[Amended 5-14-2009 by Ord. No. 77-09, effective 7-1-2009]

1311A.4 Fees. Reasonable fees may be required to pay for, but not exceed, the costs of implementing this chapter. Such fees shall be established by the Board of Supervisors upon recommendation of the Director of the Department and shall include:

1. The cost of inspections performed by the Department;
2. The cost of the appeal process and the request for exemption process;
3. The cost of filing and processing documents at the Department;
4. The cost of printing forms and informational brochures by the Department;
5. Other expenses incurred by the City and County of San Francisco in implementing this

Chapter.

[Added 5-14-2009 by Ord. No. 77-09, effective 7-1-2009]

1311A.4.1 Fee Schedule. See Building Code Section 110A, Table 1A-N for the applicable fees, once established.

[Added 5-14-2009 by Ord. No. 77-09, effective 7-1-2009]

1311A.4.2 Fee Review. The Director of the Department of Building Inspection shall cause an annual report of fees to be made and filed with the Controller as set forth in Section 3.17-2 of the San Francisco Administrative Code. The Controller shall review the report and file it with the Board of Supervisors along with a proposed ordinance readjusting the fee rates as necessary.

[Added 5-14-2009 by Ord. No. 77-09, effective 7-1-2009]

SECTION 1312A – APPEALS FROM RESULTS OF A WATER CONSERVATION INSPECTION OR REQUEST FOR EXEMPTION

1312A.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 ten 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. The determination of the Director may be appealed to the Building Inspection Commission pursuant to the appeal procedures established in the Administrative Code Chapter 77.
[Amended 5-14-2009 by Ord. No. 77-09, effective 7-1-2009]

1312A.2 Exemptions. Any person with an interest in the property subject to a water conservation inspection who claims an exemption pursuant to Section 1313A.3 and 1313A.4 of this chapter may request a determination of exemption from the Director by filing the request and stating the basis for the claim. The burden of proof shall be on the applicant to demonstrate the qualifications for the exemption. The determination of the Director may be appealed to the Building Inspection Commission pursuant to the appeal procedures established in the Administrative Code Chapter 77. Any appeal or request for exemption to the Director pursuant to this Section shall be accompanied by payment of a filing fee, pursuant to Section 1216 of the San Francisco Housing Code.
[Amended 5-14-2009 by Ord. No. 77-09, effective 7-1-2009]

SECTION 1313A – REQUIRED WATER CONSERVATION MEASURES

The following water conservation measures are required for commercial buildings:

1313A.1 Showerheads. Replace all showerheads having a maximum flow rate exceeding 2.5 gallons (9.46 liters) per minute, with showerheads not exceeding the maximum flow rate established by the California Energy Commission, as set forth in the Appliance Efficiency Regulations, California Code of Regulations, Title 20, Sections 1601 to 1608, as it may be amended. Showers shall have no more than one showerhead per valve. For purposes of this subsection, the term “showerheads” includes rain heads, rain tiles, or any other fitting that transmits water for purposes of showering.
[Amended 5-14-2009 by Ord. No. 77-09, effective 7-1-2009]

1313A.2 Faucet Aerators. Replace all faucets and faucet aerators having a maximum flow rate exceeding 2.2 gallons per minute at a water pressure of 60 pounds per square inch, with plumbing fittings not exceeding the maximum flow rate established by the California Energy Commission, as set forth in the Appliance Efficiency Regulations, California Code of Regulations, Title 20, Sections 1601 to 1608, as it may be amended. Health-care facilities that are required by this chapter to install faucet aerators may satisfy that requirement by installing other flow restricting devices, such as laminar flow control devices.
[Amended 5-14-2009 by Ord. No. 77-09, effective 7-1-2009]

1313A.3 Water Closets. Replace all water closets that have a rated water consumption exceeding 1.6 gallons per flush with fixtures not exceeding the rated maximum water consumption established in the San Francisco Plumbing Code Chapter 4, Section 402.2, as it may be amended. An owner of a commercial building may request an exemption from replacing a water closet in the building if the replacement would detract from the historical integrity of the building, as determined by the Director of the Department of Building Inspection pursuant to the California Historic Building Code and Section 1312A.2.
[Amended 5-14-2009 by Ord. No. 77-09, effective 7-1-2009]

1313A.4 Urinals. Replace all urinals that have a flow rate exceeding one gallon per flush with fixtures not exceeding the maximum flow rate established in the San Francisco Plumbing Code, Section 402.3, as it may be amended. An owner of a commercial building may request an exemption from replacing a urinal in the building if the replacement would detract from the historical integrity of the building, as determined by the Director of the Department of Building Inspection pursuant to the California Historical Building Code and Section 1312A.2.
[Added 5-14-2009 by Ord. No. 77-09, effective 7-1-2009]

1313A.5 Leak repair. All water leaks shall be located and repaired. To determine the existence of leaks, the following is required.

1. **Visual inspection or water meter registration.** If water meter registration is used, compliance is achieved if there is no meter movement for ten minutes while all fixtures are shut off.

2. **All tank type water closets shall be tested with leak detector tablets or dye to detect slow valve leaks and all flushometer type fixtures shall be visually checked for proper operation with respect to timing and leaks.**
[Added 5-14-2009 by Ord. No. 77-09, effective 7-1-2009]

SECTION 1314A – WATER CONSERVATION INSPECTIONS

1314A.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 Building Official 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.**
[Amended 5-14-2009 by Ord. No. 77-09, effective 7-1-2009]

1314A.2 Qualified Inspector Duties. The duties of a qualified inspector shall be as follows:

1. **To inspect portions of a building that are subject to this chapter to determine whether the water conservation standards specified in Section 1313A have been met and, if met, to sign a certificate of compliance, pursuant to Section 1311A, and to furnish it to the permit applicant, building owner or owner's agent;**
2. **To record on an official inspection form, pursuant to Section 1311A, all measures required by this chapter for which the building is in noncompliance, and to sign the inspection form and furnish it to the permit applicant, building owner or owner's agent.**
[Amended 5-14-2009 by Ord. No. 77-09, effective 7-1-2009]

1314A.3 Private Water Inspectors. Private inspectors shall be required to demonstrate financial responsibility by being insured and / or bonded in amounts to be determined by the Building Official.
[Amended 5-14-2009 by Ord. No. 77-09, effective 7-1-2009]

1314A.4 Conflict of Interest. No authorized inspector may conduct a water inspection on any building in which that inspector has a financial interest. For the purposes of this section, an inspector shall be deemed to have a financial interest in a building if the inspector:

1. Is an owner of the building or the property upon which the building is located in full or in part;
2. Is a full- or part-time employee of the building or its owners;
3. Is regularly placed on the building staff by a company that provides building engineering, operations and maintenance, or other building services to the property.
[Amended 5-14-2009 by Ord. No. 77-09, effective 7-1-2009]

1314A.5 Inspector as Employee. No inspector may approve a certificate of water conservation compliance for a building where that inspector is an employee or officer of a company that performed construction or repair work required by this chapter.
[Amended 5-14-2009 by Ord. No. 77-09, effective 7-1-2009]

1314A.6 Limitation. Water conservation inspections are intended to enforce the provisions of this chapter only, and are not intended to determine compliance or noncompliance with any other portions of this code.
[Amended 5-14-2009 by Ord. No. 77-09, effective 7-1-2009]

**Chapter 13B
CONSTRUCTION AND DEMOLITION DEBRIS RECOVERY PROGRAM**

SECTION 1301B – TITLE

This chapter shall be known as the “Construction and Demolition Debris Recovery Program.”

SECTION 1302B – RECOVERY OF CONSTRUCTION AND DEMOLITION DEBRIS

Under the requirements set forth herein and in Chapter 14 of the Environment Code, all construction and demolition debris in amounts of one cubic yard or greater generated in the course of a construction or demolition project must be transported off the site by a registered transporter, unless transported by the owner of the site, and handled, processed and otherwise managed by a registered facility for recovery of the materials. All persons subject to these requirements, including an applicant for any building or demolition permit shall comply with the requirements for construction and demolition debris recovery set forth in Chapter 14 of the Environment Code.

SECTION 1303B – DEFINITIONS

“Construction and Demolition Debris” shall mean building materials and solid waste generated from construction and demolition activities, including, but not limited to, fully-cured asphalt, concrete, brick, rock, soil, lumber, gypsum wallboard, cardboard and other associated packaging, roofing material, ceramic tile, carpeting, fixtures, plastic pipe, metals, tree stumps, and other vegetative matter resulting from land clearing and landscaping for construction, deconstruction, demolition or land developments. This term does not include refuse regulated under the 1932 Refuse Collection and Disposal Initiative Ordinance or sections of the Municipal Code that implement the provisions of that ordinance; materials from the public right-of-way; or, unless specified in Chapter 14 of the Environment Code, materials source separated for reuse or recycling. Hazardous waste, as defined in California Health and Safety Code section 25100 et seq., as amended, is not Construction and Demolition Debris for purposes of this Chapter.

“Registered Transporter” or “Registered Facility” shall mean a person who holds a valid registration issued by the Director of the Department of the Environment pursuant to Chapter 14 of the Environment Code. “Transporter” does not include a person that owns and operates only vehicles with no more than two axles and no more than two tires per axle.

SECTION 1304B – PERMIT CONDITION

The provisions of Chapter 14 of the Environment Code and any approvals or conditions imposed in writing by the Department of the Environment are conditions of the permit issued by the Department under Section 106A.1, and a violation of Chapter 14 or such approvals or conditions shall be deemed non-compliance with the permit.

SECTION 1305B – PERMIT NOTIFICATION

Permit application materials shall bear notice of and reference to the above requirements and the owner's responsibility for compliance with such requirements.

Chapter 13C
GREEN BUILDING REQUIREMENTS

The City and County of San Francisco adopts the 2010 Cal Green Code as amended by the City & County of San Francisco and herein printed as Chapter 13C of the San Francisco Building Code.

Replace the chapters as follows:

CHAPTER 13C.1
ADMINISTRATION GENERAL

SECTION 13C.101
GENERAL

13C.101.1 Title. These regulations shall be known as the ~~California~~ San Francisco Green Building Standards Code and may be cited as such and will be referred to herein as "this code". ~~It is intended that it shall also be known as the CAL Green Code.~~ The ~~California~~ San Francisco Green Building Standards Code is ~~Part 11 of twelve parts~~ Chapter 13C of the official compilation and publication of the adoption, amendment and repeal of building regulations to the ~~California Code of Regulations, Title 24, also referred~~ San Francisco Building Inspection Commission Amendments to as the California Building Standards Code.

13C.101.2 Purpose. The purpose of this ~~code chapter~~ is to ~~improve public~~ promote the health, safety and general welfare of San Francisco residents, workers, and visitors by ~~enhancing the design and construction of buildings through minimizing the use of building concepts having a reduced negative impact, or positive environmental impact and encouraging sustainable construction practices~~ waste of energy, water and other resources in the ~~following categories:~~

- ~~1. Planning and design.~~
- ~~2. Energy efficiency.~~
- ~~3. Water efficiency and conservation.~~
- ~~4. Material conservation and resource efficiency.~~
- ~~5. Environmental quality.~~

construction and operation of buildings in the City and County of San Francisco and by providing a healthy indoor environment. The green building practices required by this chapter will also further the goal of reducing the greenhouse gas emissions in the City and County of San Francisco to 20 percent below 1990 levels by the year 2012, as stated in Board of Supervisors Resolution No. 158-02 and the City's 2004 Climate Action Plan.

13C.101.3 Scope. The provisions of this code shall apply to the planning, design, operation, construction, use and occupancy of every newly constructed building or structure, unless other wise indicated in this code, as well as alterations to existing buildings throughout the State of California. City and County of San Francisco.

It is not the intent that While this code substitute or be identified as meeting references the standards of green building programs, the City and County of San Francisco does not confer certification requirements of under any green building program.

13C.101.3.1 State-regulated Regulated buildings, structures and applications. Provisions of this code shall apply to the following buildings, structures, and applications regulated by state agencies as referenced in the Matrix Adoption Tables and as specified in Sections 103 through 106, except where modified by local

~~ordinance pursuant to Section 101.7. When adopted by a state agency, the provisions of this code shall be enforced by the appropriate enforcing agency, but only to the extent of authority granted to such agency by statute. Provisions of this code shall apply to all occupancy types regulated by the San Francisco Building Code, including: A, B, E, F, H, I, L, M, R, S, and U as defined by California Building Code Title 24 Section 302 (2010) as amended.~~

- ~~1. State owned buildings, including buildings constructed by the Trustees of the California State University, and to the extent permitted by California laws, buildings designed and constructed by the Regents of the University of California and regulated by the Building Standards Commission. See Section 103 for additional scoping provisions.~~
- ~~2. Energy efficiency standards regulated by the California Energy Commission~~
- ~~3. Low rise residential buildings constructed throughout the State of California, including but not limited to, hotels, motels, lodging houses, apartment houses, dwellings, dormitories, condominiums, shelters for homeless persons, congregate residences, employee housing, factory built housing and other types of dwellings containing sleeping accommodations with or without common toilets or cooking facilities regulated by the Department of Housing and Community Development. See Section 104 for additional scoping provisions.~~
- ~~4. Public elementary and secondary schools, and community college buildings regulated by the Division of the State Architect. See Section 105 for additional scope provisions.~~
- ~~5. Qualified historical buildings and structures and their associated sites regulated by the State Historical Building Safety Board within the Division of the State Architect.~~
- ~~6. General acute care hospitals, acute psychiatric hospitals, skilled nursing and/or intermediate care facilities, clinics licensed by the Department of Public Health and correctional treatment centers regulated by the Office of Statewide Health Planning and Development. See Section 106 for additional scoping provisions.~~
- ~~7. Graywater systems regulated by the Department of Water Resources and the Department of Housing and Community Development.~~

~~**13C.101.4 Appendices.** Provisions contained in the appendices of this code are not mandatory unless specifically adopted by a State agency or adopted by a city, county, or city and county in compliance with Health and Safety Code Sections 18930 and 18941.5, respectively, for Building Standards Law; Health and Safety Code Section 17950 for State Housing Law; and Health and Safety Code Section 13869.7 for Fire Protection Districts. See Section 101.7 of this code. [Reserved]~~

~~**13C.101.5 Referenced codes and standards.** The codes and standards referenced elsewhere in this code shall be considered part of the requirements of this code to the extent prescribed ~~extent~~ of each such reference.~~

~~**101.5.1 Building.** The provisions of the California Building Code and California Residential Code, as applicable shall apply to the construction, alteration, movement, enlargement, replacement, repair, use and occupancy, location, maintenance, removal and demolition of every structure or any appurtenances connected or attached to such buildings or structures.~~

~~**101.5.2 Electrical.** The provisions of the California Electrical Code shall apply to the installation of electrical systems, including but not limited to, alterations, repair, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.~~

~~**101.5.3 Mechanical.** The provisions of the California Mechanical Code shall apply to the installation, alterations, repair and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air conditioning and refrigeration systems, incinerators and other energy related systems.~~

~~**101.5.4 Plumbing.** The provisions of the California Plumbing Code shall apply to the installation, alteration,~~

~~repair and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances where connected to a water or sewage system.~~

~~**101.5.5 Fire prevention.** The provisions of CCR, Title 19, Division 1 and CCR, Title 24, Part 2 and Part 9 relating to fire and panic safety as adopted by the Office of the State Fire Marshal shall apply to all structures, processes and premises for protection from the hazard of fire, panic and explosion.~~

~~**101.5.6 Energy.** The provisions of the California Energy Code shall apply to the minimum design and construction of buildings for energy efficiency.~~

13C.101.6 Order of precedence and use.

~~**13C.101.6.1 Differences.** In the event of any differences between these building standards and the standard reference documents, the text of ~~these building standards~~ this Chapter shall govern. ~~In the event a local amendment to this code results in differences between these building standards and the amendment, the text of the amendment shall govern.~~~~

~~**13C.101.6.2 Specific provision.** Where a specific provision varies from a general provision, the specific provision shall apply.~~

~~**13C.101.6.3 Conflicts.** When the requirements of this code conflict with the requirements of any other part of the California Building Standards Code, Title 24, **any provision contained elsewhere in the San Francisco Municipal Code, or any regulation or requirement adopted by the Public Utilities Commission or other City agency under its Charter authority,** the most restrictive requirement shall prevail.~~

~~**13C.101.6.4. Explanatory notes.** Explanatory material, such as references to web sites or other sources where additional information may be found, is included in this code in the form of notes. Notes are informational only and are not enforceable requirements of this code.~~

~~**13C.101.7 City, county, or city and county amendments, additions or and deletions.** This code is intended to set mandatory minimum Green Building Standards and include optional tiers that may, at the discretion of any city, county or city and county, be applied. This chapter includes the amendments, deletions, and additions necessary to enforce California green building minimum mandatory measures as well as maintain stricter local standards.~~

~~This code does not limit the authority of city, county, or city and county governments to make necessary changes to the provisions contained in this code pursuant to Section 101.7.1. The effective date of amendments, additions, or deletions to this code for cities, counties, or cities and counties filed pursuant to Section 101.7.1 shall be the date on which it is filed. However, in no case shall the amendments, additions or deletions to this code be effective any sooner than the effective date of this code.~~

~~Local modifications shall comply with Health and Safety Code Section 18941.5(b) for Building Standards Law, Health and Safety Code Section 17958.5 for State Housing Law or Health and Safety Code Section 13869.7 for Fire Protection Districts.~~

~~**101.7.1 Findings and filings.**~~

~~1. The city, county, or city and county shall make express findings for each amendment, addition or deletion based upon climatic, topographical, or geological conditions. For the purpose of this section, climatic, topographical, or geological conditions include local environmental conditions as established by the city, county, or city and county.~~

2. The city, county, or city and county shall file the amendments, additions, or deletions expressly marked and identified as to the applicable findings. Cities, counties, cities and counties, and fire departments shall file the amendments, additions or deletions and the findings with the California Building Standards Commission at 2525 Natomas Park Drive, Suite 130, Sacramento, CA 95833.

3. Findings prepared by fire protection districts shall be ratified by the local city, county, or city and county and filed with the California Department of Housing and Community Development at 1800 3rd Street, Room 260, Sacramento, CA 95811.

4. The city, county, or city and county shall obtain California Energy Commission approval for any energy related ordinances consistent with Public Resources Code Section 25402.1(h)(2) and Title 24, Part 1, Section 10-106. Local governmental agencies may adopt and enforce energy standards for newly constructed buildings, additions, alterations, and repairs provided the California Energy Commission finds that the standards will require buildings to be designed to consume no more energy than permitted by Part 6. Such local standards include, but are not limited to, adopting the requirements of Part 6 before their effective date, requiring additional energy conservation measures, or setting more stringent energy budgets.

101.8 Alternate materials, designs and methods of construction. The provisions of this code are not intended to prevent the use of any alternate material, appliance, installation, device, arrangement, method, design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternate shall be approved on a case-by-case basis where the enforcing agency finds that the proposed alternate is satisfactory and complies with the intent of the provisions of this code and is at least the equivalent of that prescribed in this code in planning and design, energy, water, material resource efficiency and conservation, environmental air quality, performance, safety, and the protection of life and health. Consideration and compliance provisions for occupancies regulated by adopting state agencies are found in the sections listed below:

1. Section 1.2.2 in the California Building Code (CBC) for the California Building Standards Commission
2. Section 104.11 of Chapter 1, Division II for the Division of the State Architect.
3. Section 1.8.7, Chapter 1, Administration, Division 1, of the 2010 California Building Code and Section 1.2.6, Chapter 1, Administration, Division 1, of the 2010 California Residential Code for the Department of Housing and Community Development.
4. Section 7-104, 2010 California Administrative Code for the Office of the Statewide Health Planning and Development.

101.9 Effective date of this code. Only those standards approved by the California Building Standards Commission that are effective at the time an application for a building permit is submitted shall apply to the plans and specifications for, and to the construction performed under, that permit. For the effective dates of the provisions contained in this code, see the appropriate application checklist and the History Note page of this code.

101.10 Mandatory requirements. This code contains both mandatory and voluntary green building measures. Mandatory and voluntary measures are identified in the appropriate application checklist contained in this code.

13C.101.10 Equivalency. Wherever reference is made to the LEED® or GreenPoint Rated systems, a comparable equivalent rating system may be used if approved by the Director. The applicable LEED®, GreenPoint Rated or equivalent versions of performance standards for applications subject to this chapter are:

LEED® for Green Interior Design and Construction v2009

LEED® for Building Design and Construction v2009

GreenPoint Rated (GPR) Single Family New Home Construction – v2009-11 version

GreenPoint Rated (GPR) New Multifamily Construction – v2009-11 version
LEED® for Homes v2009 (applicable as an equivalent compliance path for residential projects of 4 stories or greater, where CalGreen mandatory measures are not required.)

Wherever specific LEED® prerequisites or credits are cited, such references are to LEED® BD&C 2009. More recent LEED® and GreenPoint Rated versions may be used, provided the credits and points achieved are as or at least as stringent as LEED® BD&C 2009 or GPR 2009-11.

Wherever the LEED® or GreenPoint Rated systems include a minimum energy or other performance requirement, the permit applicant may choose to meet the minimum performance requirements with an alternative equivalent method approved by the Director.

Compliance with any of these requirements may be verified and/or certified by any means, including third-party review, as approved by the Director.

13C.101.11 Effective use of this code. The following steps may be used to establish which provisions of this code are applicable to a specific occupancy:

1. Establish the type of occupancy.
2. ~~Verify which state agency has authority for the established occupancy by reviewing the authorities list in Sections 103 through 106.~~
3. ~~Once the appropriate agency has been identified, find~~ Find the chapter which covers the established occupancy.
4. ~~The Matrix Adoption Tables at the beginning of Chapters 4 and 5~~ Identify the mandatory green building measures necessary to meet the minimum requirements of this code for the established occupancy in chapters 4 and 5.
5. ~~Voluntary tier measures are contained in Appendix Chapters A4 and A5. A Checklist containing each green building measure, both required and voluntary is provided at the end of each appendix chapter. Each measure listed in the application checklist has a section number which correlates to a section where more information about the specific measure is available.~~
6. ~~The Application Checklist identifies which measures are required by this code and allows users to check off which voluntary items have been selected to meet voluntary tier levels if desired or mandated by a city, county or city and county.~~
4. Administrative Bulletin 93, provided by the Department of Building Inspection, summarizes how the requirements of this code may be met. Appendices to Administrative Bulletin 93 include tabular summaries of required measures, and provide submittal forms.

SECTION 102 CONSTRUCTION DOCUMENTS AND INSTALLATION VERIFICATION

102.1 Submittal documents. ~~Construction documents and other data shall be submitted in one or more sets with each application for a permit. Where special conditions exist, the enforcing agency is authorized to require additional construction documents to be prepared by a licensed design professional and may be submitted separately.~~

Exception: ~~The enforcing agency is authorized to waive the submission of construction documents and other data not required to be prepared by a licensed design professional.~~

102.2 Information on construction documents. ~~Construction documents shall be of sufficient clarity to~~

indicate the location, nature and scope of the proposed green building feature and show that it will conform to the provisions of this code, the California Building Standards Code, and other relevant laws, ordinances, rules and regulations as determined by the enforcing agency.

102.3 Verification. Documentation of conformance for applicable green building measures shall be provided to the enforcing agency. Alternate methods of documentation shall be acceptable when the enforcing agency finds that the proposed alternate documentation is satisfactory to demonstrate substantial conformance with the intent of the proposed green building measure.

SECTION 103 BUILDING STANDARDS COMMISSION

103.1 Specific scope of application of the agency responsible for enforcement, the enforcement agency, and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.

1. All occupancies.

Application—New construction, unless otherwise indicated in this code, of State buildings (all occupancies), including buildings constructed by the Trustees of the California State University and the Regents of the University of California and all occupancies where no state agency has the authority to adopt building standards applicable to such buildings.

Enforcing Agency—State or local agency specified by the applicable provisions of law.

Authority Cited—Health and Safety Code Sections 18930.5, 18934.5 and 18938 (b).

Reference—Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.

8. — University of California, California State Universities, and California Community Colleges. Application—Standards for lighting for parking lots and primary campus walkways at the University of California, California State Universities, and California Community Colleges.

Enforcing Agency—State or local agency specified by the applicable provisions of law.

Authority Cited—Government Code Section 14617.

Reference—Government Code Section 14617.

3. Existing State Owned Buildings, including those owned by the University of California and by the California State University.

Application—Building seismic retrofit standards including abating falling hazards of structural and nonstructural components and strengthening of building structures. See also Division of the State Architect.

Enforcing Agency—State or local agency specified by the applicable provisions of law.

Authority Cited—Government Code Section 16600.

Reference—Government Code Sections 16600 through 16604.

4. Unreinforced Masonry Bearing Wall Buildings.

Application—Minimum seismic strengthening standards for buildings specified in Appendix Chapter 1 of the California Code for Building Conservation, except for buildings subject to building standards adopted pursuant to Part 1.5 (commencing with Section 17910).

Enforcing Agency—State or local agency specified by the applicable provisions of law.

Authority Cited—Health and Safety Code Section 18934.6.

Reference—Health and Safety Code Sections 18901 through 18949.

SECTION 104 DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

104.1 Specific scope of application of the agency responsible for enforcement, the enforcement agency, and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.

1. Housing construction. Application—Hotels, motels, lodging houses, apartment houses, dwellings, dormitories, condominiums, shelters for homeless persons, congregate residences, employee housing, factory built housing and other types of dwellings containing sleeping accommodations with or without common toilet or cooking facilities including accessory buildings, facilities and uses thereto. Sections of this code which pertain to applications listed in this section are identified in the Matrix Adoption Table using the abbreviation “HCD 1.”

Enforcing agency—Local building department or the Department of Housing and Community Development.

Authority Cited—Health and Safety Code Sections 17921, 17922 and 19990.

Reference—Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

SECTION 105 DIVISION OF THE STATE ARCHITECT

105.1 Specific scope of application of the agency responsible for enforcement, the enforcement agency, and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated

105.1.1 Application — Public elementary and secondary schools and community colleges. New construction on a new campus site or new construction on an existing site cleared of all existing structures.

Enforcing agency—The Division of the State Architect—Structural Safety (DSA-SS) has been delegated the responsibility and authority by the Department of General Services to review and approve the design and observe the construction of public elementary and secondary schools, and community colleges.

Authority cited—Education Code Sections 17310 and 81142.

Reference—Education Code Sections 17280 through 17317, and 81130 through 81147.

105.1.2 Applicable administrative standards.

1. Title 24, Part 1, California Code of Regulations:

Sections 4 301 through 4 355, Group 1, Chapter 4, for public elementary and secondary schools and community colleges.

2. Title 24, Part 2, California Code of Regulations:

2.1 Sections 1.1 and 1.9.2 of Chapter 1, Division 1.

~~2.2 Sections 102.1, 102.2, 102.3, 102.4, 102.5, 104.9, 104.10 and 104.11 of Chapter 1, Division II.~~

~~**105.1.3 Applicable building standards.** *California Building Standards Code, Title 24, Parts 2, 3, 4, 5, 6, 9, 11 and 12, California Code of Regulations, for school buildings and community colleges.*~~

SECTION 106 OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT

~~**106.1 OSHPD 1.** Specific scope of application of the agency responsible for enforcement, enforcement agency and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.~~

~~**Application**—General acute care hospitals and acute psychiatric hospitals, excluding distinct part units or distinct part freestanding buildings providing skilled nursing or intermediate care services. For structural regulations: Skilled nursing facilities and/or intermediate care facilities except those skilled nursing facilities and intermediate care facilities of single story, Type V, wood or light steel frame construction.~~

~~**Enforcing agency**—Office of Statewide Health Planning and Development (OSHPD). The office shall enforce the Division of the State Architect—Access Compliance regulations and the regulations of the Office of the State Fire Marshal for the above stated facility types.~~

~~**106.1.1 Applicable administrative standards.**~~

~~1. Title 24, Part 1, California Code of Regulations: Chapters 6 and 7.~~

~~2. Title 24, Part 2, California Code of Regulations: Sections 101 and 110 of Chapter 1 and Appendix Chapter 1.~~

~~**106.1.2 Applicable building standards.** *California Building Standards Code, Title 24, Parts 2, 3, 4, 5, 9, 11 and 12.*~~

~~**106.1.3 Identification of amendments.** For applications listed in Section 106.1, amendments appear in this code preceded with the acronym [OSHPD 1].~~

~~**Authority**—Health and Safety Code Sections 127010, 127015, 1275 and 129850.~~

~~**References**—Health and Safety Code Sections 19958, 127010, 127015, 129680, 1275 and 129675 through 130070.~~

~~**106.2 OSHPD 2.** Specific scope of application of the agency responsible for enforcement, enforcement agency and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.~~

~~**Application**—Skilled nursing facilities and intermediate care facilities, including distinct part skilled nursing and intermediate care services on a general acute care or acute psychiatric hospital license, provided either are in a separate unit or a freestanding building. For structural regulations: Single story, Type V skilled nursing facility and/or intermediate care facilities utilizing wood or light steel frame construction.~~

~~**Enforcing agency**—Office of Statewide Health Planning and Development (OSHPD). The office shall also enforce the Division of the State Architect—Access Compliance regulations and the regulations of the Office of the State Fire Marshal for the above stated facility type.~~

~~**106.2.1 Applicable administrative standards.**~~

~~1. Title 24, Part 1, California Code of Regulations: Chapter 7.~~

~~2. Title 24, Part 2, California Code of Regulations: Sections 101 and 110 of Chapter 1 and Appendix~~

Chapter 1.

106.2.2 Applicable building standards. California Building Standards Code, Title 24, Parts 2, 3, 4, 5, 9, 11 and 12.

106.2.3 Identification of amendments. For applications listed in Section 106.2, amendments appear in this code preceded with the acronym [OSHPD 2].

Authority—Health and Safety Code Sections 127010, 127015, 1275 and 129850.

References—Health and Safety Code Sections 127010, 127015, 1275 and 129680.

106.3 OSHPD 4. Specific scope of application of the agency responsible for enforcement, enforcement agency and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.

Application—Correctional treatment centers.

Enforcing agency—Office of Statewide Health Planning and Development (OSHPD). The office shall also enforce the Division of the State Architect—Access Compliance regulations and the regulations of the Office of the State Fire Marshal for the above stated facility types.

106.3.1 Applicable administrative standards.

1. Title 24, Part 1, California Code of Regulations: Chapter 7.

2. Title 24, Part 2, California Code of Regulations: Sections 1.1 and 1.10 of Chapter 1, Division 1 and Chapter 1, Division II.

106.3.2 Applicable building standards. California Building Standards Code, Title 24, Parts 2, 3, 4, 5, 9, 11 and 12.

106.3.3 Identification of amendments. For applications listed in Section 106.4, amendments appear in this code preceded with the acronym [OSHPD 4], unless the entire chapter is applicable.

Authority—Health and Safety Code Sections 127010, 127015 and 129790.

References—Health and Safety Code Sections 127010, 127015, 1275 and 129675 through 130070.

**CHAPTER 13C.2
DEFINITIONS**

**SECTION 13C.201
GENERAL**

13C.201.1 Scope. ~~Unless otherwise stated,~~ The following words and terms shall, for the purposes of this code ~~chapter,~~ have the meanings ~~shown in this chapter~~ indicated.

201.2 Interchangeability. ~~Words used in the present tense include the future; words stated in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural, the singular.~~

201.3 Terms defined in other documents. ~~Where terms are not defined in this code and are defined in the California Building Standards Code or other referenced documents, such terms shall have the meanings ascribed to them as in those publications.~~

201.4 Terms not defined. ~~Where terms are not defined as specified in this section, such terms shall have ordinarily accepted meanings such as the context implies.~~

**SECTION 13C.202
DEFINITIONS**

AUTOMATIC. Automatic means capable of operating without human intervention.

BUILDING ENVELOPE. The ensemble of exterior and demising partitions of a building that enclose conditioned space.

~~**CALIFORNIA BUILDING CODE.** The current version of the California Building Code.~~

~~**CALIFORNIA ELECTRICAL CODE.** The current version of the California Electrical Code.~~

~~**CALIFORNIA ENERGY CODE.** The current version of the California Energy Code, unless otherwise specified.~~

~~**CALIFORNIA MECHANICAL CODE.** The current version of the California Mechanical Code.~~

~~**CALIFORNIA PLUMBING CODE.** The current version of the California Plumbing Code.~~

~~**CALIFORNIA RESIDENTIAL CODE.** The current version of the California Residential Code.~~

CONDITIONED FLOOR AREA. The floor area (in square feet) of enclosed conditioned space on all floors of a building, as measured at the floor level of the exterior surfaces of exterior walls enclosing the conditioned space.

CONDITIONED SPACE. A space in a building that is either directly conditioned or indirectly conditioned.

CONDITIONED SPACE, DIRECTLY. An enclosed space that is provided with wood heating, is provided with mechanical heating that has a capacity exceeding 10 Btu/hr-ft², or is provided with mechanical cooling

that has a capacity exceeding 5 Btu/hr-ft², unless the space-conditioning system is designed for a process space. (See “**PROCESS SPACE**”)

CONDITIONED SPACE, INDIRECTLY. Enclosed space, including, but not limited to, unconditioned volume in atria, that (1) is not directly conditioned space; and (2) either (a) has a thermal transmittance area product (UA) to directly conditioned space exceeding that to the outdoors or to unconditioned space and does not have fixed vents or openings to the outdoors or to unconditioned space, or (b) is a space through which air from directly conditioned spaces is transferred at a rate exceeding three air changes per hour.

COOLING EQUIPMENT. Equipment used to provide mechanical cooling for a room or rooms in a building.

DEMOLITION. The removal of sufficient material from an existing building to meet the definition in Planning Code.

DISPOSAL. Means the management of solid waste through landfilling or transformation at permitted solid waste facilities.

DIVERSION. Means activities which reduce or eliminate the amount of solid waste from solid waste disposal for purposes of this code.

ENERGY COMMISSION. The California State Energy Resources Conservation and Development Commission.

~~**ENFORCING AGENCY.** The designated department or agency as specified by statute or regulation.~~

EXFILTRATION. The uncontrolled outward air leakage from inside a building, including leakage through cracks and interstices, around windows and doors, and through any other exterior partition or duct penetration.

GREEN BUILDING. A holistic approach to design, construction, and demolition that minimizes the building’s impact on the environment, the occupants, and the community.

GREENPOINT RATED, GREENPOINTS and GREENPOINTS CHECKLIST. The residential green building rating system and checklist and certification methodology of the non-profit organization Build It Green.

HAZARDOUS WASTE.

(a) Means a waste, defined as a "hazardous waste" in accordance with Section 25117 of the Health and Safety Code, or a combination of wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may do either of the following:

(1) Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.

(2) Pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

(b) Unless expressly provided otherwise, "hazardous waste" includes extremely hazardous waste and acutely hazardous waste.

HIGH-RISE RESIDENTIAL BUILDING. A high-rise building that contains Group R residential occupancies.

HISTORICAL RESOURCE. A property that meets the terms of the definitions in Section 21084.1 of the CEQA Statute (The California Environmental Quality Act [Public Resources Code Section 21084.1]) and Section 15064.5 of the CEQA Guidelines, as determined by the San Francisco Planning Department.

INERT SOLIDS OR INERT WASTE. Inert solids or inert waste means a non-liquid solid waste including, but not limited to, soil and concrete, that does not contain hazardous waste or soluble pollutants at concentrations in excess of water-quality objectives established by a regional water board pursuant to Division 7 (commencing with Section 13000) of the California Water Code and does not contain significant quantities of decomposable solid waste.

INFILTRATION. An uncontrolled inward air leakage from outside a building or unconditioned space, including leakage through cracks and interstices, around windows and doors and through any other exterior or demising partition or pipe or duct penetration.

~~**KITCHEN.** That portion in a residential dwelling unit that is a room or area used for cooking, food storage and preparation and washing dishes, including associated counter tops and cabinets, refrigerator, stove, ovens and floor area.~~

~~**LOW-RISE RESIDENTIAL BUILDING.** A building that is of Occupancy Group R and is three stories or less, or that is a one- or two- family dwelling or townhouse.~~

LARGE COMMERCIAL BUILDING. A commercial building or addition of Group B, M, A, or I occupancy that is 25,000 gross square feet or more.

LEED® and LEED® Checklist The Leadership in Energy and Environment Design rating system, certification methodology, and checklist of the United States Green Building Council (USGBC).

MAJOR ALTERATIONS. Alterations where interior finishes are removed and significant upgrades to structural and mechanical, electrical and/or plumbing systems are proposed where areas of such construction are 25,000 gross square feet or more in Group B, M or R occupancies of existing buildings.

MID-SIZE COMMERCIAL BUILDING. A commercial building of Group B or M occupancy that is 5,000 or more and less than 25,000 gross square feet, and is not a high-rise building.

MID-SIZE RESIDENTIAL BUILDING. A building that contains five or more dwelling units and is not a high-rise building.

NEWLY CONSTRUCTED (or NEW CONSTRUCTION). A newly constructed building (or new construction) is a building that has never before been used or occupied for any purpose and does not include additions, alterations or repairs.

OUTDOOR AIR (Outside air). Air taken from outdoors and not previously circulated in the building.

NEW LARGE COMMERCIAL INTERIORS. First-time tenant improvements where areas of such construction are over 25,000 gross square feet or more in Group B or M occupancy areas of existing buildings.

PLANTS.

Adaptive plants. Adaptive plants are plants that grow well in a given habitat with minimal attention in the form of winter protection, pest protection, irrigation and fertilization once established.

Note: Adaptive plants are considered low in maintenance and are not Invasive plants.

Invasive plants. Invasive plants are both indigenous and non-indigenous species with growth habits that are characteristically aggressive.

Note: Invasive plants typically have a high reproductive capacity and tendency to overrun the ecosystems they inhabit.

Native plants. Native plants are plants that have adapted to a given area and are not invasive.

PROCESS SPACE. A space that is thermostatically controlled to maintain a process environment temperature less than 55° F or to maintain a process environment temperature greater than 90° F for the whole space that the system serves, or that is a space with a space-conditioning system designed and controlled to be incapable of operating at temperatures above 55° F or incapable of operating at temperatures below 90° F at design conditions.

RECYCLE or RECYCLING. The process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace. "Recycling" does not include transformation, as defined in Public Resources Code Section 40201.

~~**RESIDENTIAL BUILDING.** (See "low-rise residential building.") Buildings with Group R Occupancy.~~

RESILIENT FLOORING. Refers to non-textile flooring materials which have a relatively firm surface, yet characteristically have "give" and "bounce back" to their original surface profile from the weight of objects that compress its surface. Resilient flooring materials are made in various shapes and sizes including both tile and roll form. Common types of resilient flooring include but are not limited to:

1. Vinyl composition tile
2. Vinyl tile and sheet flooring
3. Linoleum tile and sheet
4. Cork tile and sheet flooring
5. Rubber tile and sheet flooring
6. Polymeric poured seamless flooring
7. Other types of non-textile synthetic flooring

RE-USE. Means the use, in the same form as it was produced, of a material which might otherwise be discarded.

SMALL RESIDENTIAL BUILDING. A building that has four or fewer dwelling units and is not a high-rise building.

SOLID WASTE.

(a) Solid waste means all putrescible and nonputrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, dewatered, treated,

or chemically fixed sewage sludge which is not hazardous waste, manure, vegetable or animal solid and semisolid wastes, and other discarded solid and semisolid wastes.

(b) "Solid waste" does not include any of the following wastes:

- (1) Hazardous waste, as defined in Public Resources Code Section 40141.
- (2) Radioactive waste regulated pursuant to the Radiation Control Law (Chapter 8 (commencing with Section 114960) of Part 9 of Division 104 of the Health and Safety Code).
- (3) Medical waste regulated pursuant to the Medical Waste Management Act (Part 14 commencing with Section 117600) of Division 104 of the Health and Safety Code). Untreated medical waste shall not be disposed of in a solid waste landfill, as defined in Public Resources Code Section 40195.1. Medical waste that has been treated and deemed to be solid waste shall be regulated pursuant to this division.

VAPOR BARRIER. Material that has a permeance rating of one perm or less when tested in accordance with the desiccant method using procedure A of ASTM E96 and that provides resistance to the transmission of ~~water~~ moisture vapor.

CHAPTER 13C.3
GREEN BUILDING

SECTION 13C.301
GENERAL

13C.301.1 Scope. ~~Buildings Newly constructed buildings in the City and County of San Francisco shall be designed to include the green building~~ comply with the measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in under the application checklists and may be included California Green Building Standards Code (CalGreen) in the design and construction of structures covered by this code but are not required unless adopted by a city, county or city and county as manner specified in Section 101.7. this Chapter.

Additional green building requirements established by the City and County of San Francisco in 2008 are mandatory for:

- (1) Newly constructed Group R occupancy buildings,
- (2) Newly constructed buildings of Group B, M, A, and I occupancies that are 5,000 gross square feet or more,
- (3) New first-time build-outs of commercial interiors that are 25,000 gross square feet or more in buildings of Group B or M occupancies, and
- (4) Major alterations that are 25,000 gross square feet or more in existing buildings of Group B, M or R occupancies, where interior finishes are removed and significant upgrades to structural and mechanical, electrical and/or plumbing systems are proposed.

Exempt from additional local requirements beyond CalGreen mandatory measures, unless otherwise noted are:

- (1) Any new building in which laboratory use of any occupancy classification is the primary use, and
- (2) Any building undergoing renovation in which the area of renovation will be primarily for laboratory use of any occupancy classification.

SECTION 13C.302
MIXED OCCUPANCY BUILDINGS

13C.302.1 Mixed occupancy buildings. In mixed occupancy buildings, each portion of a building shall comply with the specific green building CalGreen mandatory measures applicable to each specific occupancy. However, to fulfill any additional local green building requirements, the project sponsor may apply a single required green building standard to the entire building.

SECTION 13C.303
PHASED PROJECTS

13C.303.1 Phased projects. For shell buildings and others constructed for future tenant improvements, only those code measures relevant to the building components and systems considered to be new construction (or newly constructed) shall apply.

13C.303.1.1 Tenant improvements. The provisions Maintenance of this code shall apply only to the initial tenant or occupant improvements to a project. required features. Any structure subject to this chapter shall maintain the green building features required herein, or equivalent, regardless of subsequent alterations, additions, or changes of use, unless subject to subsequent or more stringent requirements.

SECTION 304
VOLUNTARY TIERS

~~304.1 Purpose. Voluntary tiers are intended to further encourage building practices that improve public health, safety and general welfare by promoting the use of building concepts which minimize the building's impact on the environment and promote a more sustainable design.~~

~~304.1.1 Tiers. The provisions of Appendices A4 and A5 outline means of achieving enhanced construction levels by incorporating additional measures. Buildings complying with tiers specified for each occupancy contain additional prerequisite and elective green building measures necessary to meet the threshold of each tier.~~

~~Where there are practical difficulties involved in complying with the threshold levels of a tier, the enforcing agency may grant modifications for individual cases. The enforcing agency shall first find that a special individual reason makes the strict letter of the tier impractical and that modification is in conformance with the intent and purpose of the measure. The details of any action granting modification shall be recorded and entered in the files of the enforcing agency.~~

SECTION 305 [OSHPD 1, 2 & 4]
CALGreen TIER 1 AND CALGreen TIER 2

~~305.1 CALGreen Tier 1 and CALGreen Tier 2 buildings contain voluntary green building measures necessary to meet the threshold of each level.~~

~~305.1.1 CALGREEN Tier 1. To achieve CALGreen Tier I, buildings must comply with the latest edition of "Savings By Design, Healthcare Modeling Procedures" found online at <http://www.energysoft.com/ep/2007SBDHPProcedures.pdf>~~

~~305.1.2 CALGREEN Tier 2. To achieve CALGreen Tier 2, buildings must exceed the latest edition of "Savings By Design, Healthcare Modeling Procedures" by a minimum of 15%.~~

SECTION 306
VOLUNTARY MEASURES

~~**306.1 Purpose.** Voluntary measures are intended to further encourage building practices that improve public health, safety and general welfare by promoting the use of building concepts which minimize the building's impact on the environment, promote a more sustainable design, and high performance educational facilities.~~

~~**306.1.1** The provisions of Appendix A5 outline means of achieving enhanced construction levels by incorporating additional measures.~~

CHAPTER 13C.4
RESIDENTIAL MANDATORY MEASURES REQUIREMENTS

DIVISION 13C.4.1 - PLANNING AND DESIGN

SECTION 13C.4.101
GENERAL

4.101.1 Purpose. ~~The provisions of this division outline planning, design and development methods that include environmentally responsible site selection, building design, building siting and development to protect, restore, and enhance the environmental quality of the site and respect the integrity of adjacent properties.~~

13C. 4.101.1 Purpose. This division outlines green building requirements for all newly constructed Group R occupancy buildings as well as major alterations of Group R occupancy buildings to promote the health, safety and welfare of San Francisco residents.

SECTION 13C.4.102
DEFINITIONS

13C.4.102.1 Definitions. The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

FRENCH DRAIN. A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similar pervious material used to collect or channel drainage or runoff water.

~~**WATTLES.** Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant materials such as hay, straw or similar material shaped in the form of tubes and placed on a downflow slope. Wattles are also used for perimeter and inlet controls.~~

SECTION 13C.4.103
SITE SELECTION (RESERVED) REQUIREMENTS FOR GROUP R OCCUPANCY BUILDINGS

13C.4.103.1 New small and midsize residential buildings.

13C.4.103.1.1 Rating requirements

Effective January 1, 2011, a new building must be GreenPoint Rated and applicants must submit documentation demonstrating that a minimum of 75 GreenPoints from the GreenPoints Single Family New Construction Checklist or the GreenPoints Multifamily New Construction Checklist will be achieved.

13C.4.103.1.2 Stormwater management

In addition to any stormwater measures required in the course of meeting the GreenPoint Rated standard, projects disturbing 5,000 square feet or more in ground area shall meet or exceed the stormwater management controls adopted by the San Francisco Public Utilities Commission, including LEED® SS 6.1® and 6.2 as applicable. All new building projects – including those of less than one acre in area – must

also develop and implement construction activity pollution prevention and site run-off controls adopted by the San Francisco Public Utilities Commission, as applicable.

13C.4.103.2 New high-rise residential buildings

13C.4.103.2.1 Rating requirement

Effective January 1, 2011, permit applicants must submit documentation to achieve LEED® “Silver” certification. Alternatively, this rating requirement may be met by obtaining the GreenPoint Rated designation and submitting documentation demonstrating that a minimum of 75 GreenPoints from the GreenPoint Rated Multifamily New Construction checklist will be achieved.

13C.4.103.2.2 Indoor water use reduction. Permit applicants must submit documentation verifying that a minimum 30 percent reduction in the use of indoor potable water is achieved, as calculated to meet LEED® credit WE3.2.

13C.4.103.2.3 Construction debris management. Permit applicants must submit documentation verifying the diversion of a minimum 75 percent of the projects construction and demolition debris, as calculated to meet LEED® credit MR2.2. The waste management plan necessary to meet this requirement shall be updated as necessary and shall be accessible during construction for examination by the Department of Building Inspection. Permit applicants must also meet the requirements of San Francisco Environment Code Chapter 14 and San Francisco Building Code Chapter 13B (Construction and Demolition Debris Recovery Program.)

13C.4.103.2.4 Stormwater management. Stormwater management shall meet the stormwater management controls adopted by the San Francisco Public Utilities Commission, and shall meet or exceed the applicable LEED® SS 6.1 and SS 6.2 credits.

13C.4.103.2.4.1 Construction activity stormwater pollution prevention. All projects, whether greater or less than one acre, must develop and implement construction activity pollution prevention and site run-off controls adopted by the San Francisco Public Utilities Commission, as well as LEED® prerequisite SSp1, as applicable.

13C.4.103.3 MAJOR ALTERATIONS TO EXISTING GROUP R OCCUPANCY BUILDINGS

13C.4.103.3.1 RATING REQUIREMENT

Effective January 1, 2011, permit applicants must submit documentation to achieve LEED® “Silver” certification. Effective January 1, 2012, applicants must submit documentation achieve a LEED® Gold rating. Alternatively, this rating requirement may be met by obtaining the GreenPoint Rated designation and submitting documentation demonstrating that a minimum of 75 GreenPoints from the GreenPoint Rated Multifamily New Construction checklist will be achieved.

13C.4.103.2.2 LOW-EMITTING MATERIALS

Alterations utilizing LEED® must submit documentation to verify the use of low-emitting materials meeting the LEED® credits EQ 4.1 (adhesives and sealants), EQ 4.2 (paints and coatings), and EQ 4.3 (carpet systems) where applicable.

Alterations utilizing GreenPoint Rated must submit documentation to verify the use of low-emitting materials meeting the GreenPoint Rated Multifamily New Homes measures for low-emitting coatings, adhesives and sealants, and carpet systems.

SECTION 13C.4.104
SITE (Reserved)-HISTORIC PRESERVATION

13C.4.104.1 On-site retention of historical features. For alterations of buildings determined to be historical resources, after demonstrating compliance with all applicable codes, including the 2008 California Building Energy Efficiency Standards (Title 24, Part 6) and the 2010 California Historical Building Code (Title 24, Part 8), the minimum points or credits required under this chapter shall be reduced for retention and in-situ reuse or restoration of certain character defining features, as follows:

TABLE 13C.4.104.A

<u>SIGNIFICANT HISTORICAL ARCHITECTURAL FEATURES</u>	<u>PERCENT RETAINED*</u>	<u>ADJUSTMENT TO MINIMUM LEED POINT REQUIREMENT</u>	<u>ADJUSTMENT TO MINIMUM GREENPOINTS REQUIREMENT</u>
<u>Windows @ principal façade(s)</u>	<u>At least 50%</u>	<u>2</u>	<u>7</u>
<u>Windows @ principal façade(s)</u>	<u>At least 75%</u>	<u>3</u>	<u>11</u>
<u>Windows @ principal façade(s)</u>	<u>100%</u>	<u>4</u>	<u>15</u>
<u>Other windows</u>	<u>At least 50%</u>	<u>1</u>	<u>3</u>
<u>Other windows</u>	<u>100%</u>	<u>2</u>	<u>6</u>
<u>Exterior doors @ principal façade(s)</u>	<u>100%</u>	<u>1</u>	<u>3</u>
<u>Siding or wall finish @ principal façade(s)</u>	<u>80%</u>	<u>1</u>	<u>4</u>
<u>Trim & casing @ wall openings on principal façade(s)</u>	<u>100%</u>	<u>1</u>	<u>3</u>
<u>Roof cornices or decorative eaves visible from right-of-way</u>	<u>100%</u>	<u>1</u>	<u>3</u>
<u>Sub-cornices, belt courses, water tables, and running trim visible from right-of-way</u>	<u>80%</u>	<u>1</u>	<u>3</u>
<u>Character-defining elements of significant interior spaces</u>	<u>At least 50%</u>	<u>2</u>	<u>7</u>
<u>Character-defining elements of significant interior spaces</u>	<u>100%</u>	<u>4</u>	<u>15</u>
<u>Other exterior ornamentation (e.g. cartouches, corbels, quoins, etc.) visible from right-of-way</u>	<u>80%</u>	<u>1</u>	<u>3</u>

*** Retention includes the rehabilitation and repair of character-defining features that conform to the**

Secretary of the Interior's Standards for the Treatment of Historic Properties.

SECTION 13C.4.105

DECONSTRUCTION AND REUSE OF (Reserved) DEMOLITION OF EXISTING STRUCTURES

13C.4.105.1 Adjustments to Rating Requirements for Building Demolition and Density. Applications subject to SFBC Chapter 13C, whereby construction of a new building is proposed within five years of the demolition of a building on the site, where such demolition occurred after the effective date of the Green Building Ordinance - November 3, 2008 - the sustainability requirements for new buildings pursuant to San Francisco Building Code Chapter 13C shall be increased as follows:

13C.4.105.1.1 LEED® Projects. For projects attaining a LEED® certification:

- (1) Where the building demolished was an historical resource, the required points shall be increased by 10 points.**
- (2) Where the building demolished was not an historical resource, the required points shall be increased by 6 additional points.**
- (3) Where the building demolished was not an historical resource and the number of dwellings in the residential portion of the replacement structure are tripled, the required points shall be increased by 5 additional points.**

13C.4.105.1.2 GreenPoint Rated Projects. For projects attaining GreenPoint Rated:

- (1) Where the building demolished was an historical resource, the required points shall be increased by 25 additional points.**
- (2) Where the building demolished was not an historical resource, the required points shall be increased by 20 additional points.**
- (3) Where the building demolished was not an historical resource and the number of dwellings in the residential portion of the replacement structure are tripled, the required points shall be increased by 17 additional points.**

**SECTION 13C.4.106
SITE DEVELOPMENT**

13C.4.106.1 General. Preservation and use of available natural resources shall be accomplished through evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, management of storm water drainage and erosion controls shall comply with this section. The requirements of this section are completely met in the course of compliance with Section 13C.4.103, which is either equivalent or stricter in all of its requirements. This section is therefore included for reference only.

13C.4.106.2 Storm water drainage and retention during construction. Projects, which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site. See 13C.4.103.2.4.1

1. Retention basins of sufficient size shall be utilized to retain storm water on the site.
2. Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the

enforcing agency.

~~3. Compliance with a lawfully enacted storm water management ordinance.~~

13C.4.106.3 Surface drainage. The site shall be planned and developed to keep surface water from entering buildings. Construction plans shall indicate how the site grading or drainage system will manage surface water flows. Examples of methods to manage surface water include, but are not limited to, the following:

1. Swales.
2. Water collection and disposal systems.
3. French drains.
4. Water retention gardens.
5. Other water measures which keep surface water away from building and aid in groundwater recharge.

DIVISION 13C.4.2 - ENERGY EFFICIENCY

SECTION 13C.4.201

GENERAL

~~**4.201.1 Scope.** The Department of Housing and Community Development does not regulate mandatory energy efficiency standards in residential buildings. For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory building standards.~~

~~**Note:** It is the intent of this code to encourage buildings to achieve exemplary performance in the area of energy efficiency. For the purposes of energy efficiency standards, the California Energy Commission believes specifically, a green building should achieve at least a 15% reduction in energy usage when compared to the State's mandatory energy efficiency standards. The Department of Housing and Community Development's mandatory green building standards for residential buildings do not require compliance with levels of minimum energy efficiency beyond those required by the California Energy Commission.~~

13C.4.201.1 Scope. Most common definitions of a green building include at least a 15% reduction in energy usage when compared to statewide mandatory energy efficiency standards.

13C.4.201.1.1 Energy performance. Using an Alternative Calculation Method (ACM) approved by the California Energy Commission, calculate each building's energy use, and compare it to the standard or "budget" building to achieve a 15% compliance margin over Title 24 Part 6 2008 California Energy Standards.

High rise projects utilizing LEED® to meet local green building requirements may alternatively both:

(1) Document compliance with Title 24 Part 6 2008 California Energy Standards, including submittal of all standard Title 24 Part 6 2008 compliance documentation, and

(2) Additionally demonstrate that the project achieves a 15% or greater compliance margin over ASHRAE 90.1 2007 energy cost baseline using the published LEED® 2009 rules. Such analysis must include all on-site building energy use, including exterior and security lighting, elevators, all process loads, and receptacle loads.

DIVISION 13C.4.3 - WATER EFFICIENCY AND CONSERVATION

SECTION 13C.4.301 GENERAL

13C.4.301.1 Scope. The provisions of this ~~chapter shall division~~ establish the means of conserving water used indoors, outdoors and in wastewater conveyance. The requirements of this division will be completely met in the course of compliance with Section 13C.4.103, which is either equivalent or stricter in all of its requirements. Therefore, this division is included for reference only.

SECTION 13C.4.302 DEFINITIONS

13C.4.302.1 Definitions. The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

SECTION 13C.4.303 INDOOR WATER USE

13C.4.303.1 20% Savings. A schedule of plumbing fixtures and fixture fittings that will reduce the overall use of potable water within the building by at least 20% shall be provided. The reduction shall be based on the maximum allowable water use per plumbing fixture and fitting as required by the California Building Standards Code. The 20% reduction in potable water use shall be demonstrated by one of the following methods.

1. Each plumbing fixture and fitting shall meet reduced flow rates specified in Table ~~4.303.2~~13C.4.303.1; or
2. A calculation demonstrating a 20% reduction in the building "water use" baseline as established in Table 13C.4.303.1 shall be provided. For low-rise residential occupancies, the calculation shall be limited to the following plumbing fixture and fitting types: water closets, urinals, lavatory faucets and showerheads.

~~**4.303.2 Multiple showerheads serving one shower.** When single shower fixtures are served by more than one showerhead, the combined flow rate of all the showerheads shall not exceed the maximum flow rates specified in the 20% reduction column contained in Table 4.303.2 or the shower shall be designed to only allow one showerhead to be in operation at a time.~~

~~**Exception:** The maximum flow rate for showerheads when using the calculation method specified in Section 4.303.1, Item 2, is 2.5 gpm @ 80 psi.~~

TABLE 13C.4.303.1
WATER USE BASELINE¹

Fixture Type	Flow-rate ²	Duration	Daily uses	Occupants ³
Showerheads Residential	2.5 gpm @ 80 psi	8 min.	1	
Lavatory Faucets Residential	2.2 gpm @ 60 psi	.25 min.	3	
Kitchen Faucets	2.2 gpm @ 60 psi	4 min.	1	
Replacement Aerators	2.2 gpm @ 60 psi			

Gravity tank type Water Closets	1.6 gallons/flush	1 flush	1 male 3 female	
Flushometer Tank Water Closets	1.6 gallons/flush	1 flush	1 male 3 female	
Flushometer Valve Water Closets	1.6 gallons/flush	1 flush	1 male 3 female	
Electromechanical Hydraulic Water Closets	1.6 gallons/flush	1 flush	1 male 3 female	
Urinals	1.0 gallons/flush	1 flush	2 male	

Fixture “Water Use” = Flow rate x Duration x Occupants x Daily uses

¹ Use Worksheet WS-1 to calculate baseline water use.

² The Flow-rate is from the CEC Appliance Efficiency Standards, Title 20 California Code of Regulations; where a conflict occurs, the CEC standards shall apply.

³ For low rise residential occupancies, the number of occupants shall be based on two persons for the first bedroom, plus one additional person for each additional bedroom.

**TABLE 13C.4.303.2
FIXTURE FLOW RATES**

Fixture Type	Flow-rate	Maximum flow rate at ≥ 20% Reduction
Showerheads	2.5 gpm @ 80 psi	2 gpm @ 80 psi
Lavatory Faucets Residential	2.2 gpm @ 60 psi	1.5 gpm @ 60 psi ²
Kitchen Faucets	2.2 gpm @ 60 psi	1.8 gpm @ 60 psi
Gravity tank type Water Closets	1.6 gallons/flush	1.28 gallons/flush ¹
Flushometer Tank Water Closets	1.6 gallons/flush	1.28 gallons/flush ¹
Flushometer Valve Water Closets	1.6 gallons/flush	1.28 gallons/flush ¹
Electromechanical Hydraulic Water Closets	1.6 gallons/flush	1.28 gallons/flush ¹
Urinals	1.0 gallons/flush	.5 gallons/flush

¹ Includes single and dual flush water closets with an effective flush of 1.28 gallons or less.

Single Flush Toilets - The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is the average flush volume when tested in accordance with ASME A112.19.233.2.

Dual Flush Toilets - The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is defined as the composite, average flush volume of two reduced flushes and one full flush. Flush volumes will be tested in accordance with ASME A112.19.2 and ASME A112.19.14.

² Lavatory Faucets shall not have a flow rate less than 0.8 gpm at 20 psi.

13C.4.303.3 Plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall meet the standards referenced in Table 13C.4.303.3.

**TABLE 13C.4.303.3
STANDARDS FOR PLUMBING FIXTURES AND FIXTURE FITTINGS**

REQUIRED STANDARDS	
Water closets (toilets) – flushometer valve type single flush, maximum flush volume	ASME A112.19.2/CSA B45.1 – 1.28 gal (4.8 L)

Water closets (toilets) – flushometer valve type dual flush, maximum flush volume	ASME A112.19.14 and USEPA WaterSense Tank-Type High Efficiency Toilet Specification – 1.28 gal (4.8 L).
Water closets (toilets) – tank-type	U.S. EPA WaterSense Tank-Type High-Efficiency Toilet Specification
Urinals, maximum flush volume	ASME A112.19.2/CSA B45.1 – 0.5 gal (1.9 L)
Urinals, non-water urinals	ASME A112.19.19 (vitreous china) ANSI Z124.9–2004 or IAPMO Z124.9 (plastic)
Public lavatory faucets: Maximum flow rate – 0.5 gpm (1.9 L/min)	ASME A112.18.1/CSA B125.1
Public metering self-closing faucets: Maximum water use – 0.25 gal (1.0 L) per metering cycle	ASME A112.18.1/CSA B125.1
Residential bathroom lavatory sink faucets: Maximum flow rate – 1.5 gpm (5.7 L/min)	ASME A112.18.1/CSA B125.1

**SECTION 13C.4.304
OUTDOOR WATER USE**

13C.4.304.1 Irrigation controllers. Automatic irrigation system controllers for landscaping provided by the builder and installed at the time of final inspection shall comply with the following:

1. Controllers shall be weather- or soil moisture-based controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change.
2. Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.

Note: More information regarding irrigation controller function and specifications is available from the Irrigation Association at <http://www.irrigation.org/SWAT/Industry/ia-tested.asp>.

**SECTION 13C.4.4.305
WATER REUSE SYTEMS
(Reserved)**

DIVISION 13C.4.4 – MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

SECTION 13C.4.401 GENERAL

13C.4.401.1 Scope. The requirements of this division are completely met in the course of compliance with Section 13C.4.103, which is either equivalent or stricter in all of its requirements. Therefore, this division is included for reference only. The provisions of this chapter shall outline means of achieving material conservation and resource efficiency through protection of buildings from exterior moisture, construction waste diversion, employment of techniques to reduce pollution through recycling of materials, and building commissioning or testing, adjusting and balancing.

SECTION 13C.4.402 DEFINITIONS

13C.4.402.1 Definitions. The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

SECTION 13C.4.403 FOUNDATION SYSTEMS (Reserved)

SECTION 13C.4.404 EFFICIENT FRAMING TECHNIQUES (Reserved)

SECTION 13C.4.405 MATERIAL SOURCES (Reserved)

SECTION 13C.4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE

13C.4.406.1 Joints and openings. Openings in the building envelope separating conditioned space from unconditioned space needed to accommodate gas, plumbing, electrical lines and other necessary penetrations must be sealed in compliance with the California Energy Code.

Exception: Annular spaces around pipes, electric cables, conduits, or other openings in plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or similar method acceptable to the ~~enforcing agency.~~ Director of the Department of Building Inspection.

SECTION 13C.4.407

**WATER RESISTANCE AND MOISTURE MANAGEMENT
(Reserved)**

**SECTION 13C.4.408
CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING**

~~**4.408.1 Construction waste reduction of at least 50%.** Recycle and/or salvage for reuse a minimum of 50% of the non-hazardous construction and demolition debris, or meet a local construction and demolition waste management ordinance, whichever is more stringent.~~

~~**Exceptions:**~~

- ~~1. Excavated soil and land-clearing debris.~~
- ~~2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite.~~

~~**4.408.2 Construction waste management plan.** Where a local jurisdiction does not have a construction and demolition waste management ordinance, a construction waste management plan shall be submitted for approval to the enforcing agency that:~~

- ~~1. Identifies the materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale.~~
- ~~2. Specifies if materials will be sorted on-site or mixed for transportation to a diversion facility.~~
- ~~3. Identifies the diversion facility where the material collected will be taken.~~
- ~~4. Identifies construction methods employed to reduce the amount of waste generated.~~
- ~~5. Specifies that the amount of materials diverted shall be calculated by weight or volume, but not by both.~~

~~**4.408.2.1 Documentation.** Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, Items 1 through 5. The waste management plan shall be updated as necessary and shall be accessible during construction for examination by the enforcing agency.~~

~~**4.408.2.2 Isolated jobsites.** The enforcing agency may make exceptions to the requirements of this section when jobsites are located in areas beyond the haul boundaries of the diversion facility.~~

~~**Notes:**~~

- ~~1. Sample forms found in Chapter 8 may be used to assist in documenting compliance with the waste management plan.~~
- ~~2. Mixed construction and demolition debris (C&D) processors can be located at <http://www.ciwmb.ca.gov/ConDemo/>.~~

~~**13C.4.408.1 Construction waste.** The San Francisco Construction and Demolition Debris Ordinance No. 27-06 is stricter than state construction waste requirements, and shall continue to be enforced.~~

~~**13C.4.408.2 Construction waste management plan.** High-rise residential structures must additionally comply with SFBC 13C.4.103.2.4 or the requirements of GreenPoint Rated, as applicable, to submit documentation that a construction waste management plan has been prepared and implemented.~~

**SECTION 13C.4.409
LIFE-CYCLE ASSESSMENT
(Reserved)**

SECTION 13C.4.410
BUILDING MAINTENANCE AND OPERATION

13C.4.410.1 Operation and maintenance manual. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the ~~enforcing agency~~ Director of the Department of Building Inspection which includes all of the following shall be placed in the building:

1. Directions to the owner or occupant that the manual shall remain with the building throughout the life-cycle of the structure.
2. Operation and maintenance instructions for the following:
 - a. Equipment and appliances, including water saving devices and systems, HVAC systems, water heating systems and other major appliances and equipment.
 - b. Roof and yard drainage, including gutters and downspouts.
 - c. Space conditioning systems including condenser and air filters.
 - d. Landscape irrigation systems.
 - e. Water reuse systems.
3. Information from local utility, water and waste recovery providers on methods to further reduce resource consumption including recycle programs and locations.
4. Public transportation and/or carpool options available in the area.
5. Educational material on the positive impacts of an interior relative humidity between 30-60% and what methods an occupant may use to maintain the relative humidity level in that range.
6. Information about water conserving landscape and irrigation design and controllers which conserve water.
7. Instructions for maintaining gutters and downspouts and importance of diverting water at least five feet away from foundation.
8. Information on required routine maintenance measures, including, but not limited to, caulking, painting, grading around building, etc.
9. Information about State solar energy and incentive programs available.
10. A copy of all special inspection verifications required by the ~~enforcing agency~~ Director of the Department of Building Inspection or this code.

13C.4.410.2 Solid Waste. Areas must be provided for the storage, collection and loading of recycling, composting and trash. All such areas, including any chute systems, must be designed for equal convenience for all users to separate those three material streams, and must provide space to accommodate a sufficient quantity and type of containers to be compatible with current methods of collection.

DIVISION 13C.4.5 - ENVIRONMENTAL QUALITY

SECTION 13C.4.501 GENERAL

13C.4.501.1 Scope. The requirements of this division are completely met in the course of compliance with Section 13C.4.103, which is either equivalent or stricter in all of its requirements. The provisions of this chapter shall outline means of reducing the quantity of air contaminants that are odorous, irritating, and/or harmful to the comfort and well-being of a building's installers, occupants and neighbors.

SECTION 13C.4.502 DEFINITIONS

13C.4.502.1 Definitions. The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

AGRIFIBER PRODUCTS. Agrifiber products include wheatboard, strawboard, panel substrates and door cores, not including furniture, fixtures and equipment (FF&E) not considered base building elements.

COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard, and medium density fiberboard. Composite wood products does not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber as specified in "Structural Glue Laminated Timber" (ANSI A190.1-2002) or prefabricated wood I-joists.

MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base Reactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundredths of a gram (g O₃ /g ROC).

Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 and 94701.

MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the oven-dry wood.

PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).

Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521(a).

REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.

VOC. A volatile organic compound broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a).

Note: Where specific regulations are cited from different agencies such as SCAQMD, ARB, etc., the VOC definition included in that specific regulation is the one that prevails for the specific measure in question.

SECTION 13C.4.503
FIREPLACES

13C.4.503.1 General. Any installed gas fireplace shall be a direct-vent sealed-combustion type.

SECTION 13C.4.504
POLLUTANT CONTROL

13C.4.504.1 Covering of duct openings and protection of mechanical equipment during construction. At the time of rough installation, or during storage on the construction site and until final startup of the heating and cooling equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other methods acceptable to the ~~enforcing agency~~ Director of the Department of Building Inspection to reduce the amount of dust or debris which may collect in the system.

13C.4.504.2 Finish material pollutant control. Finish materials shall comply with this section.

13C.4.504.2.1 Adhesives, sealants and caulks. Adhesives, sealants and caulks used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality management district rules apply:

1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable, or SCAQMD Rule 1168 VOC limits, as shown in Tables ~~4.504.1-13C.4.504.1~~ or ~~4.504.2-13C.4.504.2~~ as applicable. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene, and trichloroethylene), except for aerosol products as specified in subsection 2 below.
2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than one pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of California Code of Regulations, Title 17, commencing with Section 94507.

Note: Title 17 may be found at <http://ccr.oal.ca.gov/>

13C.4.504.2.2 Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table I of the ARB Architectural Suggested Control Measure as shown in Table ~~4.504.3-13C.4.504.3~~ unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table ~~4.504.3-13C.4.504.3~~, shall be determined by classifying the coating as a Flat, Nonflat, or Nonflat-High Gloss coating, based on its gloss, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 California Air Resources Board, Suggested Control Measure, and the corresponding Flat, Nonflat, or Nonflat-High Gloss VOC limit in Table ~~4.504.3-13C.4.504.3~~ shall apply.

13C.4.504.2.3 Aerosol Paints and Coatings. Aerosol paints and coatings shall meet the Product-Weighted MIR Limits for ROC in Section 94522(a)(3) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(c)(2) and (d)(2) of California Code of Regulations, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of

Regulation 8 Rule 49.

Notes:

1. Title 17 may be found at <http://ccr.oal.ca.gov/>

2. See Bay Area Air Quality Management District Regulation 8 Rule 49 at <http://www.arb.ca.gov/DRDB/BA/CURHTML/R8-49.HTM>

**TABLE 13C.4.504.1
ADHESIVE VOC LIMIT¹**

LESS WATER AND LESS EXEMPT COMPOUNDS IN GRAMS PER LITER

Architectural Applications	Current VOC Limit
Indoor Carpet Adhesives	50
Carpet Pad Adhesives	50
Outdoor Carpet Adhesives	150
Wood Flooring Adhesive	100
Rubber Floor Adhesives	60
Subfloor Adhesives	50
Ceramic Tile Adhesives	65
VCT and Asphalt Tile Adhesives	50
Dry Wall and Panel Adhesives	50
Cove Base Adhesives	50
Multipurpose Construction Adhesives	70
Structural Glazing Adhesives	100
Single Ply Roof Membrane Adhesives	250
Other Adhesive not specifically listed	50
Specialty Applications	Current VOC Limit
PVC Welding	285
CPVC Welding	270
ABS Welding	325
Plastic Cement Welding	250
Adhesive Primer for Plastic	250
Contact Adhesive	80
Special Purpose Contact Adhesive	250
Structural Wood Member Adhesive	140
Top and Trim Adhesive	250
Substrate Specific Applications	Current VOC Limit
Metal to Metal	30
Plastic Foams	50
Porous Material (except wood)	50
Wood	30
Fiberglass	80

¹ If an adhesive is used to bond dissimilar substrates together, the adhesive with the highest VOC content shall be allowed.

¹ For additional information regarding methods to measure the VOC content specified in this table, see South Coast Air Quality Management District Rule 1168, <http://www.arb.ca.gov/DRDB/SC/CURHTML/R1168.PDF>.

**TABLE 13C.4.504.2
SEALANT VOC LIMIT**

Less Water and Less Exempt Compounds in Grams per Liter

Sealants	Current VOC Limit
Architectural	250
Marine Deck	760
Nonmembrane Roof	300
Roadway	250
Single-Ply Roof Membrane	450
Other	420
Sealant Primers	Current VOC Limit
Architectural	
Non Porous	250
Porous	775
Modified Bituminous	500
Marine Deck	760
Other	750

TABLE 4.504.3

VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS^{2,3}
Grams of VOC Per Liter of Coating, Less Water and Less Exempt Compounds

Coating Category	Effective 1/1/2010	Effective 1/1/2012
Flat Coatings	50	
Nonflat Coatings	100	
Nonflat - High Gloss Coatings	150	
Specialty Coatings		
Aluminum Roof Coatings	400	
Basement Specialty Coatings	400	
Bituminous Roof Coatings	50	
Bituminous Roof Primers	350	
Bond Breakers	350	
Concrete Curing Compounds	350	
Concrete/Masonry Sealers	100	
Driveway Sealers	50	
Dry Fog Coatings	150	

Faux-Finishing Coatings	350	
Fire-Resistive Coatings	350	
Floor Coatings	400	
Form-Release Compounds	250	
Graphic Arts Coatings (Sign Paints)	500	
High Temperature Coatings	420	
Industrial Maintenance Coatings	250	
Low Solids Coatings ¹	120	
Magnesite Cement Coatings	450	
Mastic Texture Coatings	400	
Metallic Pigmented Coatings	500	
Multi-Color Coatings	250	
Pre-Treatment Wash Primers	420	
Primers, Sealers, and Undercoaters	400	
Reactive Penetrating Sealers	350	
Recycled Coatings	250	
Roof Coatings	50	
Rust Preventative Coatings	400	250
Shellacs:		
• Clear	730	
• Opaque	550	
Specialty Primers, Sealers, and Undercoaters	350	400
Stains	250	
Stone Consolidants	450	
Swimming Pool Coatings	340	
Traffic Marking Coatings	400	
Tub and Tile Refinish Coatings	420	
Waterproofing Membranes	250	
Wood Coatings	275	
Wood Preservatives	350	
Zinc-Rich Primers	340	

¹Grams of VOC per liter of coating, including water and including exempt compounds.

²The specified limits remain in effect unless revised limits are listed in subsequent columns in the table. Values in this table are derived from those specified by the California Air Resources Board, Architectural Coatings Suggested Control Measure, February 1, 2008. More information is available at http://www.arb.ca.gov/coatings/arch/Approved_2007_SCM.pdf.

13C.4.504.2.4 Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:

1. Manufacturers product specification.
2. Field verification of on-site product containers.

13C.4.504.3 Carpet systems. All carpet installed in the building interior shall meet the testing and product requirements of one of the following:

1. Carpet and Rug Institute's Green Label Plus Program
2. California Department of Public Health Standard Practice for the testing of VOCs (Specification 01350)
3. NSF/ANSI 140 at the Gold level
4. Scientific Certifications Systems Indoor Advantage™ Gold

Notes:

1. For Green Label Plus, see <http://www.carpet-rug.com/>.
2. For NSF/ANSI 140, see <http://www.carpet-rug.org/carpet-and-rug-industry/sustainability/sustainable-carpet-list.cfm>.
3. For Indoor Advantage™ Gold, see <http://www.scscertified.com/iaq/indooradvantage.htm>.
4. Scientific Certifications Systems Indoor Advantage™

<http://www.scscertified.com/iaq/indooradvantage.htm>.

13C.4.504.3.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute Green Label program.

13C.4.504.3.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 13C.4.504.1.

13C.4.504.4 Resilient flooring systems. Where resilient flooring is installed, at least 50% of floor area receiving resilient flooring shall comply with the VOC-emission limits defined in the Collaborative for High Performance Schools (CHPS) Low-emitting Materials List or certified under the Resilient Floor Covering Institute (RCFI) FloorScore program.

13C.4.504.5 Composite wood products. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.), by or before the dates specified in those sections as shown in Table 4.504.5-13C.4.504.5.

13C.4.504.5.1 Documentation. Verification of compliance with this section shall be provided as requested by the ~~enforcing agency-Department of Building Inspection~~. Documentation shall include at least one of the following:

1. Product certifications and specifications.
2. Chain of custody certifications.
3. Other methods acceptable to the ~~enforcing agency-Director of the Department of Building Inspection~~.

**TABLE 13C.4.504.5
FORMALDEHYDE LIMITS¹**

Maximum formaldehyde emissions in parts per million.

Product	Current Limit	Jan 1, 2012	Jul 1, 2012
Hardwood Plywood Veneer Core	0.05		
Hardwood Plywood Composite Core	0.08		0.05
Particle Board	0.09		
Medium Density Fiberboard	0.11		
Thin Medium Density Fiberboard ²	0.21	0.13	

¹ Values in this table are derived from those specified by the California Air Resources Board, Air Toxics Control Measure for Composite Wood as tested in accordance with ASTM E1333-96 (2002). For additional information, see California Code of Regulations, Title 17, Sections 93120 through 93120.12.

² Thin medium density fiberboard has a maximum thickness of eight millimeters.

**SECTION 13C.4.505
INTERIOR MOISTURE CONTROL**

~~**4.505.1 General.** Buildings shall meet or exceed the provisions of the California Building Standards Code.~~

13C.4.505.2 Concrete slab foundations. Concrete slab foundations required to have a vapor retarder by California Building Code, CCR, Title 24, Part 2, Chapter 19, shall also comply with this section.

13C.4.505.2.1 Capillary break. A capillary break shall be installed in compliance with at least one of the following:

1. A 4-inch (101.6 mm) thick base of ½ inch (12.7 mm) or larger clean aggregate shall be provided with a vapor barrier in direct contact with concrete and a concrete mix design which will address bleeding, shrinkage, and curling shall be used. For additional information, see American Concrete Institute, ACI 302.2R-06.
2. Other equivalent methods approved by the ~~enforcing agency~~ Director of the Department of Building Inspection.
3. A slab design specified by a licensed design professional.

13C.4.505.3 Moisture content of building materials. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19% moisture content. Moisture content shall be verified in compliance with the following:

1. Moisture content shall be determined with either a probe-type or a contact-type moisture meter.
2. Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end of each piece to be verified.
3. At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the ~~enforcing agency~~ Director of the Department of Building Inspection provided at the time of approval to enclose the wall and floor framing.

Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet applied insulation products shall follow the manufacturers' drying recommendations prior to enclosure.

SECTION 13C.4.506 INDOOR AIR QUALITY AND EXHAUST

13C.4.506.1 Bathroom exhaust fans. Mechanical exhaust fans which exhaust directly from bathrooms shall comply with the following requirements. For the purposes of this section, a bathroom is a room which contains a bathtub, shower, or tub/shower combination.

1. Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building.
2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidistat which shall be readily accessible.
 - a. Humidistat controls shall be capable of adjustment between a relative humidity range of 50 to 80 percent.

~~Note: For the purposes of this section, a bathroom is a room which contains a bathtub, shower, or tub/shower combination.~~

SECTION 13C.4.507

ENVIRONMENTAL COMFORT

13C.4.507.1 Openings. Whole house exhaust fans shall have insulated louvers or covers which close when the fan is off. Covers or louvers shall have a minimum insulation value of R-4.2.

13C.4.507.2 Heating and air conditioning system design. Heating and air conditioning systems shall be sized, designed, and equipment is selected using the following methods:

1. The heat loss and heat gain is established according to ACCA Manual J, ASHRAE handbooks or other equivalent design software or methods.
2. Duct systems are sized according to ACCA 29-D Manual D, ASHRAE handbooks or other equivalent design software or methods.
3. Select heating and cooling equipment according to ACCA 36-S Manual S or other equivalent design software or methods.

Exception: Use of alternate design temperatures necessary to ensure the systems function are acceptable.

SECTION 13C.4.508 OUTDOOR AIR QUALITY (Reserved)

CHAPTER 13C.5
NONRESIDENTIAL MANDATORY MEASURES REQUIREMENTS

DIVISION 13C.5.1 PLANNING AND DESIGN

SECTION 13C.5.101
GENERAL

5.101 Purpose. ~~The provisions of this chapter outline planning, design and development methods that include environmentally responsible site selection, building design, building siting and development to protect, restore, and enhance the environmental quality of the site and respect the integrity of adjacent properties.~~

13C.5.101 Purpose. This division outlines green building requirements for all newly constructed buildings that do not contain Group R occupancies, as well as major alterations to Group B and M occupancy buildings to promote the health, safety and welfare of San Francisco residents.

SECTION 13C.5.102
DEFINITIONS

13C.5.102 Definitions. The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

BUILDING COMMISSIONING. A systematic quality assurance process that spans the entire design and construction process, including verifying and documenting that building systems and components are planned, designed, installed, tested, operated, and maintained to meet the owner's project requirements.

CUTOFF LUMINAIRES. Luminaires whose light distribution is such that the candela per 1000 lamp lumens does not numerically exceed 25 (2.5%) at an angle of 90° above nadir, and 100 (10%) at a vertical angle of 80° above nadir. This applies to all lateral angles around the luminaire.

LOW-EMITTING AND FUEL EFFICIENT VEHICLES. Eligible vehicles are limited to the following:

1. Zero emission vehicle (ZEV), including neighborhood electric vehicles (NEV), partial zero emission vehicle (PZEV), advanced technology PZEV (AT ZEV), or CNG fueled (Original equipment manufacturer only) regulated under Health and Safety Code section 43800 and CCR, Title 13, sections 1961 and 1962.
2. High efficiency vehicles, regulated by US EPA, bearing High-Occupancy Vehicle (HOV) car pool lane stickers issued by the Department of Motor Vehicles.

NEIGHBORHOOD ELECTRIC VEHICLE (NEV). A motor vehicle that meets the definition of "low-speed vehicle" either in section 385.5 of the Vehicle Code or in 49 CFR571.500 (as it existed on July 1, 2000), and is certified to zero-emission vehicle standards.

PZEV.. Any vehicle certified by the California Air Resources Board as a Partial Credit Zero Emission Vehicle.

TENANT-OCCUPANTS. Building occupants who inhabit a building during its normal hours of operation as

permanent occupants, such as employees, as distinguished from customers and other transient visitors.

VANPOOL VEHICLE. -Eligible vehicles are limited any motor vehicle, other than a motortruck or truck tractor, designed for carrying more than 10 but not more than 15 persons including the driver, which is maintained and used primarily for the nonprofit work-related transportation of adults for the purposes of ridesharing.

Note: Source: Vehicle Code, Division 1, Section 668

ZEV. Any vehicle certified to zero-emission standards.

SECTION 13C.5.103 **SITE SELECTION (Reserved)-GREEN BUILDING REQUIREMENTS**

13C.5.103.1 New large commercial buildings The requirements of this section fulfill and replace all CALGreen mandatory measures, except where noted.

13C.5.103.1.1 Rating Requirement. Permit applicants must submit documentation to achieve LEED® “Silver” certification. Effective January 1, 2012, applicants must submit documentation to achieve a LEED® “Gold” certification.

13C.5.103.1.2 Indoor water use reduction . Permit applicants must submit documentation verifying that a minimum 30 percent reduction in the use of indoor potable water is achieved, as calculated to meet LEED® credit WE3.2.

13C.5.103.1.3 Construction debris management.. Permit applicants must submit documentation verifying the diversion of a minimum 75 percent of the projects construction and demolition debris, as calculated to meet LEED® credit MR2.2. Permit applicants must also meet the requirements of San Francisco Environment Code Chapter 14 and San Francisco Building Code Chapter 13B (Construction and Demolition Debris Recovery Program.) The waste management plan necessary to meet this requirement shall be updated as necessary and shall be accessible during construction for examination by the Department of Building Inspection.

13C.5.103.1.4 Commissioning . Permit applicants must submit documentation verifying that the facility has been or will meet the criteria necessary to meet LEED® credit EA 3.0 (Enhanced Commissioning), in addition to LEED® prerequisite EAp1 (Fundamental Commissioning of Building Energy Systems.) [

13C.5.103.1.5 Renewable energy . Effective January 1, 2012, permit applicants must submit documentation verifying that either:

(1) Acquisition of renewable on-site energy or purchase of green energy credits in accord with LEED EA2 or EA6, **OR**

(2) In addition to meeting 13C.5.103.2.8 Energy Performance requirement, achieve an additional 10% compliance margin over Title 24 Part 6 2008 California Energy Standards, for a total compliance margin of at least 25%.

13C.5.103.1.6 Stormwater Management. Stormwater management shall meet the stormwater management controls adopted by the San Francisco Public Utilities Commission, and shall meet or exceed the applicable LEED® SS 6.1 and SS 6.2 credits. All new building projects – regardless of size - must develop and implement a construction activity pollution prevention plan meeting LEED® prerequisite SSp1, and implement site run-off controls adopted by the San Francisco Public Utilities Commission as applicable.

13C.5.103.1.7 ENERGY PERFORMANCE Using an Alternative Calculation Method (ACM) approved by the California Energy Commission, permit applicants must calculate each project’s energy use, and compare it to the standard or “budget” building to achieve a 15% compliance margin over Title 24 Part 6 2008 California Energy Standards.

Alternatively, projects may **both**:

(1) Document compliance with 2008 Title 24 Part 6 2008 California Energy Standards, including submittal of all standard documentation, and

(2) Additionally demonstrate that a project achieves a 15% or greater compliance margin over ASHRAE 90.1 2007 energy cost baseline using the published LEED® 2009 rules. Such analysis must include all on-site building energy use, including exterior and security lighting, elevators, all process loads, and receptacle loads.

13C.5.103.1.8 IAQ Management During construction Permit applicants must submit documentation verifying that an Indoor Air Quality Management Plan is prepared and implemented which meets LEED® credit EQ 3.1. This includes meeting or exceeding the recommended Control Measures of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines for Occupied Buildings under Construction, 2nd Edition 2007, ANSI-SMACNA 008-2008 (Chapter 3), and which meets LEED® credit EQ 3.1.

13C.5.103.1.9 Low Emitting Materials Permit applicants must submit documentation verifying that low-emitting materials are used, subject to on-site verification, meeting LEED® credits EQ 4.1, EQ 4.2, EQ 4.3, and EQ 4.4 wherever applicable:

(1) Adhesives, sealants and sealant primers must meet LEED® credit EQ 4.1, including compliance with South Coast Air Quality Management District (SCAQMD) Rule #1168, amended January 7, 2005.

(2) Interior paints and coatings applied on-site must meet LEED® credit EQ 4.2, including:

(a) Architectural paints and coatings must meet the VOC content limits of Green Seal Standard GS-11 (1st Edition, 1993).

(b) Anti-corrosive and anti-rust paints applied to interior ferrous metal substrates must not exceed the VOC content limit of Green Seal Standard GC-03 (2nd Edition, 1997) of 250 g/L.

(c) Clear wood finishes, floor coatings, stains, primers, and shellacs applied to interior elements must not exceed SCAQMD Rule 1113 (2004) VOC content limits.

(3) Flooring systems shall meet LEED® credit EQ 4.3 Option 1, including:

(a) Interior carpet must meet the testing and product requirements of the Carpet and Rug Institute Green Label Plus program.

(b) Interior carpet cushion must meet the requirements of the Carpet and Rug Institute Green Label program.

(c) Hard surface flooring, including vinyl, linoleum, laminate flooring, wood flooring, ceramic flooring, rubber flooring, and wall base must be certified as compliant with the FloorScore standard.

Exceptions: 100% reused or 100% post consumer recycled hard surface flooring may be exempted from this requirement. Projects exercising this exemption must otherwise be eligible for LEED® credit EQ 4.3.

(4) Interior composite wood and agrifiber products shall meet LEED® credit EQ 4.4 by containing no added urea formaldehyde resins. Interior and exterior hardwood plywood, particleboard, and medium density fiberboard composite wood products shall additionally meet California Air Resources Board Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.), by or before the dates specified in those sections.

13C.5.103.1.10 CALGreen Mandatory Measures The following sections found later in this chapter, are mandatory in California, and therefore required for New Large Commercial Buildings. Optionally, relevant LEED® credits be used as alternative compliance paths, as noted below:

SFBC Chapter 13C Section(s)	Topic/Requirement	Alternate Compliance Option:
<u>13C.5.106.4</u>	<u>Bicycle Parking</u>	<u>N/A</u>
<u>13C.5.106.5</u>	<u>Fuel efficient vehicle and carpool parking</u>	<u>Meet LEED® SSc4.3 and/or SSc4.4, and Demonstrate that 8% of parking is designated for fuel efficient vehicle and carpool parking.</u>
<u>13C.5.106.8</u>	<u>Light pollution reduction</u>	<u>Meet LEED® credit SS 8</u>
<u>13C.5.106.10</u>	<u>Drainage management plan</u>	<u>N/A</u>
<u>13C.5.303.1</u>	<u>Water Submeters</u>	<u>N/A</u>
<u>13C.5.303.2.1</u>	<u>Multiple showerheads in one shower stall must not exceed maximum flow rate for single showerhead</u>	<u>N/A</u>
<u>13C.5.503.1</u>	<u>Fireplaces in non-residential occupancy must meet residential efficiency and emissions requirements,</u>	<u>N/A</u>
<u>13C.5.407.2.2</u> <u>13C.5.504.5.3</u>	<u>Indoor Chemical and Pollutant Source Control</u>	<u>Meet LEED® credit EQ 5</u>
<u>13C.5.507.4</u> <u>13C.5.507.4.1</u> <u>13C.5.507.4.2</u>	<u>Acoustical control and noise transmission</u>	<u>N/A</u>
<u>13C.5.508.1.2</u>	<u>Halons not allowed in HVAC, refrigeration and fire suppression equipment.</u>	<u>Meet LEED® credit EA 4, and additionally document that all HVAC&R systems do not contain CFCs or Halons.</u>

13C.5.103.2 New Mid-Size Commercial Buildings The requirements of this section are additional to CALGreen mandatory measures, except where noted.

13C.5.103.2.2 Construction debris management. Permit applicants must submit documentation verifying the diversion of a minimum 75 percent of the projects construction and demolition debris, as calculated either to meet LEED® credit MR2.2 or equivalent. Permit applicants must also meet the requirements of San Francisco Environment Code Chapter 14 and San Francisco Building Code Chapter 13B (Construction and Demolition Debris Recovery Program.) The waste management plan necessary to meet this requirement shall be updated as necessary and shall be accessible during construction for examination by the Department of Building Inspection.

13C.5.103.2.3 Renewable energy . Effective January 1, 2012, permit applicants must submit documentation verifying that either:

(1) Acquisition of renewable on-site energy or purchase of green energy credits in accord with LEED EA2 or EA6, **OR**

(2) In addition to meeting 13C.5.103.2.8 Energy Performance requirement, achieve an additional 10% compliance margin over Title 24 Part 6 2008 California Energy Standards, for a total compliance margin of at least 25%.

13C.5.103.2.4 Stormwater Management and pollution. Stormwater management shall meet the stormwater management controls adopted by the San Francisco Public Utilities Commission, and shall meet or exceed the applicable LEED® SS 6.1 and SS 6.2 credits. All new building projects – regardless of size - must develop and implement construction activity pollution prevention and site run-off controls adopted by the San Francisco Public Utilities Commission, as applicable.

13C.5.103.2.5 ENERGY PERFORMANCE Using an Alternative Calculation Method (ACM) approved by the California Energy Commission, permit applicants must calculate each project’s energy use, and compare it to the standard or “budget” building to achieve a 15% compliance margin over Title 24 Part 6 2008 California Energy Standards.

Alternatively, projects may **both**:

(1) Document compliance with Title 24 Part 6 2008 California Energy Standards, including submittal of all standard documentation, and

(2) Additionally demonstrate that a project achieves a 15% or greater compliance margin over ASHRAE 90.1 2007 energy cost baseline using the published LEED® 2009 rules. Such analysis must include all on-site building energy use, including exterior and security lighting, elevators, all process loads, and receptacle loads.

13C.5.103.2.6 All other new buildings

13C.5.103.2.6.1 All other new non-residential occupancies and new non-residential buildings of group B, M, A, and I occupancy with less than 5,000 square feet in gross interior area shall meet the non-residential mandatory requirements summarized in this chapter.

13C.5.103.3 Major alterations to existing non residential buildings.

13C.5.103.3.1 Rating Requirement. Permit applicants must submit documentation to achieve LEED®

“Silver” certification. Effective January 1, 2012, applicants must submit documentation to achieve a LEED® “Gold” certification.

13C.5.103.3.2 Low Emitting Materials. Permit applicants must submit documentation to verify the use of low-emitting materials meeting LEED® EQ4.1, 4.2, and 4.3.

13C.5.103.4 New large commercial interiors

13C.5.103.4.1 Rating Requirement. Permit applicants must submit documentation to achieve LEED® “Silver” certification. Effective January 1, 2012, applicants must submit documentation to achieve a LEED® “Gold” certification.

13C.5.103.4.2 Low Emitting Materials. Permit applicants must submit documentation to verify the use of low-emitting materials meeting LEED® EQ4.1, 4.2, and 4.3.

**SECTION 13C.5.104
SITE (Reserved)-HISTORIC PRESERVATION**

13C.5.104.1 On-site retention of historical features. For alterations of buildings determined to be historical resources, after demonstrating compliance with all applicable codes, including the 2008 California Building energy Efficiency Standards (Title 24, Part 6) and the 2010 California Historical Building Code (Title 24, Part 8), the minimum points or credits required under this chapter shall be reduced for retention and in-situ reuse or restoration of certain character defining features, as follows:

TABLE 13C.5.104.A

<u>SIGNIFICANT HISTORICAL ARCHITECTURAL FEATURES</u>	<u>PERCENT RETAINED*</u>	<u>ADJUSTMENT TO MINIMUM LEED POINT REQUIREMENT</u>	<u>ADJUSTMENT TO MINIMUM GREENPOINTS REQUIREMENT</u>
<u>Windows @ principal façade(s)</u>	<u>At least 50%</u>	<u>2</u>	<u>7</u>
<u>Windows @ principal façade(s)</u>	<u>At least 75%</u>	<u>3</u>	<u>11</u>
<u>Windows @ principal façade(s)</u>	<u>100%</u>	<u>4</u>	<u>15</u>
<u>Other windows</u>	<u>At least 50%</u>	<u>1</u>	<u>3</u>
<u>Other windows</u>	<u>100%</u>	<u>2</u>	<u>6</u>
<u>Exterior doors @ principal façade(s)</u>	<u>100%</u>	<u>1</u>	<u>3</u>
<u>Siding or wall finish @ principal façade(s)</u>	<u>80%</u>	<u>1</u>	<u>4</u>
<u>Trim & casing @ wall openings on principal façade(s)</u>	<u>100%</u>	<u>1</u>	<u>3</u>
<u>Roof cornices or decorative eaves visible from right-of-way</u>	<u>100%</u>	<u>1</u>	<u>3</u>

<u>Sub-cornices, belt courses, water tables, and running trim visible from right-of-way</u>	<u>80%</u>	<u>1</u>	<u>3</u>
<u>Character-defining elements of significant interior spaces</u>	<u>At least 50%</u>	<u>2</u>	<u>7</u>
<u>Character-defining elements of significant interior spaces</u>	<u>100%</u>	<u>4</u>	<u>15</u>
<u>Other exterior ornamentation (e.g. cartouches, corbels, quoins, etc.) visible from right-of-way</u>	<u>80%</u>	<u>1</u>	<u>3</u>

* Retention includes the rehabilitation and repair of character-defining features that conform to the Secretary of the Interior's Standards for the Treatment of Historic Properties.

SECTION 13C.5.105

~~DECONSTRUCTION AND REUSE~~ DEMOLITION OF EXISTING STRUCTURES (Reserved)

13C.5.105.1 Adjustments to Rating Requirements. Applications subject to SFBC Chapter 13C, whereby construction of a new building is proposed within five years of the demolition of a building on the site, where such demolition occurred after the effective date of the Green Building Ordinance - November 3, 2008 - the sustainability requirements for new buildings pursuant to San Francisco Building Code Chapter 13C shall be increased as follows:

13C.5.105.1.1 LEED® Projects. For projects attaining a LEED® certification:

- (1) **Where the building demolished was an historical resource, the required points shall be increased by 10 points, which is 10% of the total available in the LEED® rating system, absent demolition.**
- (2) **Where the building demolished was not an historical resource, the required points shall be increased by 6 additional points, which is 10% of the maximum total required points under this chapter, absent demolition.**
- (3) **Where the building demolished was not an historical resource and the number of dwellings in the residential portion of the replacement structure are tripled, the required points shall be increased by 5 additional points, which is 8% of the maximum total required points under this chapter, absent demolition.**

13C.5.105.1.2 GreenPoint Rated Projects. For projects attaining GreenPoint Rated:

- (1) **Where the building demolished was an historical resource, the required points shall be increased by 25 additional points.**
- (2) **Where the building demolished was not an historical resource, the required points shall be increased by 20 additional points.**
- (3) **Where the building demolished was not an historical resource and the number of dwellings in the residential portion of the replacement structure are tripled, the required points shall be increased by 17 additional points.**

**SECTION 13C.5.106
SITE DEVELOPMENT**

13C.5.106.1 Storm water pollution prevention plan. For newly constructed projects of less than one acre, develop a Storm Water Pollution Prevention Plan (SWPPP) that has been designed, specific to its site, conforming to the State Storm water NPDES Construction Permit as required for projects one acre or more, and stormwater management controls adopted by the San Francisco Public Utilities Commission or local ordinance, whichever is stricter, as is required for projects one acre or more. The plan should cover prevention of soil loss by storm water run-off and/or wind erosion, of sedimentation, and/or of dust/particulate matter air pollution.

Note: Assistance with the permit may be obtained from the San Francisco Public Utilities Commission at <http://www.sfwater.org>, the San Francisco Bay Regional Water Quality Control Board, or the California State Water Resources Control Board (SWRCB) at: <http://www.swrcb.ca.gov/stormwtr/>, from a Regional Water Quality Control Board, and at local public works departments.

13C.5.106.4 Bicycle parking and changing rooms. - Comply with Sections ~~5~~13C.5.106.4.1 and ~~5~~13C.5.106.4.2; or meet the applicable requirements of San Francisco Planning Code Sec 155 local ordinance or the University of California Policy on Sustainable Practices, whichever is stricter.

13C.5.106.4.1 Short-term bicycle parking. If the project is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 100 feet of the visitors' entrance, readily visible to passers-by, for 5% of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack.

13C.5.106.4.2 Long-term bicycle parking. For buildings with over 10 tenant-occupants, provide secure bicycle parking for 5% of motorized vehicle parking capacity, with a minimum of one space. Acceptable parking facilities shall be convenient from the street and may include:

1. Covered, lockable enclosures with permanently anchored racks for bicycles;
2. Lockable bicycle rooms with permanently anchored racks; and
3. Lockable, permanently anchored bicycle lockers.

Note: Additional information on recommended bicycle accommodations may be ~~obtained from Sacramento Area Bicycle Advocates~~ **found at http://www.sacbike.org/advocacy/state_bicycle_facilities/**

13C.5.106.5.2 Designated parking. Provide designated parking for any combination of low-emitting, fuel-efficient, and carpool/van pool vehicles as follows:

Table 13C.5.106.5.2

Total Number of Parking Spaces	Number of Required Spaces
0-9	0
10-25	1
26-50	3
51-75	6

76-100	8
101-150	11
151-200	16
201 and over	At least 8% of total

13C.5.106.5.2.1 Parking stall marking. Paint, in the paint used for stall striping, the following characters such that the lower edge of the last word aligns with the end of the stall striping and is visible beneath a parked vehicle:

"CLEAN AIRVEHICLE"

13C.5.106.8 Light pollution reduction. Comply with lighting power requirements in the California Energy Code, CCR, Part 6, and design interior and exterior lighting such that zero direct-beam illumination leaves the building site. Meet or exceed exterior light levels and uniformity ratios for lighting zones 1-4 as defined in Chapter 10 of the California Administrative Code, CCR, Part 1, using the following strategies:

1. Shield all exterior luminaires or provide cutoff luminaires per Section 132 (b) of the California Energy Code.
2. Contain interior lighting within each source.
3. Allow no more than .01 horizontal lumen footcandles to escape 15 feet beyond the site boundary.
4. Automatically control exterior lighting dusk to dawn to turn off or lower light levels during inactive periods.

Exceptions:

1. Part 2, Chapter 12, Section 1205.6 for campus lighting requirements for parking facilities and walkways.
2. Emergency lighting and lighting required for nighttime security.

13C.5.106.10 Grading and Paving. The site shall be planned and developed to keep surface water from entering buildings. Construction plans shall indicate how site grading or a drainage system will manage all surface water flows.

DIVISION 13C.5.2 ENERGY EFFICIENCY

SECTION 13C.5.201

GENERAL

13C.5.201.1 Scope. ~~For the purposes~~ Most common definitions of a green building include at least a 15% reduction in energy usage when compared to statewide mandatory energy efficiency standards in this code, the California. Commission will continue to adopt mandatory building standards

A13C.5.201.1.1 Energy performance. Using an Alternative Calculation Method (ACM) approved by the California Energy Commission, calculate each building's energy use, and compare it to the standard or "budget" building to achieve a 15% compliance margin over Title 24 Part 6 2008 California Energy Standards.

Alternatively, projects utilizing LEED® to meet local green building requirements may **both**:

(1) Document compliance with Title 24 Part 6 2008 California Energy Standards, including submittal of all standard documentation, and

(2) Submit documentation demonstrating that the project achieves a 15% or greater compliance margin over ASHRAE 90.1 2007 energy cost baseline using the published LEED® 2009 rules. Such analysis must include all on-site building energy use, including exterior and security lighting, elevators, all process loads, and receptacle loads.

Note: It is the intent of this code to encourage buildings to achieve exemplary performance in the area of energy efficiency. For the purposes of energy efficiency standards, the California Energy Commission believes specifically, a green building should achieve at least a 15% reduction in energy usage when compared to the State's mandatory energy efficiency standards.

DIVISION 13C.5.3 WATER EFFICIENCY AND CONSERVATION

SECTION 13C.5.301 GENERAL

13C.5.301.1 Scope. The provisions of this chapter shall establish the means of conserving water used indoors, outdoors, and in wastewater conveyance.

SECTION 13C.5.302 DEFINITIONS

13C.5.302.1 Definitions. The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

GRAYWATER. Untreated household waste which has not come into contact with toilet waste. Graywater includes used water from bathtubs, showers, bathroom wash basins, and water from clothes washing machines and laundry tubs. It shall not include waste water from kitchen sinks, dishwashers, or laundry water from soiled diapers.

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE. The California ordinance regulating landscape design, installation and maintenance practices that will ensure commercial, multifamily and other developer installed landscapes greater than 2500 square feet meet an irrigation water budget developed based on landscaped area, and climatological parameters.

POTABLE WATER. Water that is drinkable and meets the U. S. Environmental Protection Agency (EPA) Drinking Water Standards. See definition in the California Plumbing Code, Part 5.

RECYCLED WATER. Water which, as a result of treatment of waste, is suitable for a direct, beneficial use or a controlled use that would not otherwise occur (Water Code Section 13050 (n)). Simply put, recycled water is water treated to remove waste matter attaining a quality that is suitable to use the water again.

SUBMETER. A meter installed subordinate to a site meter. Usually used to measure water intended for one purpose, such as landscape irrigation. For the purposes of this section, a Dedicated Meter may be considered a submeter.

WATER BUDGET. Estimated total landscape irrigation water use shall not exceed the maximum applied water allowance calculated in accordance with the Department of Water Resources Model Efficient Landscape Ordinance (MLO).

SECTION 13C.5.303 INDOOR WATER USE

13C.5.303.1 Meters. Separate meters or metering device shall be installed for the uses described in Sections 503.1.1 and 503.1.2.

13C.5.303.1.1 Buildings in excess of 50,000 square feet. Separate submeters shall be installed as follows:

1. For each individual leased, rented, or other tenant space within the building projected to consume more

than 100 gal/day.

2. For spaces used for laundry or cleaners, restaurant or food service, medical or dental office, laboratory, or beauty salon or barber shop projected to consume more than 100 gal/day.

13C.5.303.1.2 Excess consumption. Any building within a project or space within a building that is projected to consume more than 1,000 gal/day.

13C.5.303.2 20% Savings. A schedule of plumbing fixtures and fixture fittings that will reduce the overall use of potable water within the building by 20% shall be provided. The reduction shall be based on the maximum allowable water use per plumbing fixture and fittings as required by the California Building Standards Code. The 20% reduction in potable water use shall be demonstrated by one of the following methods.

1. Each plumbing fixture and fitting shall meet the 20% reduced flow rate specified in Table 13C.5.303.2.3, or

2. A calculation demonstrating a 20% reduction in the building "water use baseline" as established in Table §13C.5.303.2.2 shall be provided.

13C.5.303.2.1 Multiple showerheads serving one shower. When single shower fixtures are served by more than one showerhead, the combined flow rate of all the showerheads shall not exceed the maximum flow rates specified in the 20% reduction column contained in Table 13C.5.303.2.2 or the shower shall be designed to only allow one showerhead to be in operation at a time.

Exception: The maximum flow rate for shower heads when using the calculation method specified in Section 13C.5.303.2.1, Item 2 is 2.5 gpm @ 80 psi.

TABLE 13C.5.303.2.2
INDOOR WATER USE BASELINE ⁴

Fixture Type	Flow-rate ²	Duration	Daily uses	Occupants ^{3,4}
Showerheads	2.5 gpm @ 80 psi	8 min.	1	X
Lavatory Faucets Nonresidential	0.5 gpm @ 60 psi	.25 min.	3	X
Kitchen Faucets	2.2 gpm @ 60 psi	4 min.	1	X
Replacement Aerators	2.2 gpm @ 60 psi			X
Wash Fountains	2.2 [rim space (in.) / 20 gpm @ 60 psi]			X
Metering Faucets	0.25 gallons/cycle	.25 min.	3	X
Metering Faucets for Wash Fountains	.25 [rim space (in.) / 20 gpm @ 60 psi]	.25 min.		X
Gravity tank type Water Closets	1.6 gallons/flush	1 flush	1 male ¹ 3 female	X

Flushometer Tank Water Closets	1.6 gallons/flush	1 flush	1 male ¹ 3 female	X
Flushometer Valve Water Closets	1.6 gallons/flush	1 flush	1 male ¹ 3 female	X
Electromechanical Hydraulic Water Closets	1.6 gallons/flush	1 flush	1 male ¹ 3 female	X
Urinals	1.0 gallons/flush	1 flush	2 male	X

Fixture "Water Use" = Flow rate x Duration x Occupants x Daily uses

¹The daily use number shall be increased to three if urinals are not installed in the room.

²The Flow-rate is from the CEC Appliance Efficiency Standards, Title 20 California Code of Regulations; where a conflict occurs, the CEC standards shall apply.

³Refer to Table A, Chapter 4, California Plumbing Code, for occupant load factors.

⁴Use Worksheet WS-1 to calculate base line water use.

TABLE 13C.5.303.2.3
FIXTURE FLOW RATES

Fixture Type	Flow-rate	Maximum flow rate at 20% Reduction
Showerheads	2.5 gpm @ 80 psi	2 gpm @ 80 psi
Lavatory Faucets Nonresidential	0.5 gpm @ 60 psi	0.4 gpm @ 60 psi
Kitchen Faucets	2.2 gpm @ 60 psi	1.8 gpm @ 60 psi
Wash Fountains	2.2 [rim space (in.) / 20 gpm @ 60 psi]	1.8 [rim space (in.) / 20 gpm @ 60 psi]
Metering Faucets	0.25 gallons/cycle	0.2 gallons/cycle
Metering Faucets for Wash Fountains	.25 [rim space (in.) / 20 gpm @ 60 psi]	.20 [rim space (in.) / 20 gpm @ 60 psi]
Gravity tank type Water Closets	1.6 gallons/flush	1.28 gallons/flush ¹
Flushometer Tank Water Closets	1.6 gallons/flush	1.28 gallons/flush ¹
Flushometer Valve Water Closets	1.6 gallons/flush	1.28 gallons/flush ¹
Electromechanical Hydraulic Water Closets	1.6 gallons/flush	1.28 gallons/flush ¹
Urinals	1.0 gallons/flush	.5 gallons/flush

¹ Includes single and dual flush water closets with an effective flush of 1.28 gallons or.

Single Flush Toilets - The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is the average flush volume when tested in accordance with ASME A112.19.233.2.

Dual Flush Toilets - The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is defined as the composite, average flush volume of two reduced flushes and one full flush.

Flush volumes will be tested in accordance with ASME A112.19.2 and ASME A112.19.14.

13C.5.303.4 Wastewater reduction. Each building shall reduce by 20% wastewater by one of the following methods:

1 The installation of water-conserving fixtures (water closets, urinals) meeting the criteria established in sections 13C.5.303.2 or 13C.5.303.3 or

2. Utilizing non-potable water systems (captured rainwater, graywater, and municipally treated wastewater {recycled water} complying with the current edition of the California Plumbing Code or other methods described in Section A13C.5.304).

13C.5.303.6 Plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall meet the standards referenced in Table 13C.5.503.6.

TABLE 13C.5.303.6
STANDARDS FOR PLUMBING FIXTURES AND FIXTURE FITTINGS

REQUIRED STANDARDS	
Water closets (toilets) – flushometer valve type single flush, maximum flush volume	ASME A112.19.2/CSA B45.1 – 1.28 gal (4.8 L)
Water closets (toilets) – flushometer valve type dual flush, maximum flush volume	ASME A112.19.14 and USEPA WaterSense Tank-Type High Efficiency Toilet Specification – 1.28 gal (4.8 L).
Water closets (toilets) – tank-type	U.S. EPA WaterSense Tank-Type High-Efficiency Toilet Specification
Urinals, maximum flush volume	ASME A112.19.2/CSA B45.1 – 0.5 gal (1.9 L)
Urinals, non-water urinals	ASME A112.19.19 (vitreous china) ANSI Z124.9-2004 or IAPMO Z124.9 (plastic)
Public lavatory faucets: Maximum flow rate – 0.5 gpm (1.9 L/min)	ASME A112.18.1/CSA B125.1
Public metering self-closing faucets: Maximum water use – 0.25 gal (1.0 L) per metering cycle	ASME A112.18.1/CSA B125.1
Residential bathroom lavatory sink faucets: Maximum flow rate – 1.5 gpm (5.7 L/min) ¹	ASME A112.18.1/CSA B125.1

SECTION 13C.5.304
OUTDOOR WATER USE

13C.5.304.1 Water budget. A water budget shall be developed for landscape irrigation use that conforms to the local **Water Efficient Irrigation Ordinance (San Francisco Administrative Code Chapter 63)** water efficient landscape ordinance or to the California Department of Water Resources Model Water Efficient Landscape Ordinance where no local ordinance is applicable.

Note: ~~Prescriptive measures~~ **Rules** to assist in compliance with the water budget are listed in Sections 492.5 through 492.8, 492.10 and 492.11 of the ordinance are included in the San Francisco Public Utilities Commission Rules for Water Efficient Irrigation, which may be found at: <http://sfwater.org>

13C.5.304.2 Outdoor potable water use. For new water service for landscaped areas between 1000 square feet and 5000 square feet (the level at which CA Water Code §535 applies), separate meters or submeters shall be installed for indoor and outdoor potable water use.

13C.5.304.3 Irrigation design. In new nonresidential construction with between 1000 and 2500 square feet of landscaped area (the level at which the MLO San Francisco Water Efficient Irrigation Ordinance applies), where irrigation is to be provided, install irrigation controllers and sensors which include the following criteria, and meet manufacturer's recommendations.

13C.5.304.3.1 Irrigation controllers. Automatic irrigation system controllers installed at the time of final inspection shall comply with the following:

1. Controllers shall be weather- or soil moisture-based controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change.
2. Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.

Note: More information regarding irrigation controller function and specifications is available from the Irrigation Association at <http://www.irrigation.org/SWAT/Industry/ia-tested.asp>.

SECTION 13C.5.305
WATER REUSE SYSTEMS
(Reserved)

DIVISION 13C.5.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

SECTION 13C.5.401

GENERAL

13C.5.401.1 Scope. The provisions of this chapter shall outline means of achieving material conservation and resource efficiency through protection of buildings from exterior moisture, construction waste diversion, employment of techniques to reduce pollution through recycling of materials, and building commissioning or testing, adjusting and balancing.

SECTION 13C.5.402

DEFINITIONS

13C.5.402.1 Definitions. The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

ADJUST. To regulate fluid flow rate and air patterns at the terminal equipment, such as to reduce fan speed or adjust a damper.

BALANCE. To proportion flows within the distribution system, including submains, branches, and terminals, according to design quantities.

BUILDING COMMISSIONING. ~~A systematic quality assurance process that spans the entire design and construction process, including verifying and documenting that building systems and components are planned, designed, installed, tested, operated, and maintained to meet the owner's project requirements.~~

TEST. A procedure to determine quantitative performance of a system or equipment.

SECTION 13C.5.403

FOUNDATION SYSTEMS

(Reserved)

SECTION 13C.5.404

EFFICIENT FRAMING TECHNIQUES

(Reserved)

SECTION 13C.5.405

MATERIAL SOURCES

(Reserved)

SECTION 13C.5.406

ENHANCED DURABILITY AND REDUCED MAINTENANCE

(Reserved)

SECTION 13C.5.407
WATER RESISTANCE AND MOISTURE MANAGEMENT

13C.5.407.1 Weather protection. Provide a weather-resistant exterior wall and foundation envelope as required by California Building Code Section 1403.2 (Weather Protection) and California Energy Code Section 150, (Mandatory Features and Devices), manufacturer's installation instructions, or local ordinance, whichever is more stringent.

13C.5.407.2 Moisture control. Employ moisture control measures by the following methods.

13C.5.407.2.1 Sprinklers. Design and maintain landscape irrigation systems to prevent spray on structures.

13C.5.407.2.2 Entries and openings. Design exterior entries and/or openings subject to foot traffic or wind-driven rain to prevent water intrusion into buildings.

Notes:

1. Use features such as overhangs and recesses, and flashings integrated with a drainage plane.
2. Use non-absorbent floor and wall finishes within at least two feet around and perpendicular to such openings.

SECTION 13C.5.408
CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

13C.5.408.1 Construction waste diversion. ~~Establish a~~ **The San Francisco Construction and Demolition Debris Ordinance No. 27-06 is stricter than CalGreen** construction waste **requirements, and shall continue to be enforced.** ~~management plan for the diverted materials, or meet local construction and demolition waste management ordinance, whichever is more stringent.~~

~~**5.408.2 Construction waste management plan.** Where a local jurisdiction does not have a construction requirements, and demolition waste management ordinance, submit a construction waste management plan for approval by the enforcement agency that:~~

- ~~1. Identifies the materials shall continue to be diverted from disposal by efficient usage, recycling, reuse on the project, or salvage for future use or sale.~~
- ~~2. Determines if materials will be sorted on site or mixed.~~
- ~~3. Identifies diversion facilities where material collected will be taken.~~
- ~~4. Specifies that the amount of materials diverted shall be calculated by weight or volume, but not by both.~~

~~**5.408.2.1 Documentation.** Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 5.408.2 items 1 thru 4. The waste management plan shall be updated as necessary and shall be accessible during construction for examination by the enforcing agency.~~

~~**Exception [DSA-SS]:** Jobsites in areas where there is no mixed construction and demolition debris (C&D) processor or recycling facilities within a feasible haul distance shall meet the requirements as follows:~~

- ~~1. The enforcement agency having jurisdiction shall at its discretion, enforce the waste management plan and make exceptions as deemed necessary.~~

~~5.408.2.2 Isolated jobsites.~~ The enforcing agency may make exceptions to the requirements of this section when jobsites are located in areas beyond the haul boundaries of the diversion facility.

Notes:

- ~~1. Sample forms found in Chapter 8 may be used to assist in documenting compliance with the waste management plan.~~
- ~~2. Mixed construction and demolition debris (C&D) processors can be located at <http://www.ciwmb.ca.gov/ConDemo/>.~~

~~5.408.3 Construction waste reduction of at least 50%.~~ Recycle and/or salvage for reuse a minimum of 50% of the non-hazardous construction and demolition debris, or meet a local construction and demolition waste management ordinance, whichever is more stringent. Calculate the amount of materials diverted by weight or volume, but not by both.

Exceptions:

- ~~1. Excavated soil and land-clearing debris~~
- ~~2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist.~~

~~5.408.4 Excavated soil and land-clearing debris.~~ 100% of trees, stumps, rocks and associated vegetation and soils resulting primarily from land-clearing shall be reused or recycled. For a phased project, such material may be stockpiled on-site until the storage site is developed.

SECTION 13C.5.409
LIFE CYCLE ASSESSMENT
(Reserved)

SECTION 13C.5.410
BUILDING MAINTENANCE AND OPERATION

~~13C.5.410.1 Recycling by occupants.~~ Provide readily accessible areas that serve the entire building and are identified **Solid Waste**. Areas must be provided for the depositing, storage, and collection and loading of non-hazardous materials for recycling, composting and trash. All such areas, including (at any chute systems, must be designed for equal convenience for all users to separate those three material streams, and must provide space to accommodate a sufficient quantity and type of containers to be compatible with current methods of collection. ~~minimum) paper, corrugated cardboard, glass, plastics and metals.~~

~~5.410.1.1 Sample ordinance.~~ Space allocation for recycling areas shall comply with Chapter 18, Part 3, Division 30 of the Public Resources Code. Chapter 18 is known as the California Solid Waste Reuse and Recycling Access Act of 1991 (Act).

Note: A sample ordinance for use by local agencies may be found in Appendix A of the document at the California Integrated Waste Management's web site at:
~~<http://www.ciwmb.ca.gov/Publications/LocalAsst/31000012.doc>~~

13C.5.410.2 Commissioning. For new buildings 10,000 square feet and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements. Commissioning shall be performed in accordance with this section by trained personnel with experience on projects of comparable size

and complexity. Commissioning requirements shall include:

1. Owner's Project Requirements.
2. Basis of Design.
3. Commissioning measures shown in the construction documents.
4. Commissioning Plan.
5. Functional Performance Testing.
6. Documentation & Training.
7. Commissioning Report.

All building systems and components covered by Title 24, Part 6, as well as process equipment and controls, and renewable energy systems shall be included in the scope of the Commissioning Requirements.

13C.5.410.2.1 Owner's or Owner representative's Project Requirements (OPR). The expectations and requirements of the building appropriate to its phase shall be documented before the design phase of the project begins. This documentation shall include the following:

1. Environmental and Sustainability Goals.
2. Energy Efficiency Goals.
3. Indoor Environmental Quality Requirements.
4. Project program, including facility functions and hours of operation, and need for after hours operation.
5. Equipment and Systems Expectations.
6. Building Occupant and O&M Personnel Expectations.

13C.5.410.2.2 Basis of Design (BOD). A written explanation of how the design of the building systems meets the OPR shall be completed at the design phase of the building project, and updated as necessary during the design and construction phases. The Basis of Design document shall cover the following systems:

1. Heating, Ventilation, Air Conditioning (HVAC) Systems and Controls.
2. Indoor Lighting System and Controls.
3. Water Heating System.
4. Renewable Energy Systems.
5. Landscape Irrigation Systems.
6. Water Reuse Systems.

13C.5.410.2.3 Commissioning plan. Prior to permit issuance a commissioning plan shall be completed to document how the project will be commissioned and shall be started during the design phase of the building project. The Commissioning Plan shall include the following

:

1. General Project Information.
2. Commissioning Goals.
3. Systems to be commissioned. Plans to test systems and components shall include:
 - a. An explanation of the original design intent,
 - b. Equipment and systems to be tested, including the extent of tests,
 - c. Functions to be tested,
 - d. Conditions under which the test shall be performed,
 - e. Measurable criteria for acceptable performance.
4. Commissioning Team Information.
5. Commissioning Process Activities, Schedules & Responsibilities - plans for the completion of

Commissioning Requirements listed in 13C.5.410.4.4 through A13C.5.410.4.6 shall be included.

13C.5.410.2.4 Functional performance testing. Functional performance tests shall demonstrate the correct installation and operation of each component, system, and system-to-system interface in accordance with the approved plans and specifications. Functional performance testing reports shall contain information addressing each of the building components tested, the testing methods utilized, and include any readings and adjustments made.

13C.5.410.2.5 Documentation and training. A Systems Manual and Systems Operations Training are required, including Occupational Safety and Health Act (OSHA) requirements in California Code of Regulations (CCR), Title 8, Section 5142, and other related regulations.

13C.5.410.2.5.1 Systems manual. Documentation of the operational aspects of the building shall be completed within the Systems Manual and delivered to the building owner or representative and facilities operator. The Systems Manual shall include the following:

1. Site Information, including facility description, history and current requirements.
2. Site Contact Information.
3. Basic Operations & Maintenance, including general site operating procedures, basic troubleshooting, recommended maintenance requirements, site events log
4. Major Systems.
5. Site Equipment Inventory and Maintenance Notes.
6. A copy of all special inspection verifications required by the ~~enforcing agency~~ Director of the Department of Building Inspection or this code.
7. Other Resources & Documentation.

13C.5.410.2.5.2 Systems operations training. The training of the appropriate maintenance staff for each equipment type and/or system shall be documented in the commissioning report and shall include the following:

1. System/Equipment overview (what it is, what it does and what other systems and/or equipment it interfaces with).
2. Review and demonstration of servicing/preventive maintenance.
3. Review of the information in the Systems Manual.
4. Review of the record drawings on the system/equipment.

13C.5.410.2.6 Commissioning report. A complete report of commissioning process activities undertaken through the design, construction and reporting recommendations for post-construction phases of the building project shall be completed and provided to the owner or representative.

13C.5.410.4 Testing and adjusting. Testing and adjusting of systems shall be required for buildings less than 10,000 square feet.

13C.5.410.4.2 Systems. Develop a written plan of procedures for testing and adjusting systems. Systems to be included for testing and adjusting shall include at a minimum, as applicable to the project:

1. HVAC systems and controls
2. Indoor and outdoor lighting and controls
3. Water heating systems
4. Renewable energy systems
5. Landscape Irrigation Systems
6. Water Reuse Systems.

13C.5.410.4.3 Procedures. Perform testing and adjusting procedures in accordance with industry best practices and applicable standards on each system as determined by the building official.

13C.5.410.4.3.1 HVAC balancing. In addition to testing and adjusting, before a new space-conditioning system serving a building or space is operated for normal use, the system shall be balanced in accordance with the procedures defined by the Testing Adjusting and Balancing Bureau National Standards; the National Environmental Balancing Bureau Procedural Standards; or Associated Air Balance Council National Standards or as approved by the building official.

13C.5.410.4.4 Reporting. After completion of testing, adjusting and balancing, provide a final report of testing signed by the individual responsible for performing these services.

13C.5.410.4.5 Operation and maintenance (O & M) manual. Provide the building owner or representative with detailed operating and maintenance instructions and copies of guaranties/warranties for each system. O & M instructions shall be consistent with OSHA requirements in CCR, Title 8, Section 5142, and other related regulations.

13C.5.410.4.5.1 Inspections and reports. Include a copy of all inspection verifications and reports required by the ~~enforcing agency~~ Director of the Department of Building Inspection.

DIVISION 13C.5.5 ENVIRONMENTAL QUALITY

SECTION 13C.5.501 GENERAL

13C.5.501.1 Scope. The provisions of this chapter shall outline means of reducing the quantity of air contaminants that are odorous, irritating, and/or harmful to the comfort and well-being of a building's installers, occupants, and neighbors.

SECTION 13C.5.502 DEFINITIONS

13C.5.502.1 Definitions. The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard, and medium density fiberboard. "Composite wood products" does not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, prefabricated wood I-joists, or finger-jointed lumber.

Note: See CCR, Title 17, Section 93120.1.

MERV. Filter minimum efficiency reporting value, based on ASHRAE 52.2-1999.

MAXIMUM INCREMENTAL REACTIVITY (MIR).₂ The maximum change in weight of ozone formed by adding a compound to the "Base Reactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundredths of a gram (g O₃ /g ROC).

Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 and 94701.

PRODUCT-WEIGHTED MIR (PWMIR).₂ The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).

Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521(a).

REACTIVE ORGANIC COMPOUND (ROC).₂ Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.

VOC.₂ A volatile organic compound broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a).

Note: Where specific regulations are cited from different agencies such as SCAQMD, ARB, etc, the VOC definition included in that specific regulation is the one that prevails for the specific measure in question.

SECTION 13C.5.503 FIREPLACES

13C.5.503.1 General. Install only a direct-vent sealed-combustion gas or sealed wood-burning fireplace, or a sealed woodstove or pellet stove, and refer to residential requirements in the California Energy Code, Title 24,

Part 6, Subchapter 7, Section 150. Woodstoves, pellet stoves and fireplaces shall comply with applicable local ordinances.

§13C.5.503.1.1 Woodstoves. Woodstoves and pellet stoves shall comply with US EPA Phase II emission limits.

SECTION 13C.5.504
POLLUTANT CONTROL

13C.5.504.3 Covering of duct openings and protection of mechanical equipment during construction. At the time of rough installation, or during storage on the construction site and until final startup of the heating and cooling equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other methods acceptable to the ~~enforcing agency~~ Director of the Department of Building Inspection to reduce the amount of dust or debris which may collect in the system.

13C.5.504.4 Finish material pollutant control.–Finish materials shall comply with Sections 13C.5.504.4.1 through 13C.5.504.4.4.

13C.5.504.4.1 Adhesives, sealants, and caulks.. Adhesives, sealants, and caulks used on the project shall meet the requirements of the following standards.

1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable, or SCAQMD Rule 1168 VOC limits, as shown in Tables 13C.5.504.4.1 and 13C.5.504.4.2. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene, and trichloroethylene), except for aerosol products as specified in subsection 2, below.
2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than one pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of California Code of Regulations, Title 17, commencing with Section 94507.

Note: Title 17 may be found at <http://ccr.oal.ca.gov/>.

TABLE §13C.5.504.4.1
ADHESIVE AND SEALANT VOC LIMIT¹

Less Water and Less Exempt Compounds in Grams per Liter

Architectural Applications	Current VOC Limit
Indoor Carpet Adhesives	50
Carpet Pad Adhesives	50
Outdoor Carpet Adhesives	150
Wood Flooring Adhesive	100
Rubber Floor Adhesives	60
Subfloor Adhesives	50
Ceramic Tile Adhesives	65

VCT and Asphalt Tile Adhesives	50
Dry Wall and Panel Adhesives	50
Cove Base Adhesives	50
Multipurpose Construction Adhesives	70
Structural Glazing Adhesives	100
Single Ply Roof Membrane Adhesives	250
Other Adhesive not specifically listed	50
Specialty Applications	Current VOC Limit
PVC Welding	285
CPVC Welding	270
ABS Welding	325
Plastic Cement Welding	250
Adhesive Primer for Plastic	250
Contact Adhesive	80
Special Purpose Contact Adhesive	250
Structural Wood Member Adhesive	140
Top and Trim Adhesive	250
Substrate Specific Applications	Current VOC Limit
Metal to Metal	30
Plastic Foams	50
Porous Material (except wood)	50
Wood	30
Fiberglass	80

¹ If an adhesive is used to bond dissimilar substrates together the adhesive with the highest VOC content shall be allowed.

² For additional information regarding methods to measure the VOC content specified in this table, see South Coast Air Quality Management District Rule 1168, <http://www.arb.ca.gov/DRDB/SC/CURHTML/R1168.PDF> ..

**TABLE 13C.5.504.4.2
SEALANT VOC LIMIT**

Less Water and Less Exempt Compounds in Grams per Liter

Sealants	Current VOC Limit
Architectural	250
Marine Deck	760
Nonmembrane Roof	300
Roadway	250
Single-Ply Roof Membrane	450
Other	420
Sealant Primers	Current VOC Limit
Architectural	
Non Porous	250

Porous	775
Modified Bituminous	500
Marine Deck	760
Other	750

Note: For additional information regarding methods to measure the VOC content specified in these tables, see South Coast Air Quality Management District Rule 1168: <http://www.arb.ca.gov/DRDB/SC/CURHTML/R1168.PDF>.

13C.5.504.4.3 Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Coatings Suggested Control Measure, as shown in Table §13C.5.504.4.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table §13C.5.504.4.3, shall be determined by classifying the coating as a Flat, Nonflat, or Nonflat-High Gloss coating, based on its gloss, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 California Air Resources Board, Suggested Control Measure, and the corresponding Flat, Nonflat, or Nonflat-High Gloss VOC limit in Table §13C.5.504.4.3 shall apply.

13C.5.504.4.3.1 Aerosol Paints and Coatings. Aerosol paints and coatings shall meet the Product- Weighted PMIR Limits for ROC in section 94522(a)(3) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in sections 94522(c)(2) and (d)(2) of California Code of Regulations, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8 Rule 49.

Notes:

1. Title 17 may be found at <http://ccr.oal.ca.gov/>
2. See Bay Area Air Quality Management District Regulation 8 Rule 49 at <http://www.arb.ca.gov/DRDB/BA/CURHTML/R8-49.HTM>

TABLE §13C.5.504.4.3
VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS^{2,3}

Grams of VOC Per Liter of Coating, Less Water and Less Exempt Compounds		
Coating Category	Effective 1/1/2010	Effective 1/1/2012
Flat Coatings	50	
Nonflat Coatings	100	
Nonflat - High Gloss Coatings	150	
Specialty Coatings		
Aluminum Roof Coatings	400	
Basement Specialty Coatings	400	
Bituminous Roof Coatings	50	
Bituminous Roof Primers	350	
Bond Breakers	350	
Concrete Curing Compounds	350	
Concrete/Masonry Sealers	100	
Driveway Sealers	50	
Dry Fog Coatings	150	
Faux Finishing Coatings	350	
Fire Resistive Coatings	350	
Floor Coatings	100	

Form-Release Compounds	250	
Graphic Arts Coatings (Sign Paints)	500	
High Temperature Coatings	420	
Industrial Maintenance Coatings	250	
Low Solids Coatings ¹	120	
Magnesite Cement Coatings	450	
Mastic Texture Coatings	100	
Metallic Pigmented Coatings	500	
Multi-Color Coatings	250	
Pre-Treatment Wash Primers	420	
Primers, Sealers, and Undercoaters	100	
Reactive Penetrating Sealers	350	
Recycled Coatings	250	
Roof Coatings	50	
Rust Preventative Coatings	400	250
Shellacs		
Clear	730	
Opaque	550	
Specialty Primers, Sealers, and Undercoaters	350	100
Stains	250	
Stone Consolidants	450	
Swimming Pool Coatings	340	
Traffic Marking Coatings	100	
Tub and Tile Refinish Coatings	420	
Waterproofing Membranes	250	
Wood Coatings	275	
Wood Preservatives	350	
Zinc-Rich Primers	340	

¹ Grams of VOC Per Liter of Coating, Including Water and Including Exempt Compounds

² The specified limits remain in effect unless revised limits are listed in subsequent columns in the Table.

³ Values in this table are derived from those specified by the California Air Resources Board, Architectural Coatings Suggested Control Measure, February 1, 2008. More information is available at http://www.arb.ca.gov/coatings/arch/Approved_2007_SCM.pdf.

13C.5.504.4.3.2 Verification. Verification of compliance with this section shall be provided at the request of the ~~enforcing agency~~ Director of the Department of Building Inspection. Documentation may include, but is not limited to, the following:

1. Manufacturers product specification.
2. Field verification of on-site product containers.

13C.5.504.4.4 Carpet systems. All carpet installed in the building interior shall meet the testing and product requirements of one of the following:

1. Carpet and Rug Institute's Green Label Plus Program
2. California Department of Public Health Standard Practice for the testing of VOCs (Specification 01350)
3. NSF/ANSI 140 at the Gold level

4. Scientific Certifications Systems Sustainable Choice

Notes:

1. For Green Label Plus, see <http://www.carpet-rug.com/>.
2. For NSF/ANSI 140, see <http://www.carpet-rug.org/carpet-and-rug-industry/sustainability/sustainable-carpet-list.cfm>.
3. For Sustainable Choice, see <http://www.scs-certified.com/gbc/sustainablecarpet.php>.

13C.5.504.4.4.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute Green Label program.

13C.5.504.4.4.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 13C.5.504.4.1.

13C.5.504.4.5 Composite wood products. Hardwood plywood, particleboard, and medium density fiberboard composite wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.), by or before the dates specified in those sections, as shown in Table 13C.5.504.4.5

13C.5.504.4.5.1 Early compliance. (Reserved.)

13C.5.504.4.5.2 Documentation. Verification of compliance with this section shall be provided as requested by the ~~enforcing agency~~ Director of the Department of Building Inspection. Documentation shall include at least one of the following.

1. Product certifications and specifications.
2. Chain of custody certifications.
3. Other methods acceptable to the ~~enforcing agency~~ Director of the Department of Building Inspection.

TABLE 13C.5.504.4.5
FORMALDEHYDE LIMITS¹

Maximum formaldehyde emissions in parts per million.

Product	Current Limit	Jan 1, 2012	Jul 1, 2012
Hardwood Plywood Veneer Core	0.05		
Hardwood Plywood Composite Core	0.08		0.05
Particle Board	0.09		
Medium Density Fiberboard	0.11		
Thin Medium Density Fiberboard ¹	0.21	0.13	

¹ Values in this table are derived from those specified by the California Air Resources Board, Air Toxics Control Measure for Composite Wood as tested in accordance with ASTM E1333-96 (2002). For additional information, see California Code of Regulations, Title 17, Sections 93120 through 93120.12.

² Thin medium density fiberboard has a maximum thickness of eight millimeters.

13C.5.504.4.6 Resilient flooring systems. For 50% of floor area receiving resilient flooring, install resilient flooring complying with the VOC-emission limits defined in the 2009 Collaborative for High Performance Schools (CHPS) criteria and listed on its Low-emitting Materials List (or Product Registry) or certified under the Resilient Floor Covering Institute (RFCI) FloorScore program.

Documentation shall be provided that verifies that finish materials are certified to meet the pollutant emission limits.

13C.5.504.4.6.1 Verification of compliance., Documentation shall be provided verifying that resilient flooring materials meet the pollutant emission limits.

Notes:

1. CHPS Low-emitting Materials List may be found at www.chpsregistry.com/live or <http://www.chps.net/dev/Drupal/node/381> .

2. Products certified under the FloorScore program may be found at: http://www.rfci.com/int_FS-ProdCert.htm.

3. Products certified under the Greenguard Children & Schools program and compliant with CHPS criteria may be found at: <http://www.greenguard.org/Default.aspx?tabid=135>.

13C.5.504.5.3 Filters.-In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air prior to occupancy that provides at least a Minimum Efficiency Reporting Value (MERV) of 8.

13C.5.504.7 Environmental tobacco smoke (ETS) control. Where outdoor areas are provided for smoking, prohibit smoking within 25 feet of building entries, outdoor air intakes and operable windows and in buildings; or as enforced by ordinances, regulations, or policies of any city, county, city and county, California Community College, campus of the California State University, or campus of the University of California, whichever are more stringent. When ordinances, regulations, or policies are not in place, post signage to inform building occupants of the prohibitions.

SECTION 13C.5.505, INDOOR MOISTURE CONTROL

13C.5.505.1 Indoor moisture control. Buildings shall meet or exceed the provisions of California Building Code, CCR, Title 24, Part 2, Sections 1203 (Ventilation) and Chapter 14 (Exterior Walls). For additional measures not applicable to low-rise residential occupancies, see Section 13C.5.407.2 of this code.

SECTION 13C.5.506 INDOOR AIR QUALITY

13C.5.506.1 Outside air delivery., For mechanically or naturally ventilated spaces in buildings, meet the minimum requirements of Section 121 (Requirements For Ventilation) of the California Energy Code, CCR, Title 24, Part 6, or the applicable local code, whichever is more stringent, and Chapter 4 of CCR, Title 8.

13C.5.506.2 Carbon dioxide (CO₂) monitoring. For buildings equipped with demand control ventilation, CO₂ sensors and ventilation controls shall be specified and installed in accordance with the requirements of the current edition of the California Energy Code, CCR, Title 24, Part 6, Section 121(c).

SECTION 13C.5.507 ENVIRONMENTAL COMFORT

13C.5.507.4 Acoustical control. Employ building assemblies and components with Sound Transmission Coefficient (STC) values determined in accordance with ASTM E90 and ASTM E413.

13C.5.507.4.1 Exterior noise transmission. Wall and roof-ceiling assemblies making up the building envelope shall have an STC of at least 50, and exterior windows shall have a minimum STC of 30 for any of the following building locations:

1. Within 1000 ft. (300 m.) of right of ways of freeways.
2. Within 5 mi. (8 km.) of airports serving more than 10,000 commercial jets per year.
3. Where sound levels at the property line regularly exceed 65 decibels, other than occasional sound due to church bells, train horns, emergency vehicles and public warning systems.

Exception: Buildings with few or no occupants and where occupants are not likely to be affected by exterior noise, as determined by the enforcement authority, such as factories, stadiums, storage, enclosed parking structures, and utility buildings.

13C.5.507.4.2 Interior sound. Wall and floor-ceiling assemblies separating tenant spaces and tenant spaces and public places shall have an STC of at least 40.

Note: Examples of assemblies and their various STC ratings may be found at:
http://www.toolbase.org/PDF/CaseStudies/stc_icc_ratings.pdf .

SECTION 13C.5.508 OUTDOOR AIR QUALITY

13C.5.508.1 Ozone depletion and greenhouse gas reductions.-Installations of HVAC, refrigeration, and fire suppression equipment shall comply with Sections 13C.5.508.1.1 and 13C.5.508.1.2.

13C.5.508.1.1 Chlorofluorocarbons (CFCs).₂ Install HVAC, refrigeration and fire suppression equipment that do not contain CFCs.

13C.5.508.1.2 Halons. Install HVAC, refrigeration and fire suppression equipment that do not contain Halons.

CHAPTER 13C.6
 REFERENCED ORGANIZATIONS AND STANDARDS

SECTION 13C.6.601
 GENERAL

13C.6.601.1 This chapter lists the standards that are referenced in various sections of this document. The standards are listed herein by the promulgating agency of the standard.

Organization	Standard	Referenced Section
AABC Associated Air Balance Council 1518 K St NW Washington, DC 20005 www.aabc.com	National Standards, 1989	<u>13C.5.410.4.3.1</u> <u>13C.A5.410.5.3.1</u>
ACCA Air Conditioning Contractors of America 2800 Shirlington Road, Suite 300 Arlington, VA 22206 www.acca.org	ACCA 29-D Manual D ACCA 36-S Manual S ACCA Manual J	<u>4.507.2</u> <u>4.507.2</u> <u>4.507.2</u>
ANSI American National Standards Institute Operations Office 25 West 43rd Street Fourth Floor New York, NY 10036 www.ansi.org	ANSI A190.1- 2002 NSF/ANSI 140- 2007	<u>13C.5.504.4.4</u>
ASHRAE American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. 1791 Tullie Circle, NE Atlanta, GA 30329 www.ashrae.org	52.1-92 52.2-99 62.2 90.1	<u>13C.A5.504.1</u> <u>13C.A5.504.1</u> <u>13C.5.108.8</u>
ASME American Society of Mechanical Engineers Three Park Avenue New York, NY 10016-5990 www.asme.org	A112.18.1 A112.19 A112.19.2 A112.19.14	<u>13C.5.303.6</u> <u>13C.5.303.6</u> <u>13C.5.303.2</u> <u>13C.5.303.6</u>
ASTM International 100 Barr Harbor Drive West Conshohocken, PA 19428-2859 www.astm.org	C33 C-1371-98 E90 E408-71(2002) E413 E1333-96 (2002) E1903-97	<u>13C.5.A5.405.3</u> <u>13C.5.3.2</u> <u>13C.5.507.5</u> <u>13C.5.507.5</u> <u>13C.5.A103.4</u>
<u>Build It Green</u> <u>1434 University Ave</u> <u>Berkeley, CA 94702</u>	<u>GreenPoint Rated</u> <u>New Home</u>	<u>XXXXXXXXXXXXXXXXXXXXX</u>
CSA Canadian Standards Association 5060 Spectrum Way, Suite 100 Mississauga, Ontario, Canada L4W 5N6 www.csa.ca	CSA B125.1	<u>13C.5.303.6</u>
IAPMO International Association of Plumbing and Mechanical Officials		

5001 E. Philadelphia St. Ontario, CA 91761 iapmo@iapmo.org	IAPMO Z124.9	<u>13C.5.303.6</u>
NEBB National Environmental Balancing Bureau 8575 Grovemont Cir Gaithersburg, MD 20877 http://nebb.org/index.php	Procedural Standards, 1983	<u>13C.5.410.3.3.1</u>
NSF International 789 Dixboro Rd. Ann Arbor, MI 48113-0140 http://www.nsf.org/	NSF/ANSI 140- 2007	<u>13C.5.504.4.4</u>
TABB Testing, Adjusting and Balancing Bureau 601 N Fairfax St, Ste 250 Alexandria, VA 22314 http://www.tabbcertified.org/contact.html	National Standards, 2003	<u>13C.5.410.3.3.1</u>
<u>USGBC U.S. Green Building Council</u> <u>2101 L Street, NW, Suite 500,</u> <u>Washington, DC 20037</u> http://www.usgbc.org	<u>LEED® (Building Design and Construction, Interior Design and Construction, Homes)</u>	<u>XXXXXXXXXXXXXXXXXX</u>

CHAPTER 13C.7
INSTALLER AND SPECIAL INSPECTOR QUALIFICATIONS

SECTION 13C.7.701
GENERAL

13C.7.701.1 These requirements apply to installers and Special inspectors with regards to the requirements of this chapter.

SECTION 13C.7.702
QUALIFICATIONS

13C.7.702.1 Installer training . HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

- 1.State certified apprenticeship programs.
2. Public utility training programs.
3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
4. Programs sponsored by manufacturing organizations.
5. Other programs acceptable to the ~~enforcing agency~~ Director of the Department of Building Inspection.

13C.7.702.2 Special inspection. When required by the ~~enforcing agency~~ Director of the Department of Building Inspection, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this ~~code~~ chapter. Special inspectors shall demonstrate competence to the satisfaction of the ~~enforcing agency~~ Director of the Department of Building Inspection for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the ~~enforcing agency~~ Director of the Department of Building Inspection, the following certifications or education may be considered by the ~~enforcing agency~~ Director of the Department of Building Inspection when evaluating the qualifications of a special inspector.

1. Certification by ~~a~~ the applicable national or regional green building program or standard publisher.
2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building performance contractors, and home energy auditors.
3. Successful completion of a third party apprentice training program in the appropriate trade.
4. Other programs acceptable to the ~~enforcing agency~~ Director of the Department of Building Inspection.

Notes:

1. Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.
2. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

13C.7.702.3 **Special inspection.** When required by the ~~enforcing agency~~ Director of the Department of Building Inspection, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code.

Special inspectors shall demonstrate competence to the satisfaction of the ~~enforcing agency~~ Director of the Department of Building Inspection for the particular type of inspection or task to be performed. In addition, the special inspector shall have a certification from a recognized state, national, or international association, as determined by the ~~local agency~~ Director of the Department of Building Inspection. The area of certification shall be closely related to the primary job function, as determined by the local agency.

Note: Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

13C.7.702.4 Special inspection. The ~~enforcing agency~~ Director of the Department of Building Inspection may require special inspection to verify compliance with this code or other laws that are enforced by the agency. The special inspector shall be a qualified person who shall demonstrate competence, to the satisfaction of the ~~enforcing agency~~ Director of the Department of Building Inspection, for inspection of the particular type of construction or operation requiring special inspection.

SECTION 13C.7.703 VERIFICATIONS

13C.7.703.1 Documentation. Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the ~~enforcing agency~~ Director of the Department of Building Inspection which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified in the application checklist.

13C.7.703.2 Documentation. Verification of compliance with this code shall include construction documents, plans, specifications builder or installer certification, inspection reports, or other methods acceptable to the ~~enforcing agency~~ Director of the Department of Building Inspection which show substantial conformance. Where specific documentation is necessary to verify compliance, that method of compliance will be specified in the appropriate section.

Chapter 13D
COMMERCIAL LIGHTING EFFICIENCY ORDINANCE

The City and County of San Francisco adopts the following Chapter 13D for the purpose of reducing public demand for electricity and the associated detriment to the environment of energy production and delivery by requiring commercial buildings to install or adopt more energy efficient lighting measures.

SECTION 1301D — TITLE

This Chapter shall be known as the “Commercial Lighting Efficiency Ordinance.”

SECTION 1302D — PURPOSE

The purpose of this Chapter is to reduce public demand for electricity and the associated detriment to the environment of energy production and delivery by requiring commercial buildings to install or adopt more energy efficient lighting measures.

SECTION 1303D — SCOPE

The provisions of this Chapter shall apply to all privately owned non-residential buildings, including school facilities, the non-residential portions of mixed-use commercial and residential buildings, tourist hotels, and the common areas of residential hotels and multiple-unit residential buildings, all as herein defined.

EXCEPTIONS:

The provisions of this Chapter do not apply to:

1. Residential buildings and residential hotels, except that it shall apply to their common areas.
2. The residential portions of mixed-use commercial and residential buildings, except that it shall apply to their common areas.

SECTION 1304D — DEFINITIONS

For the purpose of this Chapter, certain terms are defined as follows:

COMMERCIAL BUILDING is any privately owned building that is occupancy group A, B, E, F, H, I, L, M or S as defined in this Code and any tourist hotels, as herein defined. When a building is designated for more than one type of occupancy, “Commercial Building” shall mean those spaces within the mixed use building designated as A, B, E, F, H, I, L, M or S or tourist hotel, as herein defined. Except for tourist hotels as herein defined, “Commercial Building” shall include only the common areas of any R (“residential”) occupancy buildings for the common areas of any R (“residential”) occupancy portions of mixed use buildings.

COMMON AREA is any area, space or room of a building that is made available to the general public as either a client or guest.

DIRECTOR is the Director of the Department of Building Inspection, or his or her designee

EXIT SIGNS are signs located and illuminated as required by the Building Code

LINEAR FLUORESCENT LAMP is a “tube” or “bulb” formed in a straight shape, as distinguished from a circular or u-shape, but not including linear specialty lamps such as black lights.

LUMENAIRE is an interior or exterior complete lighting unit, including internally or externally illuminated signs, consisting of the lamp and the parts designed to distribute the light, to protect the lamp, and to connect the lamp to the power supply, but not including illuminated utilization equipment or exit signs as defined herein.

OCCUPANCY SENSOR CONTROL DEVICE is a device that automatically turns off a luminaires or series of luminaires not more than 30 minutes after it senses that the area is vacated.

TOURIST HOTEL is any residential building, or portion thereof, which is occupied as a hotel, motel or inn and which has a certificated of use for tourist occupancy, or any portion of a residential building which is converted to tourist hotel use pursuant to the Residential Hotel Conversion Ordinance (S.F. Administrative Code, Article 41) or other City law.

UTILIZATION EQUIPMENT is commercial, retail or industrial equipment, including but not limited to refrigeration equipment, fully enclosed retail display cases, vending machines, printing equipment or conveyors, which uses 4-foot or 8-foot linear fluorescent lamps as an integrated part of such equipment. “Utilization Equipment” shall not include furniture or workstations.

SECTION 1305D — COMPLIANCE REQUIREMENTS

1305D.1 Compliance Deadline. No later than December 31, 2011 (“Compliance Deadline”), the owner of each building subject to this Chapter shall self-certify that the entire building meets the standards specified in this Chapter 13D, and if the building is not certified, the building owner shall make such repairs as may be required to conform to this Chapter.

1305D.2 Stay of Compliance Deadline. The Compliance Deadline stated in Section 1305D.1 shall be stayed for up to two years form the date of an application for a demolition permit for any building subject to this Chapter. If the building is demolished and a Certificate of Completion issued by the Department before the end of the two-year postponement, the requirements of this Chapter shall not apply. If the building is not demolished after the expiration of two year, the provisions of this Chapter shall apply even though the demolition permit is till in effect or a new demolition permit has been issued.

SECTION 1306D – LIGHTING EFFICIENCY MEASURES

1306D.1. Mercury Content. The mercury content of each 4-foot linear fluorescent lamp installed after the Compliance Deadline in a luminaires in a building subject to this Chapter shall not exceed 5 mg. The mercury content of each 8-foot linear fluorescent lamp installed after the Compliance Deadline in a luminaires in a building subject to this Chapter shall not exceed 10 mg.

1306D.2. Energy Efficiency. The lamp and ballast system in each luminaires that utilizes one or more 4-foot of 8-foot linear fluorescent lamps to provide illumination in a building subject to this Chapter must meet at least one of the following requirements:

1. The lamp and ballast system emits 81 or more lumens per watt of electricity consumed.
2. The luminaires is controlled by an occupancy sensor control device that does not control an area in the

building of more than 250 square feet.

3. The luminaires is fitted with a lighting efficiency measure approved by the Director as equivalent to the measures in subsection (1) or (2).

4. The Director finds, based on the facts of the particular building and luminaires, that the energy savings from installing lighting efficiency measures meeting the requirements of this Section will be so insignificant over the life of the luminaires that the measure is not cost efficient.

5. If the owner of a Commercial Building elects to meet the requirements of this Section 1306D.2 with measures that require permits, such permits shall comply with all other applicable requirements of this Code and all other applicable state and local laws.

SECTION 1307D. ENFORCEMENT

Any building maintained in violation of this Chapter shall constitute a public nuisance under the terms of Section 102A of this Code and such nuisance may be abated pursuant to the procedures set forth in Section 102A of this code fro unsafe buildings.

SECTION 1308D. RULES

The director, after consulting with the Department of the Environment, and in accordance with Section 104A.2.1 of this Code, shall adopt, and may amend, reasonable rules, guidelines and forms for implementing the provisions and intent of this Chapter.

SECTION 1309D. UNDERTAKING FOR THE GENERAL WELFARE

In undertaking the enforcement of this Chapter, the City and County of San Francisco is assuming an undertaking only to promote the general welfare. It is not assuming, nor is it imposing on its officers and employees, an obligation for breach of which it is liable in money damages to any person who claims that such breach proximately caused injury.

SECTION 1310D. PREEMPTION

Nothing in this Chapter shall be interpreted or applied so as to create any power or duty in conflict with any federal or state law or regulation.

SECTION 1311D. SEVERABILITY

If any provision or clause of this Chapter or the application thereof to any person or circumstance is held to be unconstitutional or to be otherwise invalid by any court of competent jurisdiction, such invalidity shall not affect other provisions, and clauses of this Chapter are declared to be severable.

Chapter 14
EXTERIOR WALLS

SECTION 1403 – PERFORMANCE REQUIREMENTS

1403.7 Add a section as follows:

1403.7 Projections and appendages. Provisions shall be made at the outer edge of all projections and appendages to control rainwater backflow under the projection. Ventilation shall be provided for all enclosed spaces of exposed soffits, bays and other projections in wood framed construction.

Where an uncovered balcony or deck with an impervious surface exceeds 200 square feet (18.58 m²) in area, drainage shall be conveyed directly to a building drain or building sewer or be conveyed to an approved alternate location based on approved geotechnical and engineering design.

Chapter 15
ROOF ASSEMBLIES AND ROOFTOP STRUCTURES

SECTION 1501 – GENERAL

1501.1 Add a second paragraph as follows:

For qualified historical buildings or properties, see Section 3409.

SECTION 1503 – WEATHER PROTECTION

1503.4 Add a second paragraph as follows:

All storm- or casual water from roof areas which total more than 200 square feet (18.58 m²) shall drain or be conveyed directly to the building drain or storm drain or to an approved alternate location based on approved geotechnical and engineering design. Such drainage shall not be directed to flow onto adjacent property or over public sidewalks. Building projections not exceeding 12 inches (305 mm) in width are exempt from drainage requirements without area limitations.

SECTION 1505 – FIRE CLASSIFICATION

1505.1 Revise the second sentence as follows:

1505.1 General. Roof assemblies shall be divided into the classes defined below. Class A, **or B, and C** roof assemblies and roof coverings required to be listed by this section shall be tested in accordance with ASTM E 108 or UL 790.

1505.1 Add the following at the end of the first paragraph:

Class B or better roof coverings shall be used on all buildings.

1505.1 Add the following second exception:

2. Detached accessory structures with a roof of less than 200 square feet (18.58 m²) may have roof coverings of Class A, B or C.

Table 1505.1 Revise the table as follows:

TABLE 1505.1 – MINIMUM ROOF COVERING CLASSIFICATION
FOR TYPES OF CONSTRUCTION

IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
B	B	B	€ B	B	€ B	B	B	€ B

SECTION 1507 – REQUIREMENTS FOR ROOF COVERINGS

1507.8 Add the following sentence at the end of the paragraph:

Untreated wood shingles shall not be permitted.

1507.9 Add the following sentence at the end of the paragraph:

Untreated wood shakes shall not be permitted.

SECTION 1509 – ROOFTOP STRUCTURES

1509.2.2 Add the following sentence at the end of this section:

Penthouses shall be of a size no larger than the minimum clearances required for the mechanical equipment to be installed or no larger than the vertical shaft opening in the roof.

1509.6 Add the following section:

1509.6 Roof decks. May be constructed of wood when the following conditions are met:

- 1. The deck is less than 500 square feet (46.45 m²) in area.**
- 2. The deck boards are spaced not greater than 1/8 inch (3.2 mm) apart.**
- 3. Any open space around the perimeter between the deck and the roof surface shall be enclosed to within 1 inch (25.4 mm) of the roof surface.**
- 4. The deck is constructed of fire-retardant-treated wood approved for exterior use, or the deck is constructed of 2-inch (50.8 mm) nominal all heart redwood. Guardrails and fences may be constructed of any material permitted by this code.**
- 5. The deck is installed on top of a Class A or B fire-resistive roof assembly. The deck shall not be considered part of such roof assembly.**

Chapter 16
STRUCTURAL DESIGN

SECTION 1604 – GENERAL DESIGN REQUIREMENTS

1604.11. Add the following section:

1604.11 Minimum Lateral Force for Existing Buildings.

1604.11.1 General. This section is applicable to existing buildings when invoked by Section 3401.8. 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.

1604.11.2 Wind forces. Buildings and structures shall be capable of resisting wind forces as prescribed in Section 1609.

1604.11.3 Seismic forces. Buildings and structures shall comply with the applicable provisions of Sections 1613, except that, when compliance with this section is required by Section 3401.8, then structures and elements may be designed for seismic forces of not less than 75 percent of those given in Section 1613, and the building separation limitations of Section 1613.8 do not apply.

When upper floors are exempted from compliance by Section 3401.8, 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 incorporating inelastic behavior may be submitted and approved in accordance with rules and regulations adopted by the Building Official pursuant to Section 104A.2.1.

1604.11.4 Design values for existing materials. The incorporation of existing materials, construction and detailing into the designed lateral force system shall be permitted when approved by the Building Official. Minimum quality levels and maximum load and stress values shall comply with Table 16C-D of this code, Tables 8-8-A and 8-8-B of the State Historical Building Code, or with other rules, regulations and standards adopted by the Building Official pursuant to Section 104A.2.1.

1604.12. Add the following section:

1604.12 Earthquake Recording Instrumentation. This section is adopted by the City and County of San Francisco for the purpose of evaluating the performance of instrumented building in earthquakes.

1604.12.1 – General. Every building over six stories in height with an aggregate floor area of 60,000

square feet (5574 m²) or more, and every building over 10 stories in height regardless of floor area, shall be provided with not less than three approved recording accelerographs. The accelerographs shall be interconnected for common start and common timing.

1604.12.2 – Location. The instruments shall be located in the basement, midportion, and near the top of the building. Each instrument shall be located so that access is maintained at all times and is unobstructed by room contents. A sign stating **MAINTAIN CLEAR ACCESS TO THIS INSTRUMENT** shall be posted in a conspicuous location.

1604.12.3 – Maintenance. Maintenance and service of the instruments shall be provided by the owner of the building, subject to the approval of the Building Official. Data produced by the instruments shall be made available to the Building Official on request.

1604.12.4 – Instrumentation of Existing Buildings. With the agreement of the owners of existing structures selected by the Building Official, such structures shall have provided accessible space for the installation of appropriate earthquake recording instruments. Location of said instruments shall be determined by the Building Official. The Building Official shall make arrangements to provide, maintain, and service the instruments. Data shall be the property of the jurisdiction, but copies of individual records shall be made available to the public on request and the payment of an appropriate fee.

TABLE 1607.1 – MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS, L₀, AND CONCENTRATED LIVE LOADS

Table 1607.1 Add the following footnote n to Occupancy or Use 32, Sidewalks and Driveways:

ⁿ Driveways subject to vehicle loading shall be designed in accordance with the American Association of State Highway and Transportation Officials (AASHTO) HS-20 Standard Specification for Highways and Bridges. Sidewalks subject to vehicle loading shall be designed for a concentrated load of 10,000 pounds placed upon any space 2 1/2 feet (762 mm) square, wherever this load upon an otherwise unloaded sidewalk would produce stresses greater than those caused by the uniform load of 250 psf required therefor.

SECTION 1613 – EARTHQUAKE LOADS

1613. Add the following section:

1613.8 Building separations. Provisions of Section 1613.6.7 shall apply.

Chapter 16A
STRUCTURAL DESIGN

No San Francisco Building Code Amendments

Chapter 16B
EARTHQUAKE HAZARD REDUCTION IN UNREINFORCED MASONRY BEARING WALL BUILDINGS

[Note: The time limits for compliance with the provisions of chapters 16B and 16C have passed, but the ordinance and time limits therein are still in effect.]

SECTION 1601B – PURPOSE

The purpose of this chapter is to promote public safety and welfare by reducing the risk of death or injury that may result from the effects of an earthquake on existing unreinforced masonry bearing wall buildings.

The provisions of this chapter are intended as minimum standards for structural seismic resistance for earthquake ground shaking and are established primarily to reduce the risk of life loss or injury. Compliance with these provisions will not necessarily prevent loss of life or injury, or prevent earthquake damage to rehabilitated structures, or protect against the release of hazardous materials, or protect the function of essential facilities. These provisions are not intended to mitigate ground failure hazards such as liquefaction. The Community Safety Element of the General Plan of the City and County of San Francisco should be consulted for areas most susceptible to ground failure.

Time limits are given for owners of unreinforced masonry bearing wall buildings to submit an inventory of each building and an evaluation of the degree of risk presented by the building. Priorities and time limits are established for work to be completed.

Requirements for seismic strengthening of unreinforced buildings are contained in Chapter 16C.

SECTION 1602B – SCOPE

The provisions of this chapter shall apply to all existing buildings having one or more bearing walls of unreinforced masonry as defined in Chapter 16C.

EXCEPTIONS:

1. Buildings housing Group R Occupancies containing less than five dwelling units or guest rooms and used solely for residential purposes.
2. Buildings accessory to and on the same lot as those described in Exception 1.
3. Buildings which have been brought into full compliance with the requirements of Section 3401.8 in effect on or after May 21, 1973.

Compliance with the provisions of Chapters 16B and 16C does not supersede the requirement for compliance with Section 3401.8 when otherwise required under Chapter 34 of this code.

A permit issued solely for compliance with any of the procedures of Chapters 16B and 16C of this code shall not be considered “substantial change” or “structural work” as defined in Section Chapter 34 and compliance with Section 3401.8 will not be required.

SECTION 1603B – DEFINITIONS

For the purpose of Chapters 16B and 16C, certain terms are defined as follows:

BOLTS-PLUS is the installation of shear and tension anchors at the roof and floors and, when required, the bracing of the unreinforced masonry bearing walls upon evaluation of the height-to-thickness ratio of these walls.

POOR SOIL is all soil lying bayward of the line indicating the landward limit of Bay Mud deposits as shown on the U.S. Geological Survey Map MF-1376, title “Map Showing the 200-foot thickness contour of surficial deposits and the landward limit of Bay Mud deposits of San Francisco, California,” by William B. Joyner, 1982.

EXCEPTION: A building need not be considered as being located on poor soil when a subsurface exploration demonstrates that the soil is not underlain by Bay Mud.

UNREINFORCED MASONRY BEARING WALL BUILDING is a building or structure having at least one unreinforced masonry bearing wall.

SECTION 1604B – COMPLIANCE REQUIREMENTS

1604B.1 General. The owner of each unreinforced masonry bearing wall building within the scope of this chapter and Chapter 16C shall cause a structural analysis to be made of the building by a registered civil or structural engineer or licensed architect, and, if the building does not meet the minimum standards specified in this code except as provided for in Chapters 16B and 16C, the owner shall cause the building to be structurally altered to conform to such standards or cause the building to be demolished pursuant to the program implementation schedule set forth.

1604B.2 Program Implementation. The requirements stated in Section 1604B.1 above shall be accomplished by submitting to the Building Official the following:

1604B.2.1 Inventory form. The owner is required to submit to the Department, within the time limits set forth in Table 16B-A, a properly completed inventory form, signed and sealed by the owner’s civil or structural engineer or architect. See Section 110A, Table 1A-S for the applicable fee for the review of the inventory form. A failure to respond within the time limits set forth in Table 16B-A is a violation of this code.

1604B.2.2 Risk assessment.

1604B.2.2.1 General. When filling out the required information on the inventory form, the owner’s architect or civil or structural engineer shall assign to the building a relative level of risk depending upon the occupancy, soil conditions at the site and the density of the population exposed.

1604B.2.2.2 Level of risk assigned.

1. Level 1 buildings are buildings containing occupancy Group A Occupancies with an occupant load of 300 or more, or Group E Occupancies, and those buildings greater than three stories in height which are located on poor soil.

2. Level 2 buildings are all non-Level 1 buildings which are located on poor soil in the Downtown, North of Market/Civic Center, South of Market, South of Market Residential and Chinatown Unreinforced Masonry Building Study Areas as delineated on Figure 16B-1.
3. Level 3 buildings are buildings in the above areas which are not located on poor soil and buildings located on poor soil outside the above areas.
4. Level 4 buildings are all other unreinforced masonry bearing wall buildings.

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 Building Official 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 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 Building Official pursuant to Section 104A.2.1 after consultation with the Seismic Safety Retrofit Bond Program Board. See Section 110A, Table 1A-S for the applicable fee for the review of the engineering report.

1604B.2.4 Application for building permit. The owner shall submit to the Department an application for a structural alteration permit accompanied by structural plans, specifications and calculations for the proposed mitigation solution or a permit application to demolish the building. Time limits for submission of the application and for permit processing and approval are established in Table 16B-A.

1604B.2.5 Commencement and completion of construction. Construction work shall commence and a Certificate of Final Completion and Occupancy or final inspection of work under a demolition permit shall be obtained within the time limits set forth in Table 16B-A.

1604B.2.6 Transfer of title. No transfer of title shall alter the time limits for compliance set forth in Table 16B-A.

SECTION 1605B – ADMINISTRATION

1605B.1 Service of Notice. The Building Official shall, not later than February 15, 1993, issue a notice to comply with Section 1604B.1 to the owner of each building known by the Department to be within the scope of this chapter. The notice shall be accompanied by an informational letter or brochure and a sample inventory form. If, on or before February 15, 1993, an owner of an unreinforced masonry bearing wall building has knowledge that he or she owns such a building, then failure of the Building Official to issue a notice or failure of the owner to receive such a notice shall not relieve the owner of the obligation to comply with the provisions of Chapters 16B and 16C within the time limits set forth in Table 16B-A. An owner is presumed to have knowledge that he or she owns an unreinforced masonry bearing wall building if the building is on the inventory list of potential hazardous unreinforced masonry bearing wall buildings required by Section 8877(a) of the California Government Code.

For buildings not known to the Department to be unreinforced masonry bearing wall buildings and whose owners have no knowledge that the buildings are unreinforced masonry bearing wall buildings, the time limits set forth in Table 16B-A shall commence upon the owners having actual or constructive knowledge that their buildings are unreinforced masonry bearing wall buildings.

1605B.2 Appeal from Notice. The owner or the owner's agent may appeal the Building Official's notice to the Board of Examiners in accordance with Section 105A.1.

1605B.3 Processing and Recordation. Within 30 days of receipt of the inventory form, the Building Official 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 Department within 30 days of the date of the Department's initial rejection. The Building Official 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 Building Official 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.

1605B.4 Enforcement. Whenever an inventory form has not been submitted or a notice issued by the Building Official to structurally alter or demolish an unreinforced masonry bearing wall building has not been complied with within the time limits set forth in Table 16B-A, the Building Official shall have the power to abate the building in accordance with Section 102A.

1605B.5 Removal from Inventory. After all of the retrofit work required by this chapter and Chapter 16C has been completed in any building to the satisfaction of the Building Official and a Certificate of Final Completion and Occupancy has been issued in accordance with Section 109A, or after a final inspection of building demolition work has been made, or if the Building Official finds that no retrofit work is required, the Building Official shall remove that building from the inventory list of potentially hazardous unreinforced masonry bearing wall buildings required by Section 8877(a) of the California Government Code. The Building Official shall thereupon cause to be filed with the Assessor-Recorder's Office a release of any notice or Abatement Order recorded under Section 1605B.3 or 1605B.4. Additionally, the Department shall furnish to each owner upon satisfactory completion of a retrofit a sign, on a standard Department form, of the same size as that required by California Government Code Section 8875.8, stating "This building has been seismically retrofitted to reduce the risk of death or injury in the event of a major earthquake pursuant to Chapters 16B and 16C of the San Francisco Building Code." The sign shall also indicate the retrofit procedure used and shall bear the signature of the Building Official. The posting of the sign shall be at the option of the owner.

1605B.6 Voluntary Seismic Strengthening. The owner of a building that is exempt from compliance with this chapter may voluntarily retrofit the building using the procedures for seismic strengthening set forth in Chapter 16C.

1605B.7 Application of Future Retrofitting Legislation. It is the present intent of the Board of Supervisors that, absent a compelling public safety necessity, buildings strengthened pursuant to Chapter 16C will not be subject to future mandatory seismic retrofitting legislation adopted by the Board.

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 the Department with the first alteration permit application; and**
- 2. A phasing program is submitted to and approved by 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 1710; and**
- 5. All of the required strengthening work is completed within the time limits set forth in Table 16B-A.**

SECTION 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 3401.9 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 1607B – ENERGY CONSERVATION

The provisions of California Code of Regulations, Title 24, Part 6, the California Energy Code, San Francisco Housing Code, Chapter 12 (the Residential Energy Conservation Ordinance) are not applicable to buildings altered as required by this chapter, unless the alteration work also constitutes a change in use as defined in Section 3408, or increases the conditioned space or alters the lighting or mechanical systems.

FIGURE 16B-1 – UNREINFORCED MASONRY BUILDING STUDY AREAS

- 1 Downtown**
- 2 South of Market**
- 3 South of Market/Residential**
- 4 North of Market/Civic Center**
- 5 Bush Street Corridor**
- 6 Van Ness/Polk**
- 7 Chinatown**
- 8 North Beach**
- 9 Waterfront**
- 10 Mission/Upper Market**
- 11 Outlying**

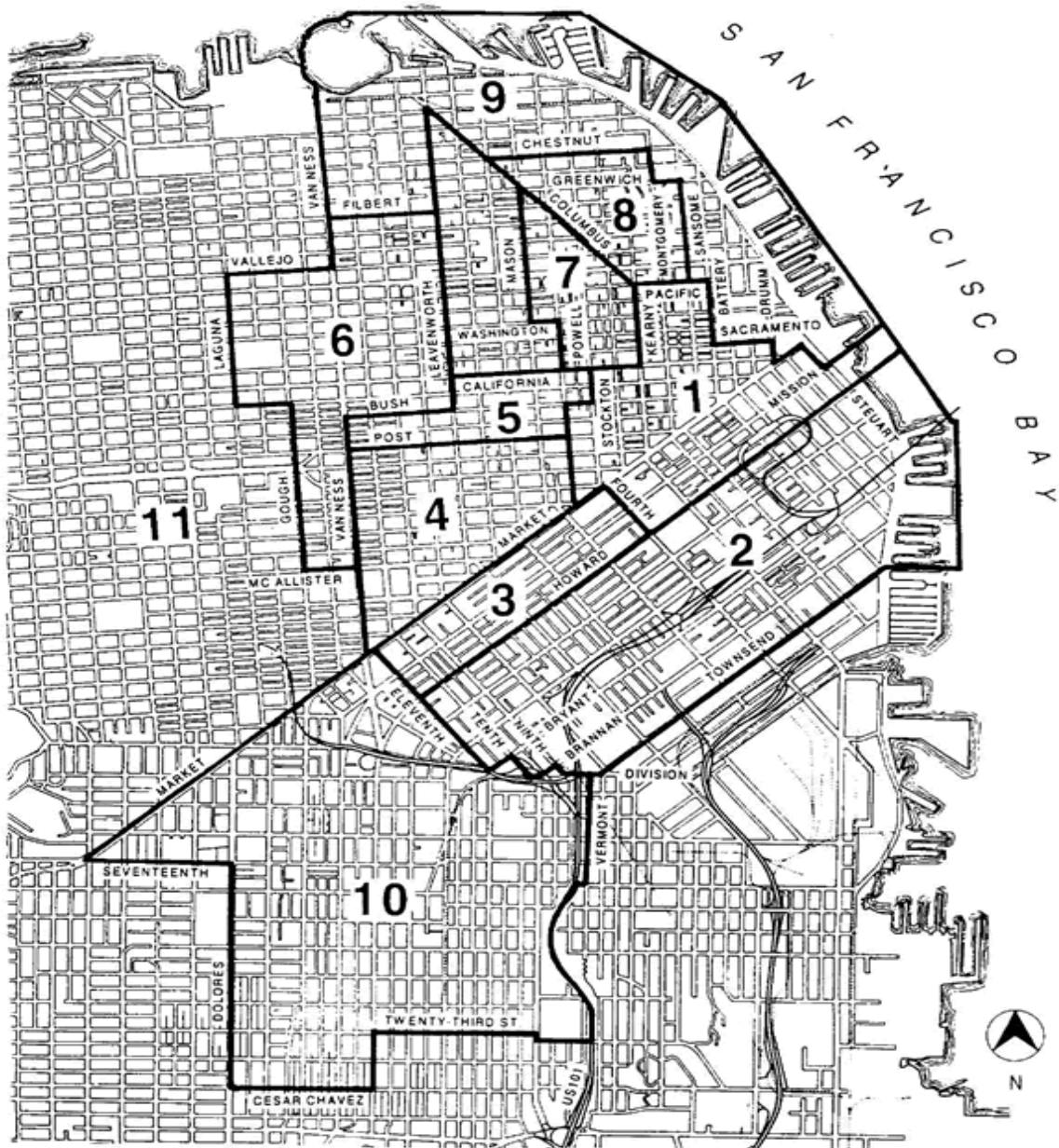


TABLE 16B-A – PROGRAM IMPLEMENTATION SCHEDULE ^{1,2}

I	II	III	IV	V
Risk Level of Building	Submission of Inventory Form to DBI	Application of Building Permit with Plans or Application for Demolition⁴	Permit Processing and Approval⁴	Structural Alterations Completion^{3,4}
1	1.0	2.0	2.5	3.5
2	1.0	2.5	3.0	5.0
3	1.0	8.0	9.0	11.0
4	1.0	10.0	11.0	13.0

¹ All time periods are in years measured from February 15, 1993.

² When compliance with this table is required, the time limits and extensions of Chapter 1A are not applicable.

³ One or more extensions of time totaling not more than two years may be approved by the Building Official for a building with preexisting lease(s) due to expire, for tenant relocation conditions, for delays in obtaining financing under the City bond fund loan program and for other conditions causing delay. Such extension requests must be submitted to the Chief Building Inspector in writing prior to the expiration of the permit with payment of a fee. Any construction inspection granted under this footnote during the period of extension will require payment of an inspection fee in addition to the basic extension fee. These extensions are not cumulative with the extensions allowed by Footnote 4.

⁴ For structures containing Occupancy Group A or E and owned by organizations exempt from taxation under the Internal Revenue laws of the United States and the Revenue and Taxation Code of the State of California as bona fide fraternal, charitable, benevolent, religious or other nonprofit organizations, extensions of time in increments of not more than three years up to the maximum time limit set forth in Column V of this table may be approved by the Building Official, provided all of the following conditions are met:

1. The owner demonstrates that an application has been made for funding available under the general obligation bond or the owner is actively seeking other sources of funds; and
2. The building is vacated and secured to the Building Official's satisfaction. For Occupancy Group A buildings only, in lieu of vacation, an owner may agree in writing to limit occupancy of the building for use as an assembly building with an actual occupant load greater than 299 persons to not more than 12 hours per week or four hours in any one day. The signs required by California Government Code Section 8875.8 shall also be posted at each entrance to the building; and
3. When deemed necessary by the Building Official, pedestrian protection canopies complying with Chapter 33 of this code and Department of Public Works Order No. 157,501 are erected and maintained along sidewalks adjacent to the building; and
4. The Building Official finds that there is no hazard to any adjacent building or that hazard is satisfactorily mitigated; and
5. The owner, for the period of time in which the extension is in effect, agrees not to file an application for a demolition permit.

Chapter 16C
SEISMIC STRENGTHENING PROVISIONS FOR UNREINFORCED MASONRY BEARING WALL BUILDINGS

[Note: The time limits for compliance with the provisions of chapters 16B and 16C have passed, but the ordinance and time limits therein are still in effect.]

SECTION 1601C – PURPOSE

The purpose of this chapter is that stated in Section 1601B.

SECTION 1602C – SCOPE

1602C.1 General. The seismic strengthening of unreinforced masonry bearing wall buildings shall comply with the provisions of this chapter when strengthening either is mandated by Chapter 16B or is done voluntarily under Section 1605B.6. The elements regulated by this chapter shall be determined in accordance with Table 16C-A. Except as provided herein, other structural provisions of this code shall apply.

1602C.2 Essential and Hazardous Facilities. The provisions of this chapter are not intended to apply to the strengthening of buildings or structures in Occupancy Categories III and IV of ASCE 7-05 Table 1-1. Such buildings or structures shall be strengthened to meet the requirements of this code for new buildings of the same occupancy category or to such other criteria as has been established by the Building Official.

1602C.3 Unreinforced Masonry Private School Buildings. The strengthening of unreinforced masonry private school buildings shall comply with Sections 39160-39176 of the California Education Code.

1602C.4 Qualified Historical Buildings. Qualified historical buildings shall be strengthened to comply with this chapter or the alternative provisions contained in California Code of Regulations, Title 24, Part 8, the State Historical Building Code.

1602C.5 Party Wall Buildings. In buildings separated by party walls, all segments sharing the party walls shall be strengthened at the same time whenever feasible. When such action is not feasible, a party wall in any segment undergoing strengthening shall be provided with the capacity to resist a reasonable estimate of the shear forces generated by the adjacent unstrengthened segments.

1602C.6 Buildings of Mixed Construction. When buildings having at least one bearing wall of unreinforced masonry also utilize other structural systems, the following requirements shall apply:

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.

1602C.6.2 Masonry-concrete 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 Building Official.

SECTION 1603C – DEFINITIONS

For the purpose of this chapter, the applicable definitions in this code shall also apply.

COLLAR JOINT is the vertical space between adjacent wythes and may contain mortar.

CROSSWALL is a new or existing wall that meets the requirements of Section 1611C.3. A crosswall is not a shear wall.

CROSSWALL SHEAR CAPACITY is the allowable shear value times the length of the crosswall, $v_c L_o$.

DIAPHRAGM EDGE is the intersection of the horizontal diaphragm and a shear wall.

DIAPHRAGM SHEAR CAPACITY is the allowable shear value times the depth of the diaphragm, $v_u D$.

ESSENTIAL FACILITY is any building or structure classified in Occupancy Category IV of ASCE 7-05 Table 1-1.

HAZARDOUS FACILITY is any building or structure classified in Occupancy Category III of ASCE 7-05 Table 1-1.

NORMAL WALL is a wall perpendicular to the direction of seismic forces.

OPEN FRONT is an exterior building wall line, without vertical elements of the lateral force resisting system in one or more stories.

PARTY WALL is a wall common to two or more buildings located on separate parcels of land.

POINTING is the partial reconstruction of the bed joints of an unreinforced masonry wall as defined in Section 1616C.

QUALIFIED HISTORICAL BUILDING is a building or structure as defined in the June 1, 1990, Edition of Title 24, California Code of Regulations, Part 8, Section 8-302.

UNREINFORCED MASONRY includes burned clay, concrete or sand-lime brick, hollow clay or concrete block, plain concrete and hollow clay tile. These materials shall comply with the requirements of Section 1606C.

UNREINFORCED MASONRY WALL is a masonry wall in which the area of reinforcing steel is less than 25 percent of the minimum steel ratios required by this code for reinforced masonry. To qualify, reinforcing steel must have been installed in grouted cells within the masonry.

UNREINFORCED MASONRY BEARING WALL is an unreinforced masonry wall which provides the vertical support for a floor or roof for which the total superimposed load exceeds 200 pounds per linear foot (298 kg/m) of wall.

YIELD STORY DRIFT is the lateral displacement of one level relative to the level above or below at

which yield stress is first developed in a frame member.

SECTION 1604C – SYMBOLS AND NOTATIONS

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

A = cross sectional area of unreinforced masonry pier or wall, square inches.

A_b = total area of the bed joints above and below the test specimen for each in-place shear test.

C_p = 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 = in-plane width dimension of pier, inches, or depth of diaphragm, feet.

DCR = demand-capacity ratio specified in Section 1611C.4.2.

F_{wx} = force applied to a wall at level x , pounds.

H = least clear height of opening on either side of a pier, inches.

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

L = span of diaphragm between shear walls, or span between shear wall and open front, feet.

L_o = length of crosswall, feet.

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

SECTION 1605C – GENERAL REQUIREMENTS

1605C.1 General. All buildings shall have a seismic resisting system conforming with ASCE 7-05 Section 12.2, except as modified by this chapter.

1605C.2 Alterations and Repairs. Alterations and repairs required to meet the provisions of this chapter shall comply with all other applicable structural requirements of this code unless specifically provided for in this chapter.

1605C.3 Requirements for Plans. In addition to the requirements of Section 106A.3.3 of this code, the following construction information shall be included in the plans required by this chapter:

1. Dimensioned floor and roof plans showing existing walls and the size and spacing of floor and roof framing members and sheathing materials. The plans shall indicate all existing and new crosswalls and

shear walls and their materials of construction. The location of these walls and their openings shall be fully dimensioned and drawn to scale on the plans.

2. Dimensioned wall elevations showing openings, piers, wall classes as defined in Section 1606C.3.3.6, thickness, heights, wall shear test locations, and cracks or damaged portions requiring repairs. Where the exterior face is veneer, the type of veneer, its thickness and its bonding and/or ties to the structural wall masonry shall also be noted.
3. The type of interior wall and ceiling materials and framing.
4. The extent and type of existing wall anchorage to floors and roof when used in the design.
5. The extent and type of parapet and appendage corrections which were previously performed, if any.
6. Repair details, if any, of cracked or damaged unreinforced masonry wall walls required to resist forces specified in this chapter.
7. All other plans, sections and details necessary to delineate required retrofit construction.
8. The design procedure used shall be stated on both the plans and the permit application.
9. Details of the anchor prequalification program required by Section 1615C, if utilized, including location and results of all tests.
10. In buildings with party walls, the details of construction on both sides of each party wall shall be shown. Where required by Section 1611C.1, Item 5 the owners' consent statements shall be included with the plans.

SECTION 1606C – MATERIALS REQUIREMENTS

1606C.1 General. All materials permitted by this chapter, including their appropriate allowable design values and those existing configurations of materials specified herein, may be utilized to meet the requirements of this chapter.

1606C.2 Existing Materials. All existing materials utilized as part of the required vertical load-carrying or lateral force-resisting system shall be in sound condition or shall be repaired or removed and replaced with new materials. All unreinforced masonry materials shall comply with the following requirements:

1. The construction (lay-up) of the masonry units complies with Section 1606C.3.2 and the quality of bond between the units has been verified to the satisfaction of the Building Official.
2. Concrete masonry units are verified to be load-bearing units complying with ASTM Standard Specification C 90 or such other standard as is acceptable to the Building Official.
3. Hollow clay tile units are verified to be structural load-bearing units complying with ASTM Standard Specification C 34 or such other standard as is acceptable to the Building Official.
4. The compressive strength of plain concrete walls shall be determined based on cores taken from

each class of concrete wall. The location and number of tests shall be the same as prescribed for strength tests in Sections 1606C.3.3.2 and 1606C.3.3.3.

1606C.3 Existing Unreinforced Masonry Walls.

1606C.3.1 General. All unreinforced masonry walls utilized to carry vertical loads or seismic forces parallel and perpendicular to the wall plane shall be tested as specified in this section. All masonry that does not meet the minimum standards established by this chapter shall be removed and replaced with new materials, repaired or alternatively shall have its structural functions replaced with new materials and shall be anchored to supporting elements.

1606C.3.2 Construction (lay-up) of walls.

1606C.3.2.1 Multi-wythe solid brick. The facing and backing shall be bonded so that not less than 10 percent of the exposed face area is composed of solid headers extending not less than 4 inches (101.6 mm) into the backing. The clear distance between adjacent full-length headers shall not exceed 24 inches (609.6 mm) vertically or horizontally. Where the backing consists of two or more wythes, the headers shall extend not less than 4 inches (101.6 mm) into the most distant wythe or the backing wythes shall be bonded together with separate headers whose area and spacing conform to the foregoing. Wythes of walls not bonded as described above shall be considered as veneer. Veneer wythes shall not be included in the effective thickness used in calculating the height to thickness and the shear capacity of the wall.

1606C.3.2.2 Grouted or ungrouted hollow concrete or clay block and structural hollow clay tile. These materials shall be laid in a running bond pattern.

Other lay-up patterns may be acceptable if their performance can be justified as being at least equal to those specified above.

1606C.3.3 Mortar.

1606C.3.3.1 Tests. The quality of mortar in all masonry walls shall be determined by performing in-place shear tests in accordance with Section 1614C. Alternative methods of testing may be approved by the Building Official for masonry walls other than brick.

1606C.3.3.2 Location of tests. The shear tests shall be taken at locations representative of the mortar conditions throughout the entire building, taking into account variations in workmanship at different building height levels, variations in weathering of the exterior surfaces, and variations in the condition of the interior surfaces due to deterioration caused by leaks and condensation of water and/or by the deleterious effects of other substances contained within the building. The exact test locations shall be determined at the building site by the engineer or architect in responsible charge of the structural design work. An accurate record of all such tests and their location in the building shall be recorded, and these results shall be submitted to the Department for approval as part of the structural analysis.

1606C.3.3.3 Number of tests. The minimum number of tests per class shall be as follows:

- 1.** At each of both the first and top stories, not less than two tests per wall or line of wall elements providing a common line of resistance to lateral forces.
- 2.** At each of all other stories, not less than one test per wall or line of wall elements providing a common line of resistance to lateral forces.

3. In any case, not less than one test per 1,500 square feet (139.355 m²) of wall surface nor less than a total of eight tests.

1606C.3.3.4 Minimum quality of mortar.

1. Mortar shear test values, v_{to} , in psi shall be obtained for each in-place shear test in accordance with the following equation:

$$v_{to} = (V_{test}/A_b) - p_{D+L} \quad (16C-1)$$

2. The mortar shear strength, v_b , is the value in psi that, after discarding the lowest 20 percent of the mortar shear test values, v_{to} , is the lowest of the remaining 80 percent of the mortar shear test values.

3. Any unreinforced masonry bearing wall with v_{to} , or with mortar shear strength, v_b , less than 30 psi (206.84 kPa) shall be either removed, entirely pointed and retested or have its structural function replaced and shall be anchored to supporting elements in accordance with Section 1606C.3.1 and Section 1613C.8. When existing mortar in any wythe is pointed to increase its shear strength and retested, the condition of the mortar in the adjacent bed joints of the inner wythe or wythes and the opposite outer wythe shall be examined for extent of deterioration. The shear strength of any wall class shall be no greater than that of the weakest wythe of that class.

1606C.3.3.5 Collar joints. The collar joints shall be inspected at the test locations during each in-place shear test, and estimates of the percentage of the surfaces of adjacent wythes which are covered with mortar shall be reported along with the results of the in-place shear tests.

1606C.3.3.6 Unreinforced masonry classes. All existing unreinforced masonry shall be categorized into one or more classes based on quality of construction, state of repair, deterioration and weathering. A class shall be characterized by the allowable masonry shear stress determined in accordance with Section 1608C.2. Classes shall be defined for whole walls, not for small areas of masonry within a wall.

1606C.3.3.7 Pointing. All deteriorated mortar joints in unreinforced masonry bearing walls shall be pointed according to Section 1616C. Nothing shall prevent pointing of any deteriorated masonry wall joints before the tests are made, except as required in Section 1607C.1.

SECTION 1607C – QUALITY CONTROL

1607C.1 Pointing. All preparation and mortar pointing shall be performed with special inspection.

EXCEPTION: At the discretion of the Building Official, incidental pointing may be performed without special inspection.

1607C.2 Masonry Shear Tests. In-place shear tests shall comply with Section 1614C.

1607C.3 Existing Wall Anchors. Existing wall anchors utilized as all or part of the required tension anchors shall be tested in pullout according to Section 1615C. The minimum number of anchors tested shall be four per floor, with two tests at walls with joists framing into the wall and two tests at walls with joists parallel to the wall, but not less than 10 percent of the total number of existing tension anchors at each level.

1607C.4 New Bolts. Twenty-five percent of all new embedded bolts resisting only shear forces in

unreinforced masonry walls shall be tested using a calibrated torque wrench in accordance with Section 1615C.

EXCEPTION: The number of bolts tested may be reduced to 10 percent when special inspection in accordance with Section 1704 is provided during installation but in no case shall less than two bolts per 500 square feet (46.45 m²) of wall or four bolts per wall be tested.

All new embedded bolts resisting tension forces or a combination of tension and shear forces shall be subject to periodic special inspection in accordance with Section 1704.16 prior to placement of the bolt and grout or adhesive in the drilled hole. Five percent of all embedded bolts resisting tension forces, but not less than two bolts, shall be subject to a direct tension test and an additional 20 percent, but not less than three bolts, shall be tested using a torque calibrated wrench. Testing shall be performed in accordance with Section 1615C.

New through bolts and existing bolts installed under the Parapet Safety Program need not be tested.

SECTION 1608C – ALLOWABLE DESIGN VALUES

1608C.1 Allowable Values.

1608C.1.1 Existing materials. Allowable values for existing materials are given in Table 16C-D, and for new materials in Table 16C-E.

1608C.1.2 Values not specified. Allowable values not specified in this chapter shall be as specified elsewhere in this code.

1608C.2 Masonry shear. The allowable unreinforced masonry shear stress, v_a shall be determined for each masonry class from the following equation:

$$v_a = 0.1v_t + 0.15P_D/A \quad (16C-2)$$

The mortar shear test value, v_t , shall be determined in accordance with Section 1606C.3.3, and shall not exceed 100 psi (689.476 kPa) for the determination of v_a .

The one-third increase in allowable values of this code for short-term loading is not allowed for v_a .

1608C.3 Masonry Compression. Where any increase in dead plus live compression stress occurs, the allowable compression stress in unreinforced masonry shall not exceed 100 psi (689.476 kPa). The one-third increase in allowable stress of this code is allowed.

1608C.4 Masonry Tension. Unreinforced masonry shall be assumed as having no tensile capacity.

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 , of 100 psi (689.476 kPa).

3. In the case of plain concrete, the compressive strength (f'_c) shall be not less than 900 psi (6,205.28 kPa) and the allowable shear strength is limited to not more than $0.02 f'_c$.
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.

1608C.6 Existing Tension Anchors. The allowable resistance values of the existing anchors shall be 40 percent of the average of the tension tests of existing anchors having the same wall thickness and joist orientation. The one-third increase in allowable value of this code is not allowed for existing tension anchors.

1608C.7 Foundations. For existing foundations, new total dead loads may be increased over existing dead load by 25 percent. New total dead load plus live load plus seismic forces may be increased over existing dead load plus live load by 50 percent.

EXCEPTION: In buildings located in poor soil areas as defined in Chapter 16B, any increase in dead load shall require an evaluation of the existing foundation system.

Higher values may be justified only in conjunction with a geotechnical investigation. A foundation investigation shall be also submitted with the building permit application when:

1. A building has an existing full or partial pile supported, or similar foundation system or whenever the installation of such a system is proposed as part of the strengthening.
2. Whenever there is evidence of significant distress attributable to foundation or geotechnical conditions.
3. An investigation is required by Section 1802 or 1804.
4. It is desired to prove that the building is not on poor soil as permitted by the exception to Section 1603B.

SECTION 1609C – SELECTION OF PROCEDURE

1609C.1 General. Except as modified herein, the analysis and design relating to the structural alteration of existing buildings shall be in accordance with this code.

1609C.2 Selection of Procedure. All buildings shall be analyzed by either the General Procedure of Section 1610C or, when applicable, buildings may be analyzed by the Special Procedure of Section 1611C.

EXCEPTIONS:

1. A building may be strengthened to the Bolts-plus level by complying only with the

requirements for wall anchorage (tension bolts), diaphragm shear transfer (shear bolts) and out-of-plane wall and parapet and appendage bracing, provided the entire building complies with all of the following requirements:

(1) The building does not have any vertical irregularities of Types 1A or 1B (Soft Story), 4 (In-Plane Discontinuity) or 5A or 5B (Weak Story) as defined in ASCE 7-05 Table 12.3-2 or horizontal irregularities of Types 3 (Diaphragm Discontinuity) or 4 (Out-of-Plane Offset) as defined in ASCE 7-05 Table 12.3-1 or those irregularities are corrected.

(2) The building does not contain any Group A Occupancies with an occupant load of 300 or more, or Group E, Group I or Group H-1, H-2, or H-4 Occupancies.

(3) The building has a mortar shear strength, v_r , as determined by Section 1606C.3.3, of 30 psi (206.843 kPa) or more for all masonry classes.

(4) The building has wood or plywood diaphragms at all levels above the base of building.

(5) The building contains a maximum of six stories above the base of the building. The base shall be the ground level and basement or basements shall be excluded from the story count.

EXCEPTION: In an otherwise qualifying building of greater than six stories, a maximum of six of the uppermost contiguous stories may be retrofitted using the Bolts-Plus Procedure, providing the building is not located on poor soil as defined in Section 1603B. The masonry walls required by Item 7 below shall occupy not less than 50 percent of the wall length in the lowest two of the uppermost six stories. Nonqualifying stories and stories below the uppermost six shall be retrofitted to any other procedure for which they qualify.

(6) The building has or will be provided with crosswalls as defined in Section 1611C.3 at a spacing that does not exceed 40 feet (12.192 m) on center. Any story which does not have or is not provided with complying crosswalls and all stories below that story shall be analyzed using the General Procedure of Section 1610C or, where applicable, the Special Procedure of Section 1611C. The floor structure that separates the Bolts-Plus and General or Special Procedure stories shall be investigated for its adequacy to act as a diaphragm in accordance with Section 1610C.1 or, where the Special Procedure is applicable, Section 1611C.4.

(7) The building has or will be provided with a minimum of two lines of vertical elements of the lateral force resisting system parallel to each axis. Masonry walls shall have wall piers with a height-to-width ratio that does not exceed 2 to 1 and shall occupy not less than 40 percent of the wall's length in order to be considered as providing a line of resistance. Existing moment frames and other lines of resistance added or altered to comply with this requirement shall fully comply with Section 1612C. At least one line in each direction shall be a masonry or concrete shear wall.

(8) In buildings containing one or more party walls, the Bolts-Plus Procedure shall not be used unless each building sharing a party wall individually complies with all of the limitations set forth above and the owner of each such building consents to the use of the procedure in writing.

When the Bolts-Plus Procedure is applicable, the forces to be used for diaphragm shear transfer and irregularity correction shall be those specified in Sections 1611C.5 and 1611C.6 and h/t ratios shall be evaluated in accordance with Section 1611C.7. When the intersection of the diaphragm span and demand capacity ratio falls outside the three regions of Figure 16C-1, the h/t ratios for "all other buildings" in Table 16C-B shall be used. The measures used to comply shall be part of, and be

coordinated with, the complete strengthening scheme described in the engineering report required by Section 1604B.2.3.

2. Buildings which are strengthened to conform to the requirements of Section 3401.7 in effect on or after May 21, 1973, are exempt from compliance with the provisions of this chapter.

SECTION 1610C – GENERAL PROCEDURE

1610C.1 Minimum Design Lateral Forces. Buildings shall be analyzed to resist minimum lateral forces assumed to act nonconcurrently in the direction of each of the main axes of the structure in accordance with the following:

$$V = 0.10 W \quad (16C-3)$$

EXCEPTION: The lateral forces need not exceed those prescribed by Section 1613.

For buildings more than one story in height, the total force shall be distributed over the height of the building in accordance with the procedures of Chapter 16.

For the purpose of this chapter, a dynamic analysis need not be performed for those buildings with irregularities, as defined in ASCE 7-05 Table 12.3-2 and ASCE 7-05 Table 12.3-1 which would otherwise require such analysis. All other design and analysis requirements of those tables shall apply.

1610C.2 Lateral Forces on Elements of Structures. Parts of structures shall be analyzed and designed as required in Chapter 16.

EXCEPTIONS:

1. Unreinforced masonry walls for which height-to-thickness ratios do not exceed ratios set forth in Table 16C-B need not be analyzed for out-of-plane loading. Unreinforced masonry walls which exceed the allowable h/t ratios of Table 16C-B shall be braced according to Section 1613C.5.
2. Parapets complying with Section 1613C.6 need not be analyzed for out-of-plane loading.
3. Out-of-plane anchorage of the walls shall be designed to 0.3 times the mass of the wall.

1610C.3 Shear Walls (In-Plane Loading). Shear walls shall comply with Section 1612C.

1610C.4 Chords. When required by the structural analysis, chord forces of horizontal diaphragms shall be developed in existing materials or by the addition of new materials.

SECTION 1611C – SPECIAL PROCEDURE

1611C.1 Limits for Application. The Special Procedure of this section may only be applied to buildings with the following characteristics:

1. The building is not an essential or hazardous facility.
2. Wood or plywood diaphragms at all levels above the base of structure.

3. A maximum of six stories above the base of the building. The base shall be the ground level, and basement or basements shall be excluded from the story count.

EXCEPTION: An otherwise qualifying building of greater than six stories may also be retrofitted using the Special Procedure, provided the building is not located on poor soil as defined in Section 1603B or does not contain any Group A Occupancies with an occupant load of 300 or more, or Group E, or Group I Occupancies.

4. Except for single-story buildings with an open front on one side only, a minimum of two lines of vertical elements of the lateral force resisting system complying with Section 1612C parallel to each axis. At least one line in each direction shall be a masonry or concrete shear wall. Requirements for open front buildings are contained in Section 1611C.8.

5. In buildings containing one or more party walls, the Special Procedure shall not be used unless each building sharing a party wall individually complies with all of the limitations set forth above, and the owner of each such building consents to the use of the procedure in writing.

1611C.2 Lateral Forces on Elements of Structures. With the exception of the diaphragm provisions in Section 1611C.4, elements of structures shall comply with Section 1610C.2.

1611C.3 Crosswalls. Crosswalls when used shall meet the requirements of this section.

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 $0.08A W_d$ 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:

$$DCR = (0.332W_d + V_{ca})/2V_uD \quad (16C-4)$$

and DCR shall not exceed 2.5.

1611C.3.2 Crosswall shear capacity. Within any 40 feet (12.19 m) measured along the span of the diaphragm, the sum of the crosswall shear diaphragm at or above the level under consideration.

1611C.3.3 Existing crosswalls. Existing crosswalls shall have a maximum height-to-length ratio between openings of 1.5 to 1. Existing crosswall connections to diaphragms need not be investigated as

long as the crosswall extends to the framing of the diaphragm above and below.

1611C.3.4 New crosswalls. New crosswall connections to the diaphragm shall develop the crosswall shear capacity. New crosswalls shall have the capacity to resist an overturning moment equal to the crosswall shear capacity times the story height. Crosswall overturning moments need not be cumulative over more than two stories.

1611C.3.5 Other crosswall systems. Other systems, such as moment resisting frames, may be used as crosswalls, provided that the yield story drift does not exceed 1 inch (25.4 mm) in any story.

1611C.4 Wood Diaphragms.

1611C.4.1 Acceptable diaphragm span. A diaphragm is acceptable if the point (L,DCR) on Figure 16C-1 falls within Regions 1, 2 or 3.

1611C.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:

$$DCR = 0.332W_{dl} / \sum v_u D \quad (16C-5)$$

2. For a diaphragm in a single-story building with qualifying crosswalls:

$$DCR = 0.332W_{dl} / (\sum v_u D + V_{cb}) \quad (16C-6)$$

3. For diaphragms in a multi-story building with qualifying crosswalls in all levels:

$$DCR = 0.332 \sum W_{dl} / (\sum \sum v_u D + V_{cb}) \quad (16C-7)$$

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 (16C-6).

4. For a roof diaphragm and the diaphragm directly below if coupled by crosswalls:

$$DCR = 0.332 \sum W_{dl} / \sum \sum v_u D \quad (16C-8)$$

1611C.4.3 Chords. An analysis for diaphragm flexure need not be made and chords need not be provided.

1611C.4.4 Collectors. An analysis of diaphragm collector forces shall be made for the transfer of diaphragm edge shears into vertical elements of the lateral force resisting system. Collector forces may be resisted by new or existing elements.

1611C.4.5 Diaphragm openings.

1611C.4.5.1 Forces. Diaphragm forces at corners of openings shall be investigated and shall be developed into the diaphragm by new or existing materials.

1611C.4.5.2 Demand-capacity ratio. In addition to the demand-capacity ratios of Section 1611C.4.2, the demand-capacity ratio of the portion of the diaphragm adjacent to an opening shall be calculated

using the opening dimension as the span.

1611C.4.5.3 End quarter of diaphragm. Where an opening occurs in the end quarter of the diaphragm span, $v_u D$ for the demand-capacity ratio calculation shall be based on the net depth of the diaphragm.

1611C.5 Diaphragm Shear Transfer. Diaphragms shall be connected to shear walls with connections capable of developing a minimum force given by the lesser of the following formulas:

$$V = 0.2C_p W_d \quad (16C-9)$$

using the C_p values in Table 16C-C, or

$$V = v_u D \quad (16C-10)$$

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

1611C.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:

$$F_{wx} = 0.132 (W_{wx} + W_d/2) \quad (16C-11)$$

but need not exceed

$$F_{wx} = 0.132 W_{wx} + v_u D \quad (16C-12)$$

2. For buildings with crosswalls in all levels:

$$F_{wx} = 0.1 (W_{wx} + W_d/2) \quad (16C-13)$$

but need not exceed

$$F_{wx} = 0.1 [W_{wx} + \sum W_d (v_u D / \sum \sum v_u D)] \quad (16C-14)$$

and need not exceed

$$F_{wx} = 0.1 W_{wx} + v_u D \quad (16C-15)$$

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.

$$V_{wx} = \sum F_{wx} \quad (16C-16)$$

1611C.6.3 Shear wall analysis. Shear walls shall comply with Section 1612C.

1611C.6.4 Moment frames. Moment frames used in place of shear walls shall be designed as required in Chapter 16 except that the forces shall be as specified in Section 1611C.6.1 and the story drift ratio shall be limited to 0.005, except as further limited by Section 1612C.4.2.

1611C.7 Out-of-Plane Forces – Unreinforced Masonry Walls.

1611C.7.1 Allowable unreinforced masonry wall height-to-thickness ratios. The provisions of Section 1610C.2 are applicable except the allowable height-to-thickness ratios given in Table 16C-B shall be determined from Figure 16C-1 as follows:

1. In Region 1, height-to-thickness ratios for buildings with crosswalls may be used if qualifying crosswalls are present in all stories.
2. In Region 2, height-to-thickness ratios for buildings with crosswalls may be used whether or not qualifying crosswalls are present.
3. In Region 3, height-to-thickness ratios for “all other buildings” shall be used whether or not qualifying crosswalls are present.

1611C.7.2 Walls with diaphragms in different regions. When diaphragms above and below the wall under consideration have demand-capacity ratios in different regions of Figure 16C-1, the lesser height-to-thickness ratio shall be used.

1611C.8 Open Front Design Procedure. A single-story building with an open front on one side and crosswalls parallel to the open front may be designed by the following procedure:

1. Effective diaphragm span, L_i , for use in Figure 16C-1 shall be determined in accordance with the following formula:

$$L_i = 2 [(W_w / W_d)L + L]x \quad (16C-17)$$

2. Diaphragm demand-capacity ratio shall be calculated as:

$$DCR = 0.332 (W_d + W_w) / [(v_u D) + V_{cb}] \quad (16C-18)$$

SECTION 1612C – ANALYSIS AND DESIGN

1612C.1 Analysis of Vertical Elements of the Lateral Force-Resisting System. General. The following requirements are applicable to both the General Procedure and Special Procedure.

1612C.2 Existing Unreinforced Masonry Walls.

1612C.2.1 Flexural rigidity. Flexural components of deflection may be neglected in determining the rigidity of an unreinforced masonry wall.

1612C.2.2 Shear walls with openings. Wall piers shall be analyzed according to the following procedure which is diagrammed in Figure 16C-2:

1612C.2.2.1 For any pier:

1. The pier shear capacity shall be calculated as:

$$V_a = v_a Ax \quad (16C-19)$$

2. The pier rocking shear capacity shall be calculated as:

$$V_r = 0.5P_D D/H \quad (16C-20)$$

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:

$$V_{wx} < \sum \dot{a} V_r \quad (16C-21)$$

2. Shear controlled mode. Where the pier shear capacity is less than the pier rocking capacity, i.e., $V_r < V_a$ 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:

$$V_p < V_a \quad (16C-22)$$

and

$$V_p < V_r \quad (16C-23)$$

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.

1612C.2.2.3 Masonry pier tension stress. Unreinforced masonry wall piers need not be analyzed for tension stress.

1612C.2.3 Shear walls without openings. Shear walls without openings shall be analyzed as for walls with openings except that V_r shall be calculated as follows:

$$V_r = (0.50P_D + 0.25P_w) D/H \quad (16C-24)$$

1612C.3 Plywood Sheathed Shear Walls. Plywood sheathed shear walls may be used to resist lateral forces for buildings with wood diaphragms analyzed according to provisions of Section 1610C. Plywood sheathed shear walls may not be used to share lateral forces with other materials along the same line of resistance.

1612C.4 Combinations of Vertical Elements.

1612C.4.1 Lateral force distribution. Lateral forces shall be distributed among the designated vertical resisting elements in a line in proportion to their relative rigidities except that moment frames shall comply with Section 1612C.4.2.

1612C.4.2 Moment-resisting frames. A moment frame shall not be used with an unreinforced masonry wall in a single line of resistance unless the wall has piers that are capable of sustaining

rocking in accordance with Section 1612C.2.2 and the frames are designed to carry 100 percent of the lateral forces, and the story drift ratio shall be limited to 0.0025.

1612C.5 Shear Force. The shear force used in the design of any party wall shall be the sum of the shear forces contributed by each building sharing that wall.

SECTION 1613C – DETAILED SYSTEM DESIGN REQUIREMENTS

1613C.1 Wall Anchorage.

1613C.1.1 Anchor locations. All unreinforced masonry walls shall be anchored at the roof and floor levels as required in Section 1610C.2. Ceilings of plaster, gypsum board or similar heavier materials, when not attached directly to roof or floor framing, and abutting masonry walls, shall be either anchored to the walls at a maximum spacing of 6 feet (1.829 m) or removed.

1613C.1.2 Anchor requirements. Anchors shall consist of bolts installed through the wall as specified in Table 16C-E, or by an approved equivalent at a maximum anchor spacing of 6 feet (1.829 m). All existing wall anchors shall be secured to the joists to develop the required forces.

1613C.1.3 Minimum wall anchorage. Anchorage of masonry walls to each floor or roof shall resist a minimum force determined in accordance with Chapter 16 or 200 pounds per linear foot (298 kg/m), whichever is greater, acting normal to the wall at the level of the floor or roof. Anchor spacing shall not exceed 6 feet (1.829 m) on center. Existing through-the-wall anchors, if used, must meet the requirements of this chapter or must be upgraded.

1613C.1.4 Anchors at corners. At the roof and floor levels, both shear and tension anchors shall be provided within 2 feet (0.609 m) horizontally from the inside of the corners of the walls.

1613C.1.5 Anchors with limited access. When access to the exterior face of the masonry wall is prevented, wall anchors conforming to Item 4.b. in Table 16C-E may be used.

1613C.1.6 Anchors at interior and party walls. When floor or roof framing aligns vertically at party and interior masonry walls, continuous anchors shall be utilized to directly connect the floor or roof framing on either side of the wall. Where the roof or floor framing is offset more than the least depth of any adjacent framing, the intervening wall section shall be investigated for cross wythe shear assuming that the diaphragm to wall tensions on either side of the wall are acting in opposite directions.

1613C.2 Diaphragm Shear Transfer. Bolts transmitting shear forces shall have a maximum bolt spacing of 6 feet (1.829 m) and shall have nuts installed over malleable iron or plate washers when bearing on wood and heavy cut washers when bearing on steel.

1613C.3 Collectors. Collector elements shall be provided which are capable of transferring the seismic forces originating in other portions of the building to the element providing the resistance to those forces.

1613C.4 Ties and Continuity. Ties and continuity shall conform to Section 1604.11.

1613C.5 Wall Bracing.

1613C.5.1 General. Where a wall height-to-thickness ratio exceeds the specified limits, the wall may be laterally supported by vertical bracing members per Section 1613C.5.2 or by reducing the wall

height by bracing per Section 1613C.5.3.

1613C.5.2 Vertical bracing members. Vertical bracing members shall be attached to floor and roof construction for their design loads independently of required wall anchors. Horizontal spacing of vertical bracing members shall not exceed one-half the unsupported height of the wall nor 10 feet (3.048 m). Deflection of such bracing members at design loads shall not exceed one-tenth of the wall thickness.

1613C.5.3 Intermediate wall bracing. The wall height may be reduced by bracing elements connected to the floor or roof. Horizontal spacing of the bracing elements and wall anchors shall be as required by design but shall not exceed 6 feet (1.829 m) on center. Bracing elements shall be detailed to minimize the horizontal displacement of the wall by the vertical displacement of the floor or roof.

1613C.6 Parapets. Parapets and appendages not conforming to this chapter shall be removed, or stabilized or braced to ensure that the parapets and appendages remain in their original position.

EXCEPTIONS:

- 1. Parapets, appendages and roof-to wall-tension anchors which have already been removed, stabilized or braced to comply with Chapter 16D of this code or previous codes pursuant to an application filed before the effective date of this ordinance need not be reanalyzed or restrengthened.**
- 2. Parapets whose heights do not exceed 3 times their thicknesses need not be removed, stabilized or braced, provided they are located either immediately adjacent to a normally inaccessible court or yard or another building. In the case of an adjoining building, the top of the parapet of the building under consideration shall not be more than 12 inches (0.305 m) above the top of the parapet of the adjoining building. In order to qualify for this exception, the owner must execute an agreement with the Department to voluntarily abate any hazard that may arise as a result of changed conditions such as demolition of the adjacent building or development or occupancy of the adjoining court or yard. The owner must record the agreement with the County Recorder on a form satisfactory to the Department and supply a copy of the recorded agreement to the Department.**

Parapets previously exempted that would not be exempted under Exception 2 above shall be removed, or stabilized or braced when the building is strengthened.

The maximum height of an unbraced unreinforced masonry parapet above the lower of either the level of tension anchors or roof sheathing shall not exceed 1 1/2 times the thickness of the parapet wall. If the required parapet height exceeds this maximum height, a bracing system designed for the forces determined in accordance with Chapter 16 shall support the top of the parapet. Parapet corrective work must be performed in conjunction with the installation of tension roof anchors.

The minimum height of a parapet above any wall anchor shall be 12 inches (0.305 m).

EXCEPTION: If a reinforced concrete beam is provided at the top of the wall, the minimum height above the wall anchor may be 6 inches (170.44 mm).

1613C.7 Veneer.

1613C.7.1 Anchorages. Veneer shall be anchored with approved anchor ties, conforming to the required design capacity specified in this code and placed at a maximum spacing of 24 inches (610 mm) with a maximum supported area of 4 square feet (0.372 m²).

EXCEPTION: Existing anchor ties for attaching brick veneer to brick backing may be acceptable, provided the ties are in good condition and are corrugated galvanized iron strips not less than 1 inch (25.4 mm) in width, 8 inches (203.2 mm) in length and 1/16 inch (1.59 mm) in thickness or equal.

1613C.7.2 Verification. The location and condition of existing veneer anchor ties shall be verified as follows:

- 1.** An approved testing laboratory shall verify the location and spacing of the ties and shall submit a report to the Building Official for approval as part of the structural analysis.
- 2.** The veneer in a selected area shall be removed to expose a representative sample of ties (not less than four) for inspection by the Building Official.

1613C.8 Nonstructural Masonry Walls. Unreinforced masonry walls which carry no design vertical or lateral loads and are not required by the design to be part of the lateral force resisting system shall be adequately anchored to new or existing supporting elements. The anchors and elements shall be designed for the out-of-plane forces specified in Chapter 16. The height or length to thickness ratio between such supporting elements for such walls shall not exceed 13.

1613C.9 Truss and Beam Supports. Where trusses and beams, other than rafters or joists, are supported on masonry, independent secondary columns shall be installed to support vertical loads of the roof or floor members.

1613C.10 Adjacent Buildings. Where elements of adjacent buildings do not have a separation of at least 5 inches (127 mm), the allowable height-to-thickness ratios for “all other buildings” per Table 16C-B shall be used in the direction of consideration.

SECTION 1614C – IN-PLACE MASONRY SHEAR TESTS

1614C.1 Scope. This section applies when this chapter requires in-place testing of the quality of masonry mortar.

1614C.2 Preparation of Sample. The bed joints of the outer wythe of the masonry shall be tested in shear by laterally displacing a single brick relative to the adjacent bricks in the same wythe. The head joint opposite the loaded end of the test brick shall be carefully excavated and cleared. The brick adjacent to the loaded end of the test brick shall be carefully removed by sawing or drilling and excavating to provide space for a hydraulic ram and steel loading blocks.

1614C.3 Application of Load and Determination of Results. Steel blocks, the size of the end of the brick, shall be used on each end of the ram to distribute the load to the brick. The blocks shall not contact the mortar joints. The load shall be applied horizontally, in the plane of the wythe, until either a crack can be seen or slip occurs. The strength of the mortar shall be calculated by dividing the load at the first cracking or movement of the test brick by the nominal gross area of the sum of the two bed joints.

SECTION 1615C – TEST OF ANCHORS IN UNREINFORCED MASONRY WALLS

1615C.1 Scope. Shear and tension anchors embedded in existing masonry construction shall be tested in accordance with this section when and as required by this chapter.

1615C.2 Direct Tension Testing of Existing Anchors and New Bolts. The test apparatus shall be supported on the masonry wall. The distance between the anchor and the test apparatus support shall not be less than one-half the wall thickness for existing anchors and 75 percent of the embedment for new embedded bolts. Existing wall anchors shall be given a preload of 300 pounds (136.4 kg) prior to establishing a datum for recording elongation. The tension test load reported shall be recorded at 1/8 inch (3.18 mm) relative movement of the existing anchor and the adjacent masonry surface. New embedded tension bolts shall be subject to a direct tension load of not less than 2.5 times the design load but not less than 1,500 pounds (682 kg) for five minutes (10 percent deviation).

1615C.3 Torque Testing of New Bolts. Bolts which are embedded in unreinforced masonry walls shall be tested using a torque calibrated wrench to the following minimum torques:

1/2-inch-diameter bolts - 40 foot-pounds.

(12.7 mm) (5.54 M-Kg)

5/8-inch-diameter bolts - 50 foot-pounds.

(16 mm) (6.93 M-Kg)

3/4-inch-diameter bolts - 60 foot-pounds.

(19 mm) (8.31 M-Kg)

1615C.4 Prequalification Test for Bolts and Other Types of Anchors. This section is applicable when it is desired to use tension or shear values for anchors greater than those permitted by Table 16C-E. The direct tension test procedure set forth in Section 1615C.2 for existing anchors may be used to determine the allowable tension values for new embedded or through bolts except that no preload is required. Bolts shall be installed in the same manner and using the same materials as will be used in the actual construction. A minimum of 5 tests for each bolt size and type shall be performed for each class of masonry in which they are proposed to be used. The allowable tension value for such anchors shall be 40 percent of the average value of the tests for each size and type of bolt and class of masonry.

Shear bolts may be similarly prequalified. The test procedure shall comply with ASTM E 488-90 or such other procedure as is approved by the Building Official. The allowable values determined in this manner may exceed those set forth in Table 16C-E.

1615C.5 Reports. Results of all tests shall be reported. The report shall include the test results as related to anchor size and type, orientation of loading, details of the anchor installation and embedment, wall thickness and joist orientation.

SECTION 1616C – POINTING OF UNREINFORCED MASONRY WALLS

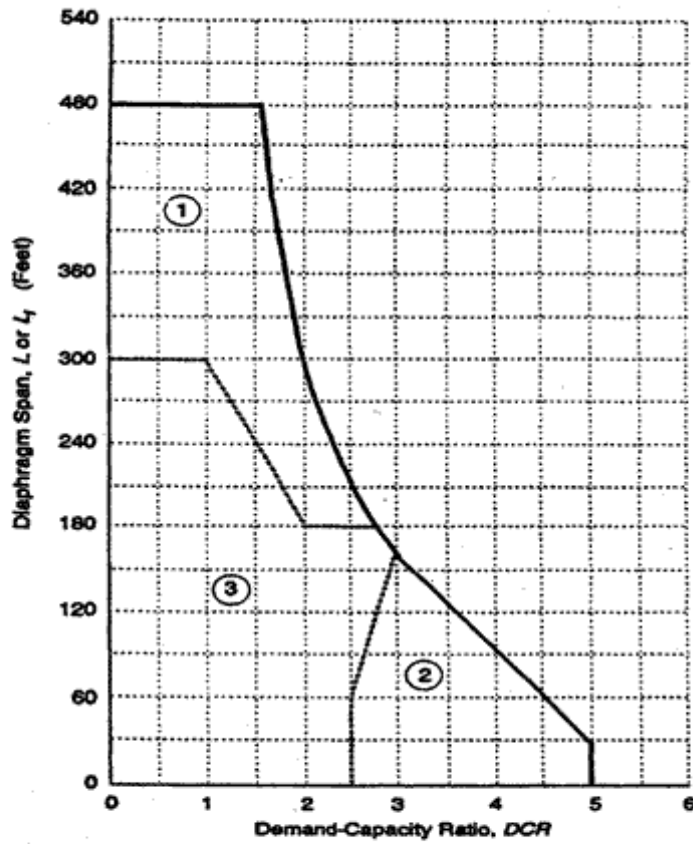
1616C.1 Scope. Pointing of deteriorated mortar joints when required by this chapter shall be in accordance with this section.

1616C.2 Joint Preparation. The old or deteriorated mortar should be cut out, by means of a toothing chisel or non-impact power tool, to a uniform depth of 3/4 inch (19.1 mm) until sound mortar is reached. Care shall be taken not to damage the brick edges. After cutting is completed, all loose material shall be removed with a brush, air or water stream.

1616C.3 Mortar Preparation. The mortar mix shall be Type N or S proportions as required by the construction specifications. The pointing mortar shall be pre-hydrated by first thoroughly mixing all ingredients dry, and then mixing again, adding only enough water to produce a damp unworkable mix which will retain its shape when pressed into a ball. The mortar shall be kept in a damp condition for 1 1/2 hours; then sufficient water shall be added to bring it to a proper consistency that is somewhat drier than conventional masonry mortar.

1616C.4 Packing. The joint into which the mortar is to be packed shall be damp but without freestanding water. The mortar shall be tightly packed into the joint in layers not exceeding 1/4 inch (6.35 mm) in depth until it is filled; then it shall be tooled to a smooth surface to match the original profile.

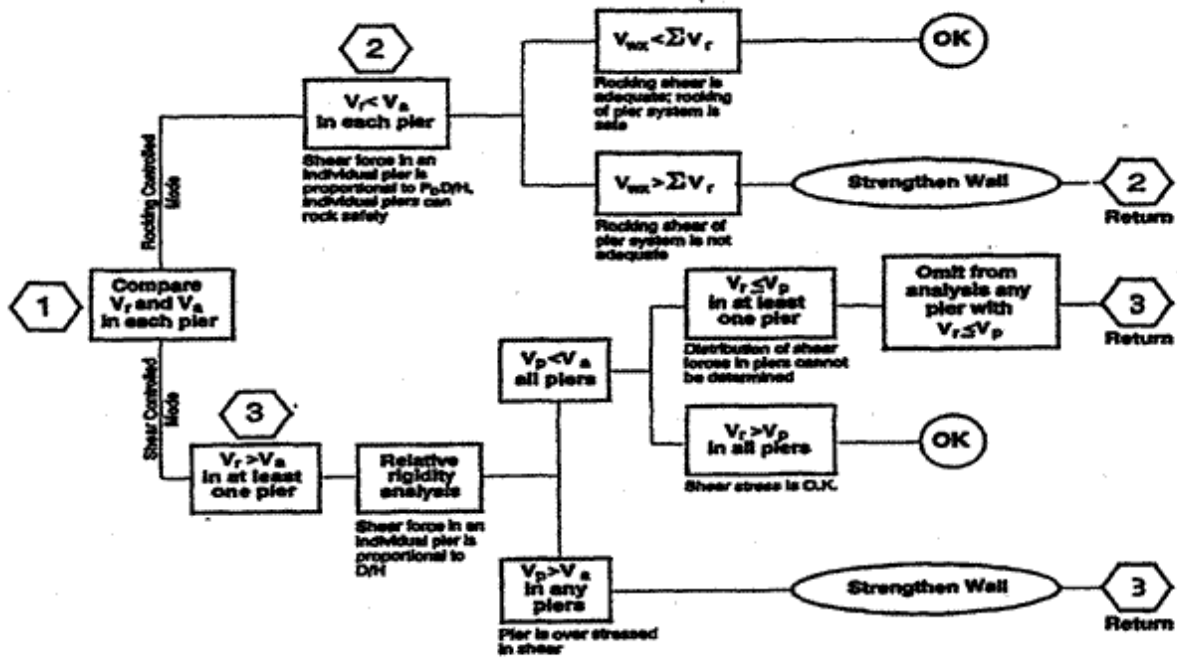
FIGURE 16C-1 – ACCEPTABLE DIAPHRAGM SPAN



- ① Region of demand-capacity ratios where crosswalls may be used to increase h/t ratios.
- ② Region of demand-capacity ratios where h/t ratios of "with crosswalls" may be used.
- ③ Region of demand-capacity ratios where h/t ratios of "all other buildings" shall be used.

NOTE: To convert feet to meters, multiply by 0.3048.

FIGURE 16C-2 – ANALYSIS OF UNREINFORCED MASONRY WALL IN-PLANE SHEAR FORCES



- V_r = Rocking shear capacity of pier.
- V_{wx} = Total Shear Force resisted by the wall.
- ΣV_r = Rocking shear capacity of all piers in the wall.
- V_p = Shear force assigned to a pier on the basis of a relative shear rigidity analysis.
- V_a = Allowable shear strength of a pier.

TABLE 16C-A – ELEMENTS REGULATED BY THIS CHAPTER

ELEMENTS	SECTION	PROCEDURE			
		BOLTS-PLUS	SPECIAL	GENERAL	3401.8 ²
Masonry Shear Strength	1606C.3.3	X	X	X	X
Diaphragms	1610C.1			X	
	1611C.4		X		
	1604.11			X	
Diaphragm Shear Transfer	1610C.1	X ¹			
	1611C.5	X ¹	X		
	1613C.2	X	X	X	
Chords	1611C.4			X	
Diaphragm Capacity Ratios	1604		X		
Collectors	1613C.3			X	
	1611C.4		X		
	1604.11				X ⁴
Analysis of Vertical Elements	1612C		X	X	
Crosswalls	1611C.3		X		
Shear Walls	1610C.3		X		
	1611C.6		X		
	1604.11				X ^{3,4}
Out of Plane Wall Anchorage	1613C.1	X	X	X	
	1604.11			X	
Ties & Continuity	1613C.4		X	X	
	1604.11			X	X

ELEMENTS	SECTION	PROCEDURE			
		BOLTS-PLUS	SPECIAL	GENERAL	3401.8 ²
Wall Bracing	1613C.5	X	X	X	X ⁵
Parapets	1613C.6	X	X	X	X
Veneer	1613C.7	X	X	X	X
Nonstructural Masonry Walls	1613C.8		X	X	X
Truss & Beam Supports	1613C.9		X	X	X
Adjacent Buildings	1613C.10		X	X	X
Subdiaphragms	1604.11				X
	1604.8.2				
	ASCE 7-05 Section 12.11.2 ⁴				

- 1 Diaphragm shear transfer forces shall be calculated using the General Procedures unless the building qualifies for the use of the Special Procedure.
- 2 Retrofit procedure per Section 3401.8
- 3 Wood shear walls allowed only for one- or two-story building per Section 2305.1.
- 4 Only in-plane shear check required. (Rocking not allowed.)
- 5 Use (h/t) for “All other walls” from Table 16C-B.

TABLE 16C-B – ALLOWABLE VALUE OF HEIGHT-TO-THICKNESS RATIO OF UNREINFORCED MASONRY WALLS

WALL TYPES	BUILDINGS WITH CROSSWALLS¹	ALL OTHER BUILDINGS
Walls of one-story buildings	16^{2,3}	13
First story wall of multistory buildings	16	15
Walls in top story of multistory buildings	14^{2,3}	9
All other walls	16	13

1 Applies to the Special Procedure of Section 1611C and the Bolts-plus Procedure of the last paragraph of Exception 1 to Section 1609C.2 only. See Section 1611C.7 for other restrictions.

2 This value of height-to-thickness ratio may be used only where mortar shear tests establish a tested mortar shear strength, v_b , of not less than 100 psi (689.48 kPa). This value may also be used where the tested mortar strength is not less than 60 psi (413.69 kPa) and a visual examination of the collar joint indicates not less than 50 percent mortar coverage.

3 Where a visual examination of the collar joint indicates not less than 50 percent mortar coverage, and the tested mortar shear strength, v_t , is greater than 30 psi (206.84 kPa) but less than 60 psi (413.69 kPa), the allowable height-to-thickness ratio may be determined by linear interpolation between the larger and smaller ratios in direct proportion to the tested mortar strength.

TABLE 16C-C – HORIZONTAL FORCE FACTOR, C_p ¹

CONFIGURATION OF MATERIALS	C_p
Roofs with straight or diagonal sheathing and roofing applied directly to the sheathing, or floors with straight tongue-and-groove sheathing	0.50
Diaphragms with double or multiple layers of boards with edges offset, and blocked plywood systems	0.75

¹ Applicable to the Special Procedure of Section 1611C only.

TABLE 16C-D – ALLOWABLE VALUES FOR EXISTING MATERIALS

EXISTING MATERIALS OR CONFIGURATION OF MATERIALS¹	ALLOWABLE VALUES
1. HORIZONTAL DIAPHRAGMS²	(x 14.5939 for N/m)
a. Roofs with straight sheathing and roofing applied directly to the sheathing	100 pounds per foot seismic shear
b. Roofs with diagonal sheathing and roofing applied directly to the sheathing	250 pounds per foot seismic shear
c. Floors with straight tongue-and-groove sheathing	100 pounds per foot seismic shear
d. Floors with straight sheathing and finished wood flooring with board edges offset or perpendicular	500 pounds per foot seismic shear
e. Floors with diagonal sheathing and finished wood flooring	600 pounds per foot seismic shear
2. CROSSWALLS^{2,3}	(x 14.5939 for N/m)
a. Plaster on wood or metal lath	per side: 200 pounds per foot seismic shear
b. Plaster on gypsum lath	175 pounds per foot seismic shear
c. Gypsum wallboard, unblocked edges	75 pounds per foot seismic shear
d. Gypsum wallboard, blocked edges	125 pounds per foot seismic shear
3. EXISTING FOOTINGS, WOOD FRAMING, STRUCTURAL STEEL AND REINFORCE STEEL	(x 6.895 for kPa)
a. Plain concrete footings	$f'_c = 1,500$ psi unless otherwise shown by tests ⁴
b. Douglas fir wood	Allowable stress same as D.F. No. 1 ⁴
c. Reinforcing steel	$f_t = 18,000$ psi maximum ⁴
d. Structural steel	$f_t = 20,000$ psi maximum 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

**TABLE 16C-E – ALLOWABLE VALUES OF NEW MATERIALS USED
IN CONJUNCTION WITH EXISTING CONSTRUCTION**

NEW MATERIALS OR CONFIGURATIONS OF MATERIALS	ALLOWABLE VALUES ¹
1. HORIZONTAL DIAPHRAGMS¹⁰	(x 14.5939 for N/m)
<p align="center">a. Plywood sheathing nailed directly over existing straight sheathing with ends of plywood sheets bearing on joists or rafters and edges of plywood located on center of individual sheathing boards</p>	225 pounds per foot seismic shear
<p align="center">b. Plywood sheathing nailed directly over existing diagonal sheathing with ends of plywood sheets bearing on joists or rafters</p>	375 pounds per foot seismic shear
<p align="center">c. Plywood sheathing nailed directly over existing straight or diagonal sheathing with ends of plywood sheets bearing on joists or rafters with edges of plywood located over new blocking and nailed to provide a minimum nail penetration into framing and blocking of 1 5/8 inches (41.28 mm)</p>	75 percent of the values specified in Table 2306.2.1 (1)
2. SHEAR WALLS: (GENERAL PROCEDURE)	
<p align="center">Plywood sheathing applied directly over wood studs. No value shall be given to plywood applied over existing plaster or wood sheathing.</p>	100 percent of the value specified in Table 2306.2.1(2) for shear walls
3. CROSSWALLS: (SPECIAL PROCEDURE)	
<p align="center">a. Plywood sheathing applied directly over wood studs. No value shall be given to plywood applied over existing plaster or wood sheathing</p>	133 percent of the value specified in Table 2306.2.1(2) for shear walls
<p align="center">b. Drywall or plaster applied directly over wood studs</p>	100 percent of the values in Table 2306.5
<p align="center">c. Drywall or plaster applied to sheathing over existing wood studs</p>	The values in Table 2306.5 reduced as noted in Footnote 1 of that table ²
4. TENSION BOLTS	(x 4.448 for N)
<p align="center">a. Bolts extending entirely through unreinforced masonry walls secured with bearing plates on far side of a 3 wythe minimum wall with at least 30 square inches (19,355 mm²) of area^{3,4,11}</p>	<p align="center">1,800 pounds per bolt⁸ 900 pounds per bolt for 2 wythe walls⁸</p>

NEW MATERIALS OR CONFIGURATIONS OF MATERIALS	ALLOWABLE VALUES ¹
b. Bolts extending to the exterior face of the wall with a 2 1/2-inch (63.5 mm) round plate under the head and drilled at an angle of 22 1/2 degrees to the horizontal, installed as specified for shear bolts ^{3,4,5}	1,200 pounds per bolt
5. SHEAR BOLTS	
Bolts embedded a minimum of 8 inches into unreinforced masonry walls and centered in a 2 1/2-inch diameter hole filled with dry-pack or non-shrink grout. Through bolts with first 8 inches as noted above and embedded bolts as noted in item 4b. ^{4,5,9}	1/2 inch dia. = 350 pounds ^{7,8}
	5/8 inch dia. = 500 pounds ^{7,8}
	3/4 inch dia. = 750 pounds ^{7,8}
6. INFILLED WALLS	
Reinforced masonry infilled openings in existing unreinforced masonry walls. Provide keys or dowels to match reinforcing.	Same values as for unreinforced masonry walls
7. REINFORCED MASONRY	
Masonry piers and walls reinforced per Chapter 21	Same values as specified in Section 2107 ⁶
8. REINFORCED CONCRETE	
Concrete footings, walls and piers reinforced as specified in Chapter 19 and designed for tributary loads	Same values as specified in Chapter 19 ⁶

- 1 A one-third increase in allowable stress is not allowed, except as noted.
- 2 In addition to existing sheathing value.
- 3 Bolts to be 1/2 inch (1.27 mm) minimum in diameter.
- 4 Drilling for bolts and dowels shall be done with an electric rotary drill. Impact tools shall not be used for drilling holes or tightening anchors and shear bolt nuts.
- 5 Embedded bolts to be tested as specified in Section 1607C.
- 6 Stress given may be increased for combinations of load as specified in this code.
- 7 A one-third increase in allowable stress is allowed for short-term loading.
- 8 Other bolt sizes, values and installation methods may be used, provided a testing program is conducted in accordance with Section 1615C. Bolt spacing shall not exceed 6 feet (1.83 m) on center and shall not be less than 12 inches (0.305 m) on center.
- 9 Tension and shear from seismic loads need not be assumed to act simultaneously.
- 10 Values and limitations are for nailed plywood. Higher values may be used for other approved fastening systems such as staples when approved by the Building Official.
- 11 Plate size may be reduced to not less than 9 square inches (5805 mm²), provided the bearing stress on the masonry at design load does not exceed 60 pounds per square inch, psi (414 kPa).

**Chapter 16D
PARAPETS AND APPENDAGES – RETROACTIVE PROVISIONS**

SECTION 1601D – GENERAL

Every parapet or appendage which is supported on or attached to an exterior wall of a building adjacent to a property line, passageway, open courtyard or public way or which occurs in any other location where failure of such parapet or appendage would be hazardous to life or limb in such areas shall, when required by the Building Official, be subject to inspection by a licensed architect or civil engineer employed by the owner. The provisions of this section are retroactive and shall apply to and include buildings erected prior to the adoption of this code.

SECTION 1602D – CORRECTION OF HAZARDOUS PARAPETS AND APPENDAGES

Whenever the Building Official determines, by visual inspection or from the report furnished by the architect or civil engineer, that an existing parapet or appendage which is within the scope of this section is not adequate to resist the lateral forces due to earthquake as detailed in Chapter 16 of the Building Code which was in effect on July 1, 1969, the Building Official shall conclude that inadequacies exist and shall, by written notice to the owner or person or the agent in charge of the building, direct that necessary steps be taken to eliminate the hazard.

Upon receipt of such notice, the owner or person or agent in control of the building where such hazardous parapet or appendage exists shall:

1. Within one year from the date of receipt of such notice:

(1) Submit to the Building Official an acceptable written plan or procedure for the elimination of the hazardous condition by removal or alteration of the hazardous parapet or appendage.

(2) Obtain the necessary alteration permit in accordance with the procedures set forth in Section 106A of this code.

2. Within one year after obtaining the alteration permit, complete all work indicated on the approved construction documents. A one-year extension may be granted by the Building Official when mitigating circumstances exist.

SECTION 1603D – VARIANCE PROCEDURE

Any person receiving a notice as set out in Section 1602D above may appeal for a variance from the notice to the Board of Examiners in the manner provided by Section 105A.1 or, in the case of parapets or appendages of unreinforced masonry bearing wall buildings, to the Board of Examiners in the manner provided by Section 105A.1.

SECTION 1604D – UNREINFORCED MASONRY PARAPETS AND APPENDAGES

The removal, stabilization or bracing of unreinforced masonry parapets and appendages, the

application for a permit for which was filed after February 15, 1993, shall comply with Section 1613C.6. Certain parapets and appendages, previously exempted under this section, shall be removed, or stabilized, or braced when required by Section 1613C.6.

Chapter 17
STRUCTURAL TESTS AND SPECIAL INSPECTIONS

SECTION 1704 – SPECIAL INSPECTIONS

1704.1. Revise Exception 3 as follows:

3. ~~Unless otherwise required by the building official special inspections are not required for Group U occupancies. The special inspections and verifications for foundation concrete, other than cast-in-place drilled piles or caissons, are not required for occupancies in Group R-3 and occupancies in Group U that are accessory to a residential occupancy including, but not limited to, those listed in Section 312.1.~~

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, or the structural design of the footing based on a specified compressive strength, f_c , greater than 2,500 pounds per square inch (psi) (17.2 MPa), regardless of the compressive strength specified in the construction documents or used in the footing construction.

1704.5. Revise the following section:

1704.5.. Masonry Construction. Masonry construction shall be inspected and verified in accordance with the requirements of Section 1704.5.1 through ~~1704.5.3~~ **1704.5.5**, depending on the occupancy category of the building or structure.

1704.5. Add the following section:

1704.5.4. 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 (73.23 kg/m²) of wall.

EXCEPTIONS:

- 1. Veneers weighing less than 5 pounds per square foot (24.46 kg/m²) located less than 15 feet (4.57 m) above grade.**
- 2. Anchored veneer located less than 10 feet (3.048 m) above grade.**

1704.5 Add the following section:

1704.5.5. Retrofit of unreinforced masonry bearing wall buildings.

- 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.**
- 2. During repointing operations in accordance with Section 1616C when required by Sections 1606C.3.3.7 and 1607C.1.**
- 3. During the installation of new shear bolts when required by the exception to Section 1607C.4.**

4. Prior to the placement of the bolt and grout or adhesive for embedded bolts as required by Section 1607C.4.

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

1704.6 Add the following section:

1704.6.3 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:

- 1. Plywood diaphragms, where shear values exceed 2/3 the values in Tables 2306.3.1 and 2306.3.2.**
- 2. Double sheathed shear walls, in all cases.**
- 3. 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.

4. Gypsum wallboard shearwalls where shear values exceed one-half of the values permitted by Footnote a of Table 2306.4.5.

5. Fiberboard shearwalls where shear values exceed one-half of the values in Table 2306.4.4.

6. Particle-board diaphragms, where shear values exceed one-half of the values in Table 2306.4.3.

1704.15. Add item 4 as follows:

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

1704.17. Add the following section:

1704.17 Demolition. Demolition of buildings more than two stories or 25 feet (7.62 m) in height. See Section 3307.4 for demolition requirements.

EXCEPTION: Type V buildings.

1704.18. Add the following section:

1704.18 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.

1704.19. Add the following section:

1704.19. Construction subject to the Slope Protection Act, created by Section 106A.4.1.4; or 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 Edgell Mountain Slope Protection Area, created by Building Code Section 106A.4.1.2, or the Northwest Mt. Sutra Slope Protection Area, created by Building Code Section 106A.4.1.3; provided, however, that, until the special inspection reports required by Building Code Section 1704.1.2 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.

1704.20. Add the following section:

1704.20 Crane Safety. No owner or other person shall operate, authorize or permit the operation of a tower crane on a high-rise building structure until a signed Crane Site Safety Plan, Submittal Form and Crane Safety Compliance Agreement have been accepted by the Building Official.

Chapter 17A
STRUCTURAL TESTS AND SPECIAL INSPECTIONS

No San Francisco Building Code Amendments

Chapter 18
SOILS AND FOUNDATIONS

No San Francisco Building Code Amendments

Chapter 18A
SOILS AND FOUNDATIONS

No San Francisco Building Code Amendments

Chapter 19
CONCRETE

No San Francisco Building Code Amendments

Chapter 19A
CONCRETE

No San Francisco Building Code Amendments

Chapter 20
ALUMINUM

No San Francisco Building Code Amendments

Chapter 21
MASONRY

No San Francisco Building Code Amendments

Chapter 21A
MASONRY

No San Francisco Building Code Amendments

Chapter 22
STEEL

No San Francisco Building Code Amendments

Chapter 22A
STEEL

No San Francisco Building Code Amendments

Chapter 23
WOOD

SECTION 2304 – GENERAL CONSTRUCTION REQUIREMENTS

2304.11.2.6 *Add the following second paragraph:*

Walls not accessible for maintenance shall have exterior covering of siding or plywood that are either treated wood or wood of natural resistance to decay. Plywood shall be exterior type, C-C Grade minimum, and not less than 1/2-inch (12.7 mm) thickness unless applied over sheathing. Plywood manufactured with redwood or cedar faces but with inner plys of other species conforming to DOC Standard PS1-95 may be used, provided the exposed outer face is plugged and not grooved or patterned.

2304.11.4.2 *Revise this section as follows:*

2304.11.4.2 Wood structural members. Wood structural members that support moisture permeable floors or roofs that are exposed to the weather, such as concrete or masonry slabs, shall be of naturally durable or preservative-treated wood unless separated from such floors or roofs by an impervious moisture barrier **extending up the walls not less than 4 inches (101.6 mm) or shall otherwise be adequately flashed and counterflashed.**

2304.11.4.2 *Add the following 2nd paragraph and exception:*

Regardless of finish flooring type or structural materials, the wood sub-floor of toilet rooms and bathrooms shall be protected by a waterproof membrane. Where a single ply sheet membrane is used, all adhesives shall be of a waterproof type and shall be applied so as to form a full unbroken coat between the backing and the membrane being applied. All seams and joints shall be thoroughly sealed.

Exception: Interior floors in Group R, Division 3 Occupancies.

2304.11.5 *Add the following 2nd paragraph with exception, and 3rd paragraph:*

Weather-exposed stairways constructed with concrete, masonry, brick, tile or terrazzo shall be supported on hot-dipped galvanized steel or reinforced concrete stringers.

EXCEPTION: In Group R, Division 3 Occupancies, wood construction on masonry or concrete foundations may be used as supports, and the area under the stair shall be ventilated in compliance with 2304.11.9.

Weather-exposed stairs of precast concrete or metal pan treads may be supported on wood stringers, provided the entire stairway is exposed and the treads are connected to the stringers by hot-dipped galvanized steel or other approved corrosion-resistant fasteners.

Chapter 24
GLASS AND GLAZING

SECTION 2405 – SLOPED GLAZING AND SKYLIGHTS

2405.3 revise this exception as follows:

3. **[CRC R308.6.6]** Any glazing material, including annealed glass, is permitted to be installed without screens in the sloped glazing systems of commercial or detached noncombustible green houses used exclusively for growing plants and not open to the public, provided that the height of the greenhouse at the ridge does not exceed 30 feet (9144 mm) above grade **except that for R-3 occupancies and townhouses, the greenhouse height at the ridge does not exceed 20 feet (6096 mm) above grade.**

2405.3 Add exception 6 this exception as follows:

6. **[CRC R308.6.6]** **In R-3 occupancies and townhouses, any glazing material, including annealed glass, is permitted to be installed without screens in the sloped glazing systems of commercial or detached noncombustible greenhouses used exclusively for growing plants and not open to the public, provided that the height of the greenhouse at the ridge does not exceed 20 feet (6096 mm) above grade.**

Chapter 25
GYPSUM BOARD AND PLASTER

No San Francisco Building Code Amendments

Chapter 26
PLASTIC

SECTION 2603 – FOAM PLASTIC INSULATION

2603.3 Revise the first sentence of Exception 3 as follows:

3. Foam plastic insulation that is part of a Class A, **or B**, ~~or C~~ roof-covering assembly provided the assembly with the foam plastic insulation satisfactorily passes FM 4450 or UL 1256.

2603.4.1.5. Revise this section as follows:

2603.4.1.5 Roofing. Foam plastic insulation under a roof assembly or roof covering that is installed in accordance with the code and the manufacturer's instructions shall be separated from the interior of the building by wood structural panel sheathing not less than 0.47 inch (11.9mm) in thickness bonded with exterior glue, **and identified as Exposure 1** with edges supported by blocking, tongue-and-groove joints or other approved type of edge support, or an equivalent material. A thermal barrier is not required for foam plastic insulation that is a part of a Class A, **or B**, ~~or C~~ roof-covering assembly, provided the assembly with the foam plastic insulation satisfactorily passes FM 4450 or UL 1256

2603.6 Revise this section as follows:

2603.6 Roofing. Foam plastic insulation meeting the requirements of Sections 2603.2, 2603.3 and 2603.4 shall be permitted as a part of a roof-covering assembly, provided the assembly with the foam plastic insulation is a Class A, **or B**, roofing assembly where tested in accordance with ASTM E 108 or UL 790.

Chapter 27
ELECTRICAL

No San Francisco Building Code Amendments

Chapter 28
MECHANICAL SYSTEMS

No San Francisco Building Code Amendments

Chapter 29
PLUMBING SYSTEMS

2902 *Add a section as follows:*

SECTION 2902 – MINIMUM PLUMBING FIXTURES

2902.1 Minimum plumbing fixtures. For new construction and changes of occupancy, plumbing fixtures shall be provided for the type of occupancy and in the minimum number shown in Table 2902.1. The minimum number of fixtures shown in Table 2902.1 is assumed to be based on 50 percent male and 50 percent female.

Exception: Where circumstances dictate that a different ratio is needed, the adjustment shall be approved by the Building Official.

The minimum number of plumbing fixtures required to serve existing occupancies shall be the number of fixtures required at the time of original construction or at the time of work previously performed under properly issued permits.

A drinking fountain need not be provided in a drinking or dining establishment.

2902.2 Sanitary facilities. Each building shall be provided with sanitary facilities, including provisions for accessibility.

2902.3 Accessibility for persons with disabilities. Where facilities for persons with disabilities are required, Chapter 11A or 11B of the California Building Code shall be used.

2902.4 Separate facilities. Separate facilities shall be provided for each sex.

Exceptions:

1. In structures or tenant spaces with a total occupant load, including both employees and customers, of 15 or less.
2. In groups B, F, H, M, and S occupancies, where there are four or fewer employees.

TABLE 2902.1 – MINIMUM PLUMBING FIXTURES^{1,2,3}

TYPE OF BUILDING OR OCCUPANCY ⁴	WATER CLOSETS ⁵ (Fixtures per person)		LAVATORIES ⁵ (Fixtures per person)		BATHTUB OR SHOWER (Fixtures per person)
	Male	Female	Male	Female	
For the occupancies listed below, use 30 square feet (2.78 m ²) per occupant for the minimum number of plumbing fixtures.					
Group A Conference rooms, dining rooms, drinking establishments, exhibit rooms, gymnasiums, lounges, stages and similar uses including restaurants classified as Group B occupancies	1:1-25 2:26-75 3:76-125 4:126-200 5:201-300 6:301-400 Over 400, add one fixture for each additional 200 males and one for each additional 150 females.	1:1-25 2:26-75 3:76-125 4:126-200 5:201-300 6:301-400	one for each water closet up to four; then one for each two additional water closets		
For the assembly occupancies listed below, use the number of fixed seating or, where no fixed seating is provided, use 15 square feet (1.39 m ²) per occupant for the minimum number of plumbing fixtures.					
Assembly places— Auditoriums, convention halls, dance floors, lodge rooms, stadiums and casinos	1:1-50 2:51-100 3:101-150 4:151-300 Over 300 males, add one fixture for each additional 200, and over 400 females add one for each 125.	3:1-50 4:51-100 6:101-200 8:201-400	1:1-200 2:201-400 3:401-750 Over 750, add one fixture for each additional 500 persons	1:1-200 2:201-400 3:401-750	
For the assembly occupancies listed below, use the number of fixed seating or, where no fixed seating is provided, use 30 square feet (2.29 m ²) per occupant for the minimum number of plumbing fixtures.					
Worship places Principal assembly area Worship places Educational and activity unit	one per 150 one per 125	one per 75 one per 75	one per two water closets one per two water closets		
For the occupancies listed below, use 200 square feet (18.58 m ²) per occupant for the minimum number of plumbing fixtures.					
Group B Offices or public buildings	1:1-15 2:16-35 3:36-55 Over 55, add one for each 50 persons.	1:1-15 2:16-35 3:36-55	one per two water closets		
For the occupancies listed below, use 50 square feet (4.65 m ²) per occupant for the minimum number of plumbing fixtures.					
Group E Schools—for staff use All schools Schools—for student use Day care	1:1-15 2:16-35 3:36-55 Over 55, add one fixture for each additional 40 persons. 1:1-20 2:21-50	1:1-15 2:16-35 3:36-55	one per 40 one per 40	one per 40 one per 40 1:1-25 2:26-50	

	Over 50, add one fixture for each additional 50 persons.		Over 50, add one fixture for each additional 50 persons.		
Elementary	one per 30	one per 25	one per 35	one per 35	
Secondary	one per 40	one per 30	one per 40	one per 40	

(Continued)

TYPE OF BUILDING OR OCCUPANCY ⁴	WATER CLOSETS ⁵ (Fixtures per person)		LAVATORIES ⁵ (Fixtures per person)		BATHTUB OR SHOWER (Fixtures per person)
	Male	Female	Male	Female	
For the occupancies listed below, use 50 square feet (4.65 m ²) per occupant for the minimum number of plumbing fixtures.					
Education Facilities other than Group E Others (colleges, universities, adult centers, etc.)	one per 40	one per 30	one per 40	one per 40	
For the occupancies listed below, use 2,000 square feet (185.8 m ²) per occupant for the minimum number of plumbing fixtures.					
Group F Workshop, foundries and similar establishments, and Group H Occupancies	1:1-10 2:11-25 3:26-50 4:51-75 5:76-100 Over 100, add one fixture for each additional 300 persons.	1:1-10 2:11-25 3:26-50 4:51-75 5:76-100	one for each two water closets		one shower for each 15 persons exposed to excessive heat or to skin contamination with irritating materials
For the occupancies listed below, use the designated application and 200 square feet (18.58 m ²) per occupant of the general use area for the minimum number of plumbing fixtures.					
Group I Hospital waiting rooms Hospital general use areas	one per room (usable by either sex) 1:1-15 2:16-35 3:36-55 Over 55, add one fixture for each additional 40 persons.	1:1-15 3:16-35 4:36-55	one per room one per each two water closets		
Hospitals Hospital P atient room Hospital W ard room	one per room one per eight patients		one per room one per 10 patients		one per room one per 20 patients
Jails and reformatories Cell Exercise room	one per cell one per exercise room		one per cell one per exercise room		
Other institutions (on each occupied floor)	one per 25	one per 25	one per 10	one per 10	one per eight
For the occupancies listed below, use 200 square feet (18.58 m ²) per occupant for the minimum number of plumbing fixtures.					
Group M Retail or wholesale stores	1:1-50 2:51-200 3:101-400 4:201-300 5:301-400 Over 400, add one fixture for each additional 500 males and one for each 150 females.	1:1-50 2:51-100 3:101-200	one for each two water closets		
For Group R Occupancies, dwelling units and hotel guest rooms, use the chart. For congregate residences, use 200 square feet (18.58 m ²) for Group R, Division 1 Occupancies and 300 square feet (27.87 m ²) for Group R, Division 3 Occupancies for the minimum plumbing fixtures.					
Group R Dwelling units Hotel guest rooms	one per dwelling unit one per guest room		one per dwelling unit one per guest room		one per dwelling unit one per guest room
Congregate residences	one per 10	one per 8	one per 12	one per 12	one per eight

	Add one fixture for each additional 25 males and one for each additional 20 females.	Over 12, add one fixture for each additional 20 males and one for each additional 15 females.	For females, add one bathtub per 30. Over 150, add one per 20.
--	---	--	---

(Continued)

TYPE OF BUILDING OR OCCUPANCY ⁴	WATER CLOSETS ⁵ (Fixtures per person)		LAVATORIES ⁵ (Fixtures per person)	
	Male	Female	Male	Female
For the occupancies listed below, use 5,000 square feet (464.5 m ²) per occupant for the minimum number of plumbing fixtures.				
Group S Warehouses	1:1-10 2:11-25 3:26-50 4:51-75 5:76-100 Over 100, add one for each 300 males and females.	1:1-10 2:11-25 3:26-50 4:51-75 5:76-100	one per 40 occupants of each sex	one shower for each 15 persons exposed to excessive heat or to skin contamination with poisonous, infectious or irritating materials

NOTE: Occupant loads over 30 shall have one drinking fountain for each 150 occupants.

¹ The figures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction thereof.

² Drinking fountains shall not be installed in toilet rooms.

³ When the design occupant load is less than 10 persons, a facility usable by either sex may be approved by the building official.

⁴ Any category not mentioned specifically or about which there are any questions shall be classified by the building official and included in the category which it most nearly resembles, based on the expected use of the plumbing facilities.

⁵ Where urinals are provided, one water closet less than the number specified may be provided for each urinal installed, except the number of water closets in such cases shall not be reduced to less than one half of the minimum specified.

⁶ Twenty-four inches (610 mm) of wash sink or 18 inches (457 mm) of a circular basin, when provided with water outlets for such space, shall be considered equivalent to one lavatory.

Chapter 30
ELEVATORS AND CONVEYING SYSTEMS

3010. Add the following section:

SECTION 3010 – PRIVATE RESIDENCE ELEVATORS

3010.1 PRIVATE RESIDENCE TYPE ELEVATOR is a power passenger elevator which is limited in size, capacity, rise and speed and is installed in a private residence or in a multiple dwelling as a means of access to a private residence.

3010.2 Construction. The construction and installation of private residence elevators, dumbwaiters, and private residence special access lifts shall comply with ANSI/ASME 17.1-1996.

[Note: For other than private residence elevators, dumbwaiters, and private residence special access lifts, see Title 24, Part 7, California Code of Regulations, California Elevator Safety Regulations.]

Chapter 31
SPECIAL CONSTRUCTION

SECTION 3103 – TEMPORARY STRUCTURES

3103.1.1 Add this sentence to the end of the paragraph.

See Section 106A.1.7 for permit requirements.

Replace this section with the following sections:

SECTION 3107 – SIGNS

3107.1_General. ~~Signs shall be designed, constructed and maintained in accordance with this code. Except as otherwise provided herein, all signs placed upon or attached to any building, structure or property shall comply with this chapter and shall be installed under a valid sign permit.~~

The electrical portion of the sign shall be constructed in accordance with the requirements of the Electrical Code, and an electrical permit shall be obtained in accordance with that code.

Plans shall be filed with the application for a permit for any sign. When required, computations shall be provided.

3107.1.1_Exempt Signs. The following signs are exempt from the requirements of this code:

- 1. Signs painted on structures. However, such signs must comply with the San Francisco Planning Code, and an application shall be filed with the Department.**
- 2. Bulletin boards for public, charitable or religious institutions, when such boards are located on the premises of said institutions.**
- 3. Real estate signs advertising the sale, rental or lease of the premises on which they are maintained, which do not exceed 15 square feet (1.39 m²) in size, and which are mounted flush to the building.**
- 4. Professional occupation signs denoting only the name and profession of an occupant in a commercial building, public institutional building or dwelling house, and not exceeding 3 square feet (0.278 m²) in area for each occupant.**

3107.1.2 Prohibitions. The following prohibitions apply to signs:

- 1. No signs shall be erected, relocated or maintained so as to block any exits or required windows. No sign shall be attached to a standpipe, gutter drain, stairway or fire escape, or interfere with the function or operation of any standpipe or fire escape. No roof sign shall be located within 6 feet (1.829 m) of a standpipe outlet.**
- 2. No sign shall be increased in size, altered in shape or changed by the addition of other signs or advertising matter not specifically allowed by the provisions of this code and the San Francisco**

Planning Code.

3. No wall sign shall extend across or in front of any window or other exterior opening located above the first story of a building, except as approved by the Building Official.

4. No wall sign erected on a wall adjacent to and facing a street, public space or yard shall project above the parapet walls.

EXCEPTIONS:

1. On a building located on a corner lot, a wall sign may project a maximum of 7 feet (2.134 m) above the roof line on only one street.

2. On any frontage, signs not more than 10 feet (3.048 m) long for any 40-foot (12.19 m) frontage and occupying no more than 25 percent of the lot frontage may project a maximum of 7 feet (2.134 m) above the roof line.

3107.1.3 Permit Number On Sign. Every sign shall have the permit number clearly painted and maintained on its face or edge, and of such size and location as to be legible from the sidewalk level, ground level or an easily accessible location. Electric signs may have an approved metal tag attached to them instead of painted characters.

3107.1.4 Revocable Permits. The permit for any sign over public property may be revoked. A permit granted under Chapter 1A and this chapter for a sign over public property shall not be construed to create any perpetual right but is a revocable license which may be terminated by revocation by the Board of Supervisors.

3107.1.5 Existing Signs. This chapter shall not render unlawful the existence or maintenance of any sign erected or maintained by a lawful permit issued prior to the adoption of this ordinance.

EXCEPTION: Signs for which lawful permits were issued and which, due to a sidewalk narrowing or street widening project, no longer conform to the requirements of Section 3103F shall be altered to conform not later than 90 days following completion of such project.

3107.2 Definitions. For the purposes of this chapter, certain terms are defined as follows:

APPROVED PLASTIC is a plastic material found to be suitable functionally for the purpose for which it is intended and which complies with the requirements of Chapter 26. For outdoor signs, the approval of the plastic shall be based upon considerations of flame spread value only. For indoor signs, the approval shall be based upon flame spread and smoke density values.

AREA OF A SIGN is that area of exposed vertical surface which is included within a rectangle enclosing all the features of the sign. In cases of an irregular sign, it is the sum of the areas of the enclosing rectangles estimated to the nearest 5 square feet (0.465 m²).

BUSINESS SIGN is a sign which directs attention to a business, commodity, service, industry or other activity which is sold, offered or conducted on the premises upon which such sign is located, or to which it is affixed.

SIGN is any structure, part thereof, or device or inscription which is located upon, attached to or

Painted, projected or represented on the exterior of any building or structure, including an awning, canopy, marquee or similar appendage, or affixed to the glass on the outside or inside of a window so as to be seen from the outside of the building, and which displays or includes any numeral, letter, word, model, banner, emblem, insignia, symbol, device, light, trademark or other representation used as, or in the nature of, an announcement, advertisement or designation by or of any person, firm, group, organization, place, commodity, product, service, business, profession, enterprise or industry. A sign includes the support, uprights and framework of the display.

3107.3 Height, Projection, and Location.

Height, projection and location of all signs shall be as specified in Article 6 of the San Francisco Planning Code. No sign shall project past the curblin of any street, alley or public way.

The minimum vertical clearance of signs over public sidewalks shall be 10 feet (3.048 m). Additionally, signs or portions within the outer one-third of a sidewalk shall have 12-foot (3.658 m) clearance, and when within 2 feet (0.61 m) of the curblin shall have 14-foot (4.267 m) clearance.

Roof signs shall be not less than 5 feet (1.524 m) above the roof. Supports shall be spaced at least 6 feet (1.829 m) apart.

3107.4 Design.

The design shall make allowances for the effects of corrosion and lack of maintenance.

No anchor or support of any sign shall be connected to, or suspended by, an unbraced parapet wall, unless such wall is designed in accordance with the requirements for parapet walls specified in Chapter 16.

Fasteners and braces shall be of noncombustible construction, except that stringers for attachment of roof signs may be of 6-inch (152.4 mm) minimum dimension redwood or approved preservative-treated lumber.

3107.5 Construction.

3107.5.1 General. All signs shall be constructed of noncombustible materials except that approved plastics may be used in sign facings as described in Section 3107.5.2. All ferrous metal and all fastenings used in construction or installation, excluding stainless steel, shall be hot-dipped galvanized, porcelain-enameled or otherwise protected in an approved manner against corrosion.

Aluminum may only be used for minor internal members, such as stiffeners and closures, and for sign faces and nonstructural trim. The minimum thickness shall be 0.0299 inch (0.76 mm).

Steel shapes or plates used for primary support shall be not less than 3/16 inch (4.76 mm) in thickness. Sheet metal formed integrally with the sign face or used as cabinet cover shall be not less than 0.0239 inch (24 gauge). Secondary support members not formed integrally with the design face shall be not less than 0.1046 (12 gauge) inch.

The minimum material thickness requirements in this section pertain to the base metal before application of protective covering and need not apply to signs located inside a building.

3107.5.2 Plastics. Where plastics are included in a sign, the application to install a sign shall set forth the manufacturer's trade name, or the common name of the plastic material to be used in the sign,

thickness of plastic, aspect ratio, corrugation type, if any, and span. The plastic employed in the signs shall be identified as set forth in Chapter 26 with the manufacturer's trade name, or with the common name of the plastic material.

Plastic sign facing shall conform to the provisions of this section. Plastic sign faces, formed or flat, letters and decorations shall be of sufficient thickness or so formed or supported that they will withstand all loads required by this code.

Plastic facing shall be mounted in a metal frame. Proper provision shall be made for the difference in thermal expansion between plastic members and the frame.

3107.5.3 Electric Plastic Signs. Every electric sign containing approved plastics shall comply with the minimum requirements set forth in the Standard for Electric Signs, UL No. 48. The attachment of Underwriters Laboratories label, or other approved laboratory per the Electrical Code, shall be sufficient proof that a sign has complied with the requirements of the Electrical Code.

3107.5.4 Wood-Faced Signs. Projecting signs with wood facing or backing are permitted on any building.

Plywood used for signs shall be exterior grade and not less than 5/8-inch (15.88 mm) thickness. Lumber shall be not less than 1-inch (25.4 mm) nominal and shall be finished to provide a weather-resistant finish.

3107.6 Ground Signs.

3107.6.1 Height. The maximum height of a ground sign constructed with wood supports shall be 30 feet (9.14 m), as measured from the top of the sign to the sidewalk in front of the sign or the existing ground under the sign, whichever is higher.

3107.6.2 Design and Construction. The design and construction of wood signs shall comply with Chapters 16 and 23 of this code. All wood within 12 inches of the ground shall be pressure-treated wood.

3107.7 Removal Of Business Signs.

It shall be unlawful for any person to allow any business sign to remain posted more than 180 days after the activity for which the business sign has been posted has ceased operation on the premises if such person (1) owns, leases or rents the property on which the sign is posted, or (2) owns or operates such business, service, industry or other activity.

3111 Add a section as follows:

SECTION 3111 – WOODBURNING APPLIANCES

3111.1 Woodburning Appliances. All woodburning appliances installed in new buildings or woodburning appliances being added, reconstructed or replaced in existing buildings shall comply with this section.

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.

3111.2_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.

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.

3111.3_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 Building Official of the Department of Building Inspection in consultation with the Director of the Department of Planning.

3111.4_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.**

3111.5 Certification. Any person who plans to install a woodburning appliance must submit documentation to the Building Official 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 wood smoke 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.

Chapter 31A
RESERVED

No San Francisco Building Code Amendments

Chapter 31B [DPH]
PUBLIC SWIMMING POOLS

No San Francisco Building Code Amendments

Chapter 31C [DHS]
RADIATION

No San Francisco Building Code Amendments

Chapter 31D [DPH]
FOOD ESTABLISHMENTS

No San Francisco Building Code Amendments

Chapter 31E
RESERVED

No San Francisco Building Code Amendments

Chapter 31F [SLC]
MARINE OIL TERMINALS

No San Francisco Building Code Amendments

Chapter 32
ENCROACHMENTS INTO THE PUBLIC RIGHT-OF-WAY

SECTION 3201 – GENERAL

3201.4 Revise this section as follows:

3201.4 Drainage. Drainage water collected from a roof, awning, canopy, or marquee, and condensate from mechanical equipment **shall be conducted to the building drain or building sewer, and** shall not flow over a public walking surface.

SECTION 3202 – ENCROACHMENTS

3202.3.1 Replace this section as follows:

3202.3.1 Awnings, canopies, marquees and signs. Awnings, canopies, marquees and signs shall be constructed so as to support applicable loads as specified in Chapter 16. ~~Awnings, canopies, marquees and signs with less than 15 feet (4572 mm) clearance above the sidewalk shall not extend into or occupy more than two-thirds the width of the sidewalk measured from the building. Stanchions or columns that support awnings, canopies, marquees and signs shall be located not less than 2 feet (610 mm) in from the curb line.~~ **Canopies shall be allowed only over entrance doorways and only for Occupancy Groups A, B, F-1, M, S-1, S-2 and R. Canopies may be constructed as awnings per Section 3105 and with the same limitations except that:**

1. **The maximum width shall be 10 feet (3.048 m); and**
2. **The maximum extension over public sidewalk may be to a point 2 feet (0.61 m) from the curb; and**
3. **The outer column support shall be located in the outer one-third of the sidewalk.**

3202.3.2 Replace this section as follows:

3202.3.2 Windows, balconies, architectural features and mechanical equipment. ~~Where the vertical clearance above grade to projecting windows, balconies, architectural features or mechanical equipment is more than 8 feet (2438 mm), 1 inch (25 mm) of encroachment is permitted for each additional 1 inch (25 mm) of clearance above 8 feet (2438 mm) but the maximum encroachment shall be 4 feet (1219 mm).~~

A 3-foot (0.914 m) projection shall be permitted for bay and oriel windows when the clearance above grade is at least 10 feet (3.048 m) and the width of the sidewalk is greater than 9 feet (2.74 m). Where the sidewalk width is 9 feet (2.74 m) or less, the projection shall not exceed 2 feet (0.61 m).

For all other appendages, a 2-foot (0.61 m) projection is permitted when the clearance above grade is at least 10 feet (3.048 m). The projection may be increased 1 inch (25.4 mm) for each additional foot of clearance over 10 feet (3.048 m), to a maximum of 4 feet (1.219 m).

3202.3.4 Add the following after the first paragraph as follows:

A covered pedestrian walkway may be constructed over a street between buildings of only Types

I-A and I-B construction. Permission from the Board of Supervisors and approval of the Department of Public Works and Planning Commission is required. The pedestrian walkway shall comply with the following conditions:

- 1. The pedestrian walkway shall be equipped with an automatic sprinkler system. The supporting structure shall be three-hour fire-resistive construction. Columns located within 8 feet (2.438 m) of the curb, or otherwise vulnerable to vehicle impact, shall either be designed for such impact or protected from the impact.**
- 2. The openings in the exterior walls of the buildings at the ends of the pedestrian walkway shall be protected by 1 1/2 hour fire assemblies.**

3203 Add a section as follows:

SECTION 3203 – SIDEWALK CONSTRUCTION

3203.1 General. Sidewalks shall be constructed in accordance with the Public Works Code.

Sidewalks over excavated areas shall be supported on noncombustible construction with 3-hour fire-rated protection. The sidewalk shall be waterproofed by use of a hot mopped asphalt membrane or other approved means.

3203.2 Openings in Sidewalks.

3203.2.1 Sidewalk trapdoor. Every basement extending under the sidewalk shall have an approved sidewalk trapdoor. The minimum size of the trapdoor opening shall be 4 feet by 4 feet (1.219 m by 1.219 m). However, trapdoors shall not be required where the basement is provided with an automatic sprinkler system.

3203.2.2 Sidewalk elevators. All openings hereafter constructed in sidewalks for sidewalk elevators shall be located in the outer half of the sidewalks, next to the curb. The outer edges of the openings shall be not more than 30 inches (762 mm) from the outer line of the curb. The length of the sides of the openings at right angles to the curb shall not exceed one-half of the width of the sidewalk and in no case shall it exceed 5 feet (1.524 m).

3203.2.3 Any other purpose. Openings on the sidewalks for any other purpose, if placed outside the property line, shall be covered with approved gratings having a maximum opening between bars of 1/2 inch (12.7 mm), or with covers having a rough surface, and rabbeted flush with the sidewalk. When a cover is placed in any sidewalk, it shall be placed as near as practicable to the line of the curb. All spaces under sidewalks shall be thoroughly ventilated.

3203.2.4 Framing. All framing supporting only the sidewalk opening shall be of noncombustible material.

3203.2.5 Guards. Metal guards will be required for openings in sidewalks in accordance with the Police Code.

3203.3 Electrical Transformers. No portion of any electrical transformer pad shall be constructed, nor electrical transformer installed on the surface of any portion of any public sidewalk.

Chapter 33
SAFEGUARDS DURING CONSTRUCTION

SECTION 3302 – CONSTRUCTION SAFEGUARDS

3302 Add a section as follows:

3302.3 Fencing. Provide for the enclosing, fencing, and boarding up or by fire watch or other means of preventing access to the site by unauthorized persons when work is not in progress.

SECTION 3303 – DEMOLITION

3303.1 Add sections as follows:

3303.1.1 Buildings other than Type V. The demolition of structures of Types I, II, III and IV construction greater than two stories or 25 feet (7.62 m) in height shall comply with the requirements of this section.

The requirements of this section shall also apply to the demolition of post-tensioned and pre-tensioned concrete structures.

3303.1.2 Required plans. Prior to approval of an application for a demolition permit, two sets of detailed plans shall be submitted for approval, showing the following:

- 1. The sequence of operation floor by floor, prepared by a registered civil engineer or licensed architect.**
- 2. The location of standpipes.**
- 3. The location and details of protective canopies.**
- 4. The location of truck crane during operation.**
- 5. Any necessary fence or barricade with lights.**
- 6. Any floor or wall left standing.**
- 7. The schedule of the days when the demolition will be done, i.e., on weekdays or on Sundays.**

3303.4 Replace this section with the following:

3303.4 Vacant Lot. ~~Where a structure has been demolished or moved, the vacant lot shall be filled and maintained to the existing grade or in accordance with the ordinances of the jurisdiction having authority.~~ When a building is demolished, the permittee must remove all debris and remove all parts of the structure above grade except those parts that are necessary to provide support for the adjoining property.

3303.7 Add a section as follows:

3303.7 Special inspection. A registered civil engineer or licensed architect shall supervise the demolition work in accordance with rules and regulations adopted by the Building Official pursuant to Section 104A.2.1 to assure the work is proceeding in a safe manner and shall submit written progress reports to the Department in accordance with Section 1701.3.

SECTION 3304 – SITE WORK

3304.1 Add a second paragraph as follows:

The City and County of San Francisco adopts Appendix J for the purpose of regulating excavation and grading.

3304.1 Add a third paragraph as follows:

Temporary wood shoring and forms. All wood used for temporary shoring, lagging or forms that will be backfilled against or otherwise left permanently in place below grade shall be treated wood as defined in Section 2302.

SECTION 3306 – PROTECTION OF PEDESTRIANS

3306.10 Add a section as follows:

3306.10 Chutes. Chutes for the removal of materials and debris shall be provided in all parts of demolition operations that are more than 20 feet (6.096 m) above the point where the removal of material is effected. Such chutes shall be completely enclosed. They shall not extend in an unbroken line for more than 25 feet (7.62 m) vertically but shall be equipped at intervals of 25 feet (7.62 m) or less with substantial stops or offsets to prevent descending material from attaining dangerous speeds.

The bottom of each chute shall be equipped with a gate or stop with a suitable means for closing or regulating the flow of material.

Chutes, floors, stairways and other places affected shall be watered sufficiently to keep down the dust.

3306.11 Add a section as follows

3306.11 Falling Debris. Wood or other construction materials shall not be allowed to fall in large pieces onto an upper floor. Bulky materials, such as beams and columns, shall be lowered and not allowed to fall.

3306.12 Add a section as follows

3306.12 Structure Stability. In buildings of wood frame construction, the supporting structure shall not be removed until the parts of the structure being supported have been removed.

In buildings with basements, the first floor construction shall not be removed until the basement walls are braced to prevent overturning, or an analysis acceptable to the Building Official is submitted which shows the walls to be stable without bracing.

SECTION 3307 – PROTECTION OF ADJOINING PROPERTY

3307.1 Insert a note at the end of this section as follows:

3307.1 Protection Required. Adjoining public and private property shall be protected from damage during construction, remodeling and demolition work. Protection must be provided for footings, foundations, party walls, chimneys, skylights, and roofs. Provisions shall be made to control water runoff and erosion during construction or demolition activities. The person making or causing an excavation to be made shall provide written notice to the owners of adjoining buildings advising them that the excavation is to be made and that the adjoining buildings should be protected. Said notification shall be delivered not less than 10 days prior to the scheduled starting date of the excavation.

Note: Other requirements for protection of adjacent property of adjacent and depth to which protection is requested are defined by California Civil Code Section 832, and is reprinted herein for convenience.

Section 832. Each coterminous owner is entitled to the lateral and subjacent support which his land receives from the adjoining land, subject to the right of the owner of the adjoining land to make proper and usual excavations on the same for purposes of construction or improvement, under the following conditions:

- 1. Any owner of land or his lessee intending to make or to permit an excavation shall give reasonable notice to the owner or owners of adjoining lands and of buildings or other structures, stating the depth to which such excavation is intended to be made, and when the excavating will begin.**
- 2. In making any excavation, ordinary care and skill shall be used, and reasonable precautions taken to sustain the adjoining land as such, without regard to any building or other structure which may be thereon, and there shall be no liability for damage done to any such building or other structure by reason of the excavation, except as otherwise provided or allowed by law.**
- 3. If at any time it appears that the excavation is to be of a greater depth than are the walls or foundations of any adjoining building or other structure, and is to be so close as to endanger the building or other structure in any way, then the owner of the building or other structure must be allowed at least 30 days, if he so desires, in which to take measures to protect the same from any damage, or in which to extend the foundations thereof, and he must be given for the same purposes reasonable license to enter on the land on which the excavation is to be or is being made.**
- 4. If the excavation is intended to be or is deeper than the standard depth of foundations, which depth is defined to be a depth of nine feet below the adjacent curb level, at the point where the joint property line intersects the curb and if on the land of the coterminous owner there is any building or other structure the wall or foundation of which goes to standard depth or deeper then the owner of the land on which the excavation is being made shall, if given the necessary license to enter on the adjoining land, protect the said adjoining land and any such building or other structure thereon without cost to the owner thereof, from any damage by reason of the excavation, and shall be liable to the owner of such property for any such damage, excepting only for minor settlement cracks in buildings or other structures.**

SECTION 3311 – STANDPIPES

3311.2 Replace this section with the following:

3311.2 Buildings being demolished. ~~Where a building is being demolished and a standpipe exists within such a building, such standpipe shall be maintained in an operable condition so as to be available for use by~~

~~the fire department. Such standpipe shall be demolished with the building but shall not be demolished more than one floor below the floor being demolished.~~ **Fire safety during demolition. All existing dry standpipes shall be maintained in an operative condition and with all inlets and outlets accessible for use within two floors of the highest remaining portion of a floor of the building. The inlets shall be so identified at the street level as to be easily located by the Fire Department. They shall be removed in place with floor removal and the upper ends capped above the highest remaining valve. The remaining system on the lower floors shall continue operative until all construction above the third floor has been removed.**

Chapter 34
EXISTING STRUCTURES

SECTION 3401 – GENERAL

3401.1. Add the following section:

3401.1.4 General. Buildings, structures and property to which additions, alterations or repairs are made shall comply with all the requirements of this code for new facilities, except as specifically provided in this section, in the San Francisco Housing Code and in other applicable ordinances and regulations. See Section 3401.6 for provisions requiring installation of smoke detectors in existing Group R, Division 3 Occupancies.

3401.6 Add the following section:

3401.6.1 Additions, alterations or repairs to Group R Occupancies. When the valuation of an addition, alteration or repair to a Group R Occupancy exceeds \$1,000 and a permit is required, or when one or more sleeping rooms are added or created in existing Group R Occupancies, smoke alarms shall be installed in accordance with Section 907.

EXCEPTION: Repairs to the exterior surfaces of a Group R Occupancy are exempt from the requirements of this section.

3401.8. Add the following section:

3401.8 Lateral Force Design requirements for Existing Buildings. Whenever other provisions of this code require compliance with this section, the lateral force provisions of Section 1604.11 shall apply to the entire building or structure except as otherwise provided therein.

3401.9. Add the following section:

3401.9 Homeless Shelters. Notwithstanding any other provision of this section, any addition, alteration, repair, installation, change or reconstruction of any building or structure, which is made in order to initiate, expand or continue a facility which, as approved by an authorized government agency, shelters otherwise homeless persons and which is operated by an organization exempt from federal income tax under Internal Revenue Code Sections 501(c)(3) or 501(d), shall meet only those requirements of this code which are determined by the Building Official, pursuant to rules and regulations adopted by the Building Official in accordance with Section 104A.1, after consultation with the Fire Department, to be necessary or appropriate to prevent a life hazard, or to prevent the building or structure from being or becoming substandard. With respect to minimum lateral force requirements, said bulletin shall not waive any requirement which can be satisfied by work eligible to receive financial assistance from the State of California. Any provisions waived by said bulletin shall be applied when homeless shelter use ceases and may be applied when homeless shelter use is reduced.

SECTION 3403 – ADDITIONS

3403.1 Add the following section:

3403.1.2 High-rise buildings. Any existing building or structure to which an addition is made which

causes the building or structure to fall within the scope of Section 403 shall comply with the provisions of that section.

3403.4.1 Add the following section:

3403.4.1.1 Horizontal additions. Horizontal additions shall meet the following requirements:

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 1604.3.7, the entire structure shall comply with Section 3401.8.

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 3404 – ALTERATIONS

3404.1.1 Add this section as follows:

3404.1.1.1 Stairways. 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.

3404.7. Add the following section:

3404.7 Substantial change.

3404.7 Add the following section:

3404.7.1 Non-structural alterations. Whenever alteration work in a building or structure involves substantial changes to elements such as walls, partitions or ceilings, on 2/3 or more of the number of stories excluding basements, the building or structure as a whole shall comply with Section 3401.8. The term “substantial change” includes the addition, removal, repair or modification of such elements. All such work included in alteration permits issued within two years of the date of a permit application shall be included in the determination of whether the application is proposing substantial change to the building or structure.

3404.7.2 Add the following section:

3404.7.2 Structural alterations. When more than 30 percent, cumulative since May 21, 1973, of the floor and roof areas of the building or structure have been or are proposed to be involved in substantial structural alteration, the building or structure shall comply with Section 3401.8. The areas to be counted towards the 30 percent shall be those areas tributary to the vertical load carrying components (joists, beams, columns, walls and other structural components) that have been or will be removed, added or altered, as well as areas such as mezzanines, penthouses, roof structures and infilled courts and shafts.

EXCEPTIONS:

1. When such alterations involve only the lowest story of a wood frame building or structure and Section 3408 does not apply, only the lateral force resisting components in and below that story need comply with Section 3401.8, or

2. When such alterations involve the lowest story of a Type V building or structure of R3 occupancy and that floor's proposed use is as a garage, that level is exempt from Section 3404.7.2. Such alterations need not be counted as part of the cumulative total of tributary area of structural alterations.

SECTION 3405 – REPAIRS

3405.1 Add the following section:

3405.1.3. Repairs. Unless otherwise approved by the building official, all structural damage shall be repaired.

Repairs to buildings or structures which have sustained substantial structural damage to lateral force resisting elements shall comply with the minimum lateral force design requirements of Section 3401.8 or with the code under which the building or structure was designed, whichever is more restrictive.

Damage may be caused by events or a combination of events, including, but not limited to, fire, explosion, structural pest or wood-destroying organism attack, earthquake, wind storm, vehicular impact, ground subsidence or failure, or the collapse or dislodgement of any portion of any adjacent building or structure. The removal or alteration of structural elements as part of the work described in an approved building permit application shall not be considered to be “damage.”

SECTION 3408 – CHANGE OF OCCUPANCY

3408.4 Add the following section:

3408.4.1 Change of occupancy. In addition to the other requirements of this code, the term “comply with the requirements of this code for such division or group of occupancy,” as used in this section, shall also mean compliance with the lateral force provisions of Section 3401.8 when the change results in an increase of more than 10 percent in the occupant load of the entire building or structure, and which also increases the occupant load by more than 100 persons as compared to the occupant load of the existing legal use or the use for which the building was originally designed.

EXCEPTIONS:

1. When a change of occupancy or use involves only one story of a building or structure, only the lateral force resisting elements in that story and all lateral force resisting elements below need comply with Section 3401.8.

2. A change from a Group R, Division 3 to a Group R, Division 1 or Division 2 Occupancy caused by the construction of a third dwelling unit in the lowest story of a building or structure shall comply with Section 3401.8 as provided in Exception 1 above.

SECTION 3410 – MOVED STRUCTURES

3410 Add the following section:

3410.2 Removal of Debris. Immediately after the building is moved and before it is occupied at the new site, the permittee must remove all debris and all walls and footings above grade at the site from which it has been moved, except where such walls provide support to adjacent buildings, structures or property. All excavated areas must be filled in or protected by substantial fences not less than 5 feet (1524 mm) in height.

SECTION 3414 – EXISTING HIGH-RISE BUILDINGS [SFM]

3414.27 Replace this section with the following sections:

~~3414.27 Automatic sprinkler system – Existing high-rise buildings. Regardless of any other provisions of these regulations, every existing high-rise building of Type II-B, Type III-B or Type V-B construction shall be provided with an approved automatic sprinkler system conforming to NFPA 13.~~

3414.27.1 General. Regardless of any other provisions of this code, every existing high-rise building as defined in Section 403.11.1 shall be provided with an approved automatic fire sprinkler system conforming to NFPA 13.

Existing high-rise buildings that are also qualified historical buildings as defined in California Health and Safety Code Section 18950 shall be provided with an approved automatic fire sprinkler system when and as required by the State Historical Building Code.

EXCEPTIONS:

1. An apartment house, condominium or other building used as a Group R, Division 2 Occupancy as defined in this code excluding tourist hotels as defined in Section 41.4(r) of the San Francisco Administrative Code.

2. A mixed-use occupancy building containing a Group R, Division 1 or Group R, Division 2 Occupancy.

3414.27.2 Additional. The following additional requirements shall also apply:

3414.27.2.1 Valves and devices. A sprinkler control valve and a waterflow detecting device shall be provided at the lateral connection to the riser for each floor.

3414.27.2.2 Signals. A separate and distinct supervisory signal shall be provided to indicate a condition that will impair the satisfactory operation of the sprinkler system. This shall include, but not be limited to, monitoring control valves, fire pump power supplies and pump running conditions. Such supervisory signals shall be annunciated at a constantly attended building security control center; when that location is not under constant supervision by qualified personnel, the signals shall be transmitted to a remote monitoring station in accordance with NFPA 72.

3414.27.2.3 Water supply. The minimum water supply requirement for the sprinkler shall be determined without regard to inside hose stream demand.

3414.27.2.4 Standpipe conversion. Existing standpipes may be converted to sprinkler risers, provided that they are hydrostatically tested for two hours at not less than 50 psi (345 Pa) in excess of the maximum pressure to be maintained in the system.

3414.27.2.5 Supports. Additional hangers, braces or other attachments for support of existing standpipes which have been converted in accordance with Section 3414.27.2.4 shall be provided if they are necessary to meet the requirements of NFPA 13. The installation of additional flexible fittings in such risers is not required.

3414.27.2.6 Pipe material. Any type pipe which has been listed by an approved testing agency for use in automatic sprinkler installations may be used when installed in accordance with its listing limitations.

3414.27.3 Permissible omissions. The following features required in new high-rise buildings are not required in systems installed under the provisions of this section:

1. Redundant fire pump;
2. Secondary on-site supply of water;
3. More than one fire department connection;
4. Connection of the system to two risers on each floor. Hydraulic calculations may consider all risers in service;
5. In a Group R, Division 1 or R-2 Occupancy building, sprinklers in bathrooms and closets.

See Section 903.3.1.1.1 for additional permissible sprinkler omissions.

3414.27.4 Effective date. The effective date of these requirements shall be February 15, 1994.

3414.27.5 Notification. Not later than 60 days following the effective date of this ordinance, the Building Official shall notify in writing by certified mail the owner of each building within the scope of this section. The notice shall contain a copy of this section, a commentary on it and a notice of intent form. The notice of intent shall be designed to elicit information regarding proposed water supply connections, pumps, risers and existing partial sprinkler systems. The notice of intent shall include a tentative schedule for phasing the installation of the complete sprinkler system.

3414.27.5.1 Deferred notice. If a building within the scope of this section is not discovered by the Building Official until after the deadline for notification, the building owner shall be notified within 30 days of such discovery.

Failure to receive notification does not exempt a building owner from compliance with this section.

3414.27.6 Authority of Building Official. The Building Official, in consultation with the San Francisco Fire Marshal, may approve modifications and alternate methods and materials when it is clearly evident that a reasonable degree of fire safety is provided. In such cases, the Building Official may:

1. Consider alternative protection based on nationally recognized standards, principles and tests, and generally recognized and well-established methods of fire protection;
2. Waive specific individual requirements if it can be shown that such requirements are not

physically possible, require disproportionate effort or pose an undue hardship with little increase in life safety and that a practical alternate cannot be provided; and

3. Grant necessary extensions of time when it can be shown that the specific time periods are not physically practical or pose an undue hardship. The granting of an extension of time for compliance may be approved by the Building Official based on the showing of good cause and on approval of an acceptable, systematic, progressive plan of correction.

3414.27.7 Appeal of high-rise sprinkler requirements. Application may be made to the Board of Examiners in accordance with Section 105A.1 for approval of alternate methods, materials or types of construction or for variances from the provisions of this section.

3414.27.8 Implementation. The requirements stated in Section 3414.27.2 shall be accomplished by the following steps. Failure to complete any step within the required time frame is a violation of this code, and the Building Official shall have the power to abate the building in accordance with Section 102A.

3414.27.8.1_ Step 1. Notice of intent. The owner shall submit a properly completed Department-provided notice of intent to the Building Official not later than three years after the effective date of this requirement.

EXCEPTION: No notice of intent is required if an approved sprinkler system is completed prior to the deadline above.

3414.27.8.2_ Step 2. Water supply. The owner shall install the system riser, including floor-control valves, and shall connect it to the approved automatic water supply not later than five years after the effective date of this ordinance. For purposes of this section, an automatic water supply shall consist of a connection to the public water works system and, if required by hydraulic analysis, installation of a fire pump.

3414.27.8.3 Step 3. Piping and sprinklers. The owner shall complete the sprinkler system, including required electrical monitoring, not later than 12 years after the effective date of this ordinance.

3414.27.8.4_ Installation. The installation of all fire alarm equipment shall be in accordance with the Electrical Code and the California Fire Code.

3424 Add the following section:

**SECTION 3424 – EXISTING BUILDINGS OR OTHER STRUCTURES LOCATED ON A
MILITARY BASE SELECTED FOR CLOSURE**

3424.1 General. As authorized by California Health and Safety Code Section 18941.7, a building or other structure that is located on a military base selected for closure by action of the federal Defense Base Closure and Realignment Commission, including Naval Station Treasure Island (including Yerba Buena Island) and Hunters Point Naval Shipyard, may comply with the requirements of this code in a graduated manner over a period not to exceed three years, provided that:

1. The building or structure is in existence at the time the military base is selected for closure by action of the federal Defense Base Closure and Realignment Commission;
2. The building or structure will be safe for its intended use and occupancy;

3. The building or structure is under a lease from the federal government to either the City and County of San Francisco or the Redevelopment Agency of the City and County of San Francisco (the “Redevelopment Agency”);

4. The building or structure will be subleased by the City and County of San Francisco or Redevelopment Agency to either a private party, to the City and County of San Francisco or to the Redevelopment Agency; and

5. The building or structure meets the code compliance inspection and graduated compliance plan requirements set forth below.

3424.2 Presubleasing Code Compliance Inspections. Before the City and County of San Francisco or the Redevelopment Agency enters into any sublease of a building or structure, the public entity proposing to enter into the sublease shall request the Building Official and the San Francisco Fire Marshal (the “Fire Marshal”) to inspect, or cause to be inspected, the building or structure for compliance with applicable codes, in accordance with the provisions of this Section 3424. The Building Official and the Fire Marshal shall issue a written report containing their findings on the compliance of the building or structure to the agency proposing to enter into the sublease. The Building Official and the Fire Marshal may, in their discretion, issue the compliance report jointly or separately.

3424.2.1 Applicable codes. The Building Official and the Fire Marshal shall evaluate the building or structure, including any alterations or changes in use if known, using the codes in effect at the time of original construction. If a determination of what codes were in effect at the time of original construction cannot be made, the Building Official and the Fire Marshal shall jointly determine which codes are appropriate for evaluation of the building or structure for the purposes herein.

3424.2.2 Notice to proposed subtenants. The Redevelopment Agency or the City and County of San Francisco agency proposing to enter into a sublease shall notify the proposed subtenant of the final compliance inspection reports for such building or structure by (a) attaching a copy of the final reports of the Building Official and Fire Marshal to the sublease; or (b) providing a copy of such reports to the subtenant and referencing such delivery in the sublease.

3424.3 Graduated Code Compliance Plan and Timetable.

3424.3.1 Buildings with no change in occupancy or use and no anticipated alterations.

3424.3.1.1 Complying building or structure. If, after performing the inspections required by Section 3424.2., the Building Official and the Fire Marshal concur that the building or structure complies with the applicable codes and will not be hazardous to life safety, fire safety, health or sanitation based on its intended use and occupancy, the Building Official, with the approval of the Fire Marshal, will issue a Certificate of Final Completion and Occupancy.

3424.3.1.2 Remedial work required. If, after performing the inspection required by Section 3424.2, the Building Official and the Fire Marshal determine that remedial work is required so that the intended use and occupancy of the building or structure will not be hazardous to life safety, fire safety, health or sanitation, such work must be performed pursuant to building permits issued by the Department. All such remedial work shall either comply with current codes or be approved by the Building Official and the Fire Marshal as providing equivalent public safety. The Building Official, with the approval of the Fire Marshal, shall determine that the building or structure is safe for occupancy as evidenced by the issuance of a Temporary Certificate of Occupancy or a Certificate of

Final Completion and Occupancy. Such issuance shall not be a precondition to the execution of leases or subleases.

3424.3.1.3 Graduated compliance plan. A graduated plan of compliance with the applicable codes may be approved upon the concurrence of the Building Official and the Fire Marshal, provided that:

- 1. The Building Official and the Fire Marshal have issued a written determination that, in their respective opinions, the intended use and occupancy of the building or structure will not be hazardous to life safety, fire safety, health or sanitation. This determination may, in the discretion of the Building Official and the Fire Marshal, be issued jointly or separately;**
- 2. The time for full compliance with the applicable codes does not exceed a period of three years from the date that the City and County of San Francisco or the Redevelopment Agency enters into a sublease;**
- 3. All required remedial work either complies with current codes or is approved by the Building Official and the Fire Marshal as providing equivalent public safety; and**
- 4. A Temporary Certificate of Occupancy is issued by the Building Official, with the approval of the Fire Marshal, setting forth the approved graduated compliance plan and a timetable for full compliance with the applicable codes. The compliance plan may be amended only with the joint approval of the Building Official and the Fire Marshal. In no event may the time allowed for full code compliance extend beyond the three-year period.**

3424.3.2 Buildings with no change in occupancy or use but with planned alterations.

3424.3.2.1 Complying building or structure. If, after performing the inspection required by Section 3424.2, the Building Official and the Fire Marshal concur that the building or structure meets current requirements for the new occupancy and will not be hazardous to life safety, fire safety, health or sanitation based on its intended use and occupancy, the Building Official, with the approval of the Fire Marshal, shall cause a Certificate of Final Completion and Occupancy to be issued.

3424.3.2.2 Remedial work required. If, after performing the inspection required by Section 3424.2, the Building Official and the Fire Marshal determine that remedial work is required so that the intended use and occupancy of the building or structure will not be hazardous to life safety, fire safety, health or sanitation, such work must be done in conjunction with any planned alterations. A Temporary Certificate of Occupancy or a Certificate of Final Completion and Occupancy shall be issued by the Building Official, with the approval of the Fire Marshal. Such issuance shall not be a precondition to the execution of leases or subleases.

3424.3.2.3 Graduated compliance plan. A graduated plan for compliance with the applicable codes may be approved with the concurrence of the Building Official and the Fire Marshal, provided that:

- 1. The Building Official and the Fire Marshal have issued a written determination that, in their respective opinions, the intended use and occupancy of the building or structure will not be hazardous to life safety, fire safety, health or sanitation. This determination may, in the discretion of the Building Official and the Fire Marshal, be issued jointly or separately;**
- 2. The time for full compliance with the applicable codes does not exceed a period of three years from the date that the City and County of San Francisco or Redevelopment Agency enters into a sublease;**

3. All new work either complies with current codes or is approved by the Building Official and the Fire Marshal as providing equivalent public safety; and

4. A Temporary Certificate of Occupancy setting forth the approved graduated compliance plan with a timetable for full compliance with the applicable codes is issued by the Building Official, with the approval of the Fire Marshal. The compliance plan and timetable may be amended only with the joint approval of the Building Official and the Fire Marshal. In no event may the time allowed for full code compliance extend beyond the three-year period.

3424.3.3 Building with a change in occupancy or use but no anticipated alterations.

3424.3.3.1 Complying building or structure. If, after performing the inspection required by Section 3424.2, the Building Official and the Fire Marshal concur that the building or structure meets current requirements for the new occupancy and will not be hazardous to life safety, fire safety, health or sanitation based on its intended use and occupancy, the Building Official, with the approval of the Fire Marshal, shall cause a Certificate of Final Completion and Occupancy to be issued.

3424.3.3.2 Remedial work required. If, after performing the inspection required by Section 3424.2, the Building Official and the Fire Marshal determine that remedial work is required so that the intended use and occupancy of the building or structure will not be hazardous to life safety, fire safety, health or sanitation, such work must be performed pursuant to building permits issued by the Department. All remedial work shall either comply with current codes or be approved by the Building Official and the Fire Marshal as providing equivalent public safety. The building or structure may not be occupied until the Building Official, with the approval of the Fire Marshal, has caused the issuance of a Certificate of Final Completion and Occupancy.

3424.3.3.3 Graduated compliance plan. A graduated plan of compliance with the applicable codes may be approved with the concurrence of the Building Official and the Fire Marshal, provided that:

1. The Building Official and the Fire Marshal have issued a written determination that, in their respective opinions, the intended use and occupancy of the building or structure will not be hazardous to life safety, fire safety, health or sanitation. This determination may, in the discretion of the Building Official and the Fire Marshal, be issued jointly or separately;

2. The time for full compliance with the applicable codes does not exceed a period of three years from the date that the City and County of San Francisco or the Redevelopment Agency enters into a lease;

3. All required remedial work either complies with current codes or is approved by the Building Official and the Fire Marshal as providing equivalent public safety; and

4. A Temporary Certificate of Occupancy is issued by the Building Official, with the approval of the Fire Marshal, setting forth the approved graduated compliance plan and a timetable for full compliance with the applicable codes. The compliance plan and timetable may be amended only with the joint approval of the Building Official and the Fire Marshal. In no event may the time allowed for full code compliance extend beyond the three-year period.

3424.3.4 Buildings with a change in occupancy or use and with planned alterations.

3424.3.4.1 Complying building or structure. If, after performing the inspection required by Section

3424.2, the Building Official and the Fire Marshal concur that the building or structure meets current requirements for the new occupancy and will not be hazardous to life safety, fire safety, health or sanitation based on its intended use and occupancy, the Building Official shall cause, with the approval of the Fire Marshal, the issuance of a Certificate of Final Completion and Occupancy upon completion and approval of the planned alteration work.

3424.3.4.2 Remedial work required. If, after performing the inspection required by Section 3424.2, the Building Official and the Fire Marshal concur that remedial work is required so that the intended use and occupancy of the building or structure will not be hazardous to life safety, fire safety, health or sanitation, that work must be done in conjunction with any planned alterations. The building or structure must meet current code requirements for the new occupancy. All remedial work must either comply with current codes or be approved by the Building Official and the Fire Marshal as providing equivalent public safety. The building or structure may not be occupied until the Building Official, with the approval of the Fire Marshal, has caused a Certificate of Final Completion and Occupancy to be issued.

3424.3.4.3_ Graduated compliance plan. A graduated plan of compliance with the applicable codes may be approved with the concurrence of the Building Official and the Fire Marshal, provided that:

1. The Building Official and the Fire Marshal have issued a written determination that, in their respective opinions, the intended use and occupancy of the building or structure will not be hazardous to life safety, fire safety, health or sanitation. This determination may be issued jointly or separately, in the discretion of the Building Official and the Fire Marshal;

2. The time for full compliance with the applicable codes does not exceed a period of three years from the date that the City and County of San Francisco or the Redevelopment Agency enters into a sublease;

3. All new work either complies with current codes or is approved by the Building Official and the Fire Marshal as providing equivalent public safety; and

4. A Temporary Certificate of Occupancy is issued by the Building Official, with the approval of the Fire Marshal, setting forth the approved graduated compliance plan and a timetable for full compliance with the applicable codes. The compliance plan and timetable may be amended only with the joint approval of the Building Official and the Fire Marshal. In no event may the time allowed for full code compliance extend beyond the three-year period.

3424.4 Enforcement.

3424.4.1_ Notices of violation and orders to abate. The Department and the Fire Department shall provide to the Redevelopment Agency or City and County of San Francisco agency that has entered into a sublease a copy of any notice of violation or order to abate served upon a subtenant. The manner of service shall be as otherwise required by law.

3424.4.2_ Revocation of certificate of final completion and occupancy. In the event that the Building Official or Fire Marshal issues an order to abate code violations and the order is not complied with during the time provided therein, the Building Official may, in writing, revoke the Certificate of Final Completion and Occupancy.

3424.5_ Fees. The Department and the Fire Department may charge the Redevelopment Agency or other appropriate City and County of San Francisco agencies fees for actual time and materials

expended in responding to requests for inspection and performing other tasks associated with the graduated compliance plan program. Fees for permits and other services shall be as set forth in the San Francisco Building Code and San Francisco Fire Code.

3425 Add the following section:

SECTION 3425 – WORK PRACTICES FOR LEAD-BASED PAINT ON PRE-1979 BUILDINGS AND STEEL STRUCTURES

3425.1 General. Any buildings, structures, and properties on which the original construction was completed on or before December 31, 1978, or any steel structures to which lead-based paint disturbance or removal, including surface preparation, additions, alterations, repairs, or demolitions are made, shall comply with the requirements of this section.

3425.1.1 Purpose, intent and scope.

3425.1.1.1 Purpose. The purpose of this section is to ensure that any person undertaking activities that result in the disturbance or removal of interior or exterior lead-based paint on pre-1979 buildings, structures and properties and on steel structures uses work practices that minimize or eliminate the risk of lead contamination of the environment.

3425.1.1.2 Intent. The intent of this section is to encourage safe work practices for activities resulting in the disturbance or removal of lead-based paint while providing a reasonable level of health and safety for the occupants and the public at large.

3425.1.1.3 Scope.

3425.1.1.3.1 Interior. The requirements of this section apply to any activity resulting in the disturbance or removal of lead-based paint in the interior of pre-1979 buildings, structures and properties or portions thereof with one of the following occupancy classifications: Group E3 and Group R, Divisions 1, 2, and 3. The requirements of this section with regard to the interior of a facility shall include, but are not limited to, residential-based family child-care facilities licensed by the State of California.

3425.1.1.3.2 Exterior. The requirements of this section apply to any activity resulting in the disturbance or removal of lead-based paint on the exterior of any pre-1979 buildings, structures and properties and any steel structures.

3425.2_ Definitions. Except as otherwise specified herein, the terms used in this section shall have the same meanings as those set forth in Chapter 2 of this code.

ACCREDITED LABORATORY means a laboratory that operates within the EPA National Lead Laboratory Accreditation Program.

ADJACENT PROPERTIES means properties that adjoin the regulated area, including but not limited to properties next to and at the corners of lot lines.

CERTIFIED LEAD INSPECTOR/ASSESSOR means any person licensed or certified by the California Department of Health Services (DHS), as authorized by the United States Environmental Protection Agency (EPA), in accordance with 40 CFR Part 745, subparts L or Q, to perform risk

assessment and/or lead-based paint inspection.

CLEARANCE INSPECTION means an on-site limited investigation using visual observation and sampling techniques performed by an independent certified lead inspector/assessor to verify the absence of lead-based paint hazards, as specified in Title 17, California Code of Regulations, Division 1, Chapter 8: Accreditation, Certification and Work Practices for Lead-Based Paint and Lead Hazards. Any analytical testing of sample(s) collected during such inspection shall be performed by an accredited laboratory.

COMMON AREA means any interior part of a multi-unit residential building that is accessible to all occupants, including but not limited to: corridor, hallways, lobbies, laundry rooms, storage areas, stairways, porches and interior play areas.

CONTAINMENT AND BARRIER SYSTEMS refers to various measures that prevent the migration of work debris beyond the regulated area, and usually includes the use of disposable polyethylene plastic sheeting that is at least 6 mils thick (or two layers each 3 mils thick) to protect the ground, floor or other interior surfaces, and to seal off windows, doors and ventilation openings.

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 lead-based paint. For purpose of this section, "contractor" shall also include subcontractors.

DISTURB OR REMOVE LEAD-BASED PAINT means any action that creates friction, pressure, heat or a chemical reaction upon any lead-based paint on an interior or 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 any 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 without limitations the outside of any detached structures, including but not limited to outside and common walls, stairways, fences, light wells, breezeways, sheds, and garages.

HEPA means a high efficiency particulate air filter.

INTERIOR means the inside of a building, including but not limited to the inside of any detached structures, interior common walls, common areas, and overhangs (projections).

LEAD means metallic lead and all inorganic compounds of lead.

LEAD-BASED PAINT or **LEAD PAINT** means (1) any paint, varnish, shellac, or other coating on surfaces with lead in excess of 1.0 mg/cm² (milligram 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 µg/g (micrograms per gram), or 5,000 mg/kg (milligrams per kilogram) as measured by laboratory analysis; or (2) any paint, varnish, shellac, or other coating found in the interior or on the exterior of pre-1979 buildings, structures, or properties or on the exterior of any steel structures, unless such paint, varnish, shellac or other coating is shown, by a lead-based paint testing, that it does not have the characteristics specified in (1).

LEAD-BASED PAINT TESTING means testing of surfaces, by laboratory analysis of bulk sample or measurement using x-ray fluorescence detector, to determine the presence of lead-based paint performed by an independent certified lead inspector/assessor. Where laboratory analysis is used as a method of testing bulk paint samples, the laboratory shall be an accredited laboratory.

PERSON shall have the same meaning as that defined in Chapter 2 of this code and shall also include any department, agency, or commission of the City and County of San Francisco, and State or federal agencies and departments to the extent allowable by law.

PRE-1979 BUILDING means any building whose original construction was completed on or before December 31, 1978.

PROHIBITED PRACTICES means any work practice that disturbs or removes lead-based paint using any of the following methods: (1) open flame burning or torching; (2) heat guns without containment and barrier systems, or operating above 1,100 degrees Fahrenheit (611.1 degrees Celsius) or causing the charring of paint; (3) hydroblasting or high-pressure washing without containment and barrier systems; (4) dry manual sanding or scraping, or machine sanding or grinding, or abrasive blasting or sandblasting without containment and barrier systems or a HEPA vacuum local exhaust tool.

REGULATED AREA means an area in the interior of any pre-1979 buildings, structures or properties with one of the following occupancy classifications: Group E3 and Group R, Divisions 1, 2, and 3; or on the exterior of any pre-1979 buildings or any steel structures, in which work is being performed that disturbs or removes lead-based paint, and to which access is restricted in order to prevent migration of work debris. "Regulated area" shall also include any area contaminated with work debris as a result of a breach or lack of containment and barrier system, which constitutes a violation of the requirement set forth in Section 3425.4.2.

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.

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.

WORK DEBRIS means any debris, including without limitations paint chips and dust, resulting from any activity that disturbs or removes lead-based paint.

3425.3_ General Prohibitions.

No person shall disturb or remove lead-based paint through the use of prohibited practices, or in any other way that generates work debris during demolition or work on the interior of Occupancy Group E3 and Group R, Divisions 1, 2, and 3 or exterior of any pre-1979 buildings or any steel structure except in accordance with the requirements of this section.

For purposes of this section, all paint on the exterior of any pre-1979 building or any steel structure shall be presumed to be lead-based paint. Any person seeking to rebut this presumption shall establish through lead-based paint testing, or other means satisfactory to the Building Official, that the

paint on the building or steel structure in question is not lead-based paint.

Exemption: Work that disturbs or removes lead-based paint from the interior of an owner-occupied pre-1979 dwelling unit shall be exempted from the requirements for demolition or work on the interior of Occupancy Group R, Divisions 1, 2, and 3, provided that such unit is not a licensed childcare facility. Notwithstanding this exemption, the responsible parties shall take all reasonable measures to prevent the migration of work debris from the interior of the owner-occupied dwelling unit to the outside of such unit which includes, without limitations, any interior common areas and the exterior of the building, during the course of any work that disturbs or removes lead-based paint.

3425.4_ Performance Standards.

3425.4.1 Restrict access. Any person performing work subject to this section shall restrict access by third parties to the regulated area, except as authorized by this section or until the regulated area is cleaned in accordance with Section 3425.4.4.

This subsection shall not apply to regulated areas that are required for access or egress during the course of the work, such as common areas, and where no alternative exists for access or egress, in which case dust generation and migration shall be controlled through the use of HEPA-attached tools or other feasible containment and barrier systems that allow for access or egress.

3425.4.2_ Containment and barrier systems. Any person performing work subject to this section shall establish containment and barrier systems that contains the work debris within the regulated area.

3425.4.2.1 Protect ground. Any person performing exterior work subject to this section shall, to the maximum extent possible, protect the ground from contamination by work debris by laying 6 mil plastic (or two layers each 3 mil thick) on the ground extending at least 10 feet (3048 mm) from the work surface when possible.

3425.4.2.2 Protect floor and furnishings. Any person performing interior work subject to this section shall protect with the use of 6 mil plastic (or two layers each 3 mil thick) any floors and other interior horizontal surfaces, carpets, rugs, drapes, curtains, blinds, shades and furniture in the regulated areas from work debris when it is impracticable to remove such items from the regulated areas during the course of the work.

3425.4.3 Prevent migration. Any person performing work subject to this section shall make all reasonable efforts to prevent the migration of work debris beyond the established containment and barrier systems during the course of the work. Such efforts may include, but are not limited to, providing secure 6 mil plastic (or two layers each 3 mil thick) protective covering, bagging, shrouding, and/or other safe containment and barrier systems to prevent the migration of work debris; covering and sealing any windows, vent openings and doors in the regulated area to prevent migration; and instituting measures to prevent the tracking of dust from the regulated areas.

3425.4.4_ Clean up standards. At the completion of any work that disturbs or removes lead-based paint or when access to the regulated areas are required by State law or local ordinance during the course of such work, the responsible party shall:

3425.4.4.1 For interior work, make all efforts to remove all visible work debris from the regulated areas. Such efforts shall include but are not limited to wet clean with detergent any exposed interior horizontal hard surfaces in the regulated areas and HEPA vacuum the regulated areas.

3425.4.4.2 For exterior work, make all efforts to remove all visible work debris from the regulated areas.

3425.5 Notification Requirements.

3425.5.1 Notification to the Building Official. Except as otherwise authorized by this section, prior to the commencement of exterior work subject to this section, the owner or contractor shall provide written notice to the Building Official, either in person, by U.S. mail or by fax, of the following:

3425.5.1.1 The address and location of the project;

3425.5.1.2 The scope of work, including the specific location of the work to be performed;

3425.5.1.3 The methods and tools for paint disturbance and/or removal;

3425.5.1.4 The approximate age of the building or steel structure;

3425.5.1.5 The anticipated job start and completion dates for work subject to this section;

3425.5.1.6 Whether the building is residential or nonresidential, and whether it is owner-occupied or rental property;

3425.5.1.7 The dates by which the responsible party has or will fulfill any residential occupant or adjacent property notification requirements as described in Sections 3425.5.4, 3425.5.5 and 3425.5.6 below; and

3425.5.1.8 The name, address, telephone number and, if available, pager number of the party who will perform the specified work.

3425.5.1.9 The Building Official shall make available to the public a form containing blank spaces for the information required by Sections 3425.5.1.1 to 3425.5.1.8, inclusive.

3425.5.1.10 In lieu of the submission of the form set forth in Section 3425.5.1.9, the owner or contractor may submit the Lead Work Pre-Job Notification form required by the California Division of Occupational Health and Safety pursuant to Section 1532.1 of Title 8 of the California Code of Regulations.

3425.5.2 De minimi exemption. Any person performing exterior work that disturbs or removes less than 100 square feet or 100 linear feet of lead-based paint in total shall be exempted from the requirements of Section 3425.5.1.

3425.5.3 Sunset. Unless extended by the Board of Supervisors, the requirements of Section 3425.5.1 shall terminate two years from this effective date of this subparagraph.

3425.5.4 Post sign. Not later than the commencement of work subject to this section, the owner or, where the owner has entered into a contract with a contractor to perform work subject to this section, the contractor shall post signs in a location or locations clearly visible at the access points to interior regulated areas, such as at the entrances of the affected residential unit(s) or common areas, and in the case of exterior work, shall post signs in a location or locations clearly visible to adjacent properties stating the following:

**LEAD WORK IN PROGRESS
PUBLIC ACCESS TO REGULATED AREA
PROHIBITED
POSTED IN ACCORDANCE WITH
SF BUILDING CODE SECTION 3425.5.4**

3425.5.5 Requirements for sign. The sign required by Section 3425.5.4 shall be not less than 24 inches (609.6 mm) square and shall be in large boldface capital letters no less than 1/2 inch (12.7 mm) in size. The Building Official shall make available to the public a sign that complies with these requirements and states the required information in English, Chinese and Spanish. The sign required by this section shall remain in place until the work subject to this section has been completed. Where it is not possible to post signs in a conspicuous location or locations clearly visible at the access points to interior regulated areas, such as at the entrances of the affected residential unit(s) or common areas, and in the case of exterior work, in a location or locations clearly visible to the adjacent properties, the owner or, where the owner has entered into a contract with a contractor to perform work subject to this section, the contractor shall provide the notice in written form, such as a letter or memorandum, to the occupants of adjacent properties.

3425.5.6 Notice to residential occupants. Except as may be otherwise inconsistent with state law, where work subject to the requirements of this section is to be performed on a residential property or structure regulated by this section and occupied by one or more residential occupants, not less than three business days before work subject to this section is to commence, the owner shall provide the following information:

3425.5.6.1_ The notice shall be in the form of a sign, letter or memorandum and shall prominently state the following:

Work is scheduled to be performed beginning [date] on this property that may disturb or remove lead-based paint. The persons performing this work are required to follow State and local laws regulating work with lead-based paint. You may obtain information regarding State laws by calling the California Department of Health Services. You may obtain information regarding local laws, or report any suspected violations of these requirements, by calling the San Francisco Department of Building Inspection. In addition, you may obtain information regarding your rights as a tenant under the San Francisco Administrative Code, by calling the San Francisco Rent Stabilization Board. Finally, the owner of this property is required to provide residential occupants with a copy of the U.S. Environmental Protection Agency pamphlet titled “Protect Your Family From Lead-Based Paint in Your Home,” unless the owner has previously provided this pamphlet to residential occupants.

The Building Official shall make available to the public a form that states the required information in English, Chinese and Spanish.

3425.5.7 Early commencement of work. An owner may commence, or may authorize a contractor to commence, work subject to this section less than three business days after providing notices required in Sections 3425.5.6 above when the owner determines that such work must be commenced immediately in order to correct life-safety hazards.

3425.5.8 Early commencement of work requested by residential occupant. Upon written request of residential occupant, an owner may commence, or authorize a contractor to commence, work subject to this section less than three business days after providing notices required in Section 3425.5.6.

3425.6 Inspection and Sampling.

3425.6.1 Authority to inspect. The Building Official is authorized to inspect the interior or exterior of any building or steel structure upon which work subject to the requirements of this section is being performed for the purpose of determining whether the work is being carried out in accordance with the requirements of this section. This inspection authority shall be exercised in accordance with Section 104A.2.3 of this code.

3425.6.2 Response to complaint. Upon receiving a complaint, the Building Official shall (1) review the complaint; (2) determine whether a valid notification form has been filed with the Building Official for the property in compliance with the requirements of Section 3425.5.1; and (3) where deemed necessary by the Building Official, conduct an inspection at the job site within two business days to determine the validity of the complaint.

3425.6.3 Evaluation of complaint. When determining the validity of a complaint, if the Building Official is not able to observe the actual performance of any work practices constituting violations of Sections 3425.3, 3425.4 and/or 3425.5, the Building Official shall investigate and consider the following:

3425.6.3.1 The containment and barrier systems, work measures and work tools being used by the responsible party;

3425.6.3.2 The color(s) of paint being disturbed or removed by the responsible party;

3425.6.3.3 The color(s), quantities, nature and locations of work debris;

3425.6.3.4 The color(s), locations and conditions of paint on buildings or steel structures adjacent to the regulated area, including without limitations adjacent properties, to determine if such paint could be a source of the work debris;

3425.6.3.5 Any work being performed on adjacent properties which could be a source of the work debris; and

3425.6.3.6 A record of clearance inspection of the regulated area performed after the completion of the work regulated under this section or records of any lead-based paint testing performed for the regulated area, if available; and

3425.6.3.7 Any other relevant evidence that the Building Official determines in the exercise of his or her discretion would help to determine whether a violation of this section has occurred.

3425.6.4 Authority of Building Official. The Building Official or the Director of the Department of Public Health may also collect paint, dust and soil samples from the property where the work is being performed and from adjacent properties in order to determine the validity of a complaint. The Building Official shall have the authority to order a clearance inspection of the regulated area if he or she determines that there has been a violation of the requirements of Section 3425.3 or 3425.4.

3425.7 Enforcement. In addition to the enforcement authorities granted to the Building Official by Chapter 1A of this code, whenever the Building Official determines that a violation of the provisions of this section has occurred, the Building Official may assess an administrative penalty against the responsible parties pursuant to Section 3425.8. The notice of penalty shall be served on the party against whom the penalty is being assessed. The notice of penalty shall be final and shall be adopted by the Building Official as a Building Official's Order if the responsible party fails to appeal the notice of penalty as provided for in Subsection 3425.8.

3425.8 Penalties.

3425.8.1 In addition to any other penalties authorized by law, the Building Official may impose administrative penalties for violations of this section. Such penalty shall not exceed \$500 per violation per day. In addition to the administrative penalties assessed pursuant to this section, the Building Official may assess additional fees to cover the reasonable costs incurred in enforcing the administrative penalties. Penalties and fees assessed shall continue to accrue against the responsible party or parties until the violation of this section is abated or otherwise remedied in the judgment of the Building Official. Each day in which the violation continues unabated constitutes a separate and distinct violation.

3425.8.1.1 Use of penalty. Any administrative penalty and fee received by the Treasurer of the City and County of San Francisco shall be placed in the Building Inspection Fund and used to offset the Department's costs in connection with the administration and enforcement of this section.

3425.8.2 Appeal penalty. A responsible party may appeal the imposition of the administrative penalty by requesting, in writing, a Building Official's hearing. Such appeal shall be made within 15 business days from the issuance of the notice of penalty and shall specify grounds for appealing the imposition of the administrative penalty. Upon a timely request for a Building Official's hearing, the Building Official shall conduct an administrative hearing in accordance with Section 3423.9.

3425.8.2.1 Alternative penalty. The Building Official, in his or her discretion, may allow a responsible party found to be in violation of this section to attend a training course approved by the State of California Department of Health Services in lead-related construction supervision and project monitoring in lieu of paying an administrative penalty pursuant to Section 3425.8.1 in which case the penalty is stayed until such time that the responsible party provides proof of satisfactory completion of the course. The Building Official shall require proof of attendance and satisfactory completion of the course, including certification from the instructor or provider of the course before dismissing the penalty assessed against the person. Failure to provide such proof when requested by the Building Official shall result in the reinstatement of the assessed penalty against the responsible party.

3425.8.2.1.1 Applicability. The alternative penalty set forth in Section 3425.8.2.1 shall only be available to persons who have not previously completed such a training course and who have not been previously found by the Building Official to be in violation of this section.

3425.9 Administrative Enforcement Procedures.

3425.9.1 Action by the Building Official. If the responsible parties failed to comply with the notice of violation, Stop Work Order and/or notice of penalty issued pursuant to this code, the Building Official may:

3425.9.1.1 Refer the matter for a hearing in accordance to the provision of this subsection; or

3425.9.1.2 Issue another notice of violation, Stop Work Order, and/or notice of penalty, if appropriate; or

3425.9.1.3 In the case where the responsible party is a contractor, file a complaint with the State Contractor Licensing Board.

3425.9.2 Notice of hearing. Notice of any hearing conducted under this section shall be given in

accordance with Chapter 1A of this code.

3425.9.3 Hearing. Any hearing held pursuant to this section shall be conducted in accordance with Chapter 1A of this code.

3425.9.4 Decision. Except as otherwise provided for in this subsection, any decision issued pursuant to this subsection shall be issued in accordance with Chapter 1A of this code.

3425.9.4.1 Where the order imposes administrative penalties, the order shall apprise the responsible parties of their rights to seek judicial review in the Superior Court of San Francisco pursuant to Section 1094.6 of the California Code of Civil Procedure.

3425.9.5 Posting and service of order. The Building Official's order shall be posted and served in accordance with Chapter 1A of this code.

3425.9.4 Appeal of order. Any person may appeal the nonmonetary portion of the Building Official's order issued pursuant to Section 3425.9.4, provided that such appeal is in writing and filed with the Abatement Appeals Board pursuant to Chapter 1A of this code. Upon the determination of the Clerk of the Abatement Appeals Board that all requirements to make an appeal have been met, the monetary portion of the Building Official's order shall be stayed pending the appeal.

3425.9.6.1 A responsible party against whom administrative penalties are imposed may seek judicial review of the monetary portion of the order by filing a writ of mandate with the Superior Court of San Francisco pursuant to Section 1094.6 of the California Code of Civil Procedure.

3425.9.7 Referral to the City Attorney's Office. If the responsible parties fail to comply with a final and nonappealable order, the Building Official may refer the order to the City Attorney's Office for civil prosecution. In any action brought by the City Attorney's Office to enforce a final and nonappealable order, the responsible party shall be liable for all costs and fees including, but are not limited, to attorneys fees incurred by the City.

3425.10 Miscellaneous.

3425.10.1 Method of service. Unless otherwise specified, any notices and orders issued pursuant to this section shall be served in accordance with Chapter 1A of this code.

3425.10.2 Proof of service. The person serving the notice or order as provided herein shall file an affidavit or declaration thereof under the penalty of perjury, certifying the time and manner in which such notice was given. Such person shall also file therewith any receipt card of such notice or order if service was performed by certified mail.

3425.11 Remedies and Enforcement by City Officials.

3425.11.1 No obligation by City. In undertaking the enforcement of this section, the City and County of San Francisco is assuming an undertaking only to promote the general welfare. It is not assuming, nor is it imposing on its officers and employees, an obligation for breach of which it is liable in money damages to any person who claims that such breach proximately caused injury.

3425.11.2 Discretionary duty. Subject to the limitations of due process, notwithstanding any other provision of this section, whenever the words "shall" or "must" are used in establishing a responsibility or duty of the City, its elected or appointed officers, employees or agents, it is the

legislative intent that such words establish a discretionary responsibility or duty requiring the exercise of judgment and discretion.

3425.12 Severability. If any section, paragraph, sentence, clause or phrase of this section is for any reason held to be unconstitutional, invalid or ineffective by any court of competent jurisdiction, such decision shall not affect the validity or effectiveness of the remaining portions of this section. The Board of Supervisors declares that it would have passed each section, paragraph, sentence, clause or phrase of this section irrespective of the fact that any portion of this section could be declared unconstitutional, invalid or ineffective.

3426 Add the following section:

SECTION 3426 – ASBESTOS INFORMATION AND NOTICE

3426.1 Definitions. For the purpose of this section the following definitions shall apply:

ASBESTOS means naturally occurring fibrous hydrated mineral silicates, chrysotile, crocidolite, amosite, fibrous tremolite, fibrous anthophyllite and fibrous actinolite.

ASBESTOS-CONTAINING CONSTRUCTION MATERIAL means any manufactured construction material, including structural, mechanical and building material, which contains more than one percent asbestos by weight.

ASBESTOS-RELATED WORK means any activity which by disturbing asbestos-containing construction materials may release asbestos fibers into the air and which is not related to its manufacture, the mining or excavation of asbestos-bearing ore or materials, or the installation or repair of automotive materials containing asbestos.

MISCELLANEOUS MATERIAL means interior building material on structural components, structural members or fixtures, such as floor and ceiling tiles, and does not include surfacing material or thermal system insulation.

NONRESIDENTIAL BUILDING means any building as defined in this code except:

1. A building which is used exclusively as a single-dwelling unit or multiple-dwelling units and is not occupied as a mixed residential-commercial use;
2. A building owned or operated by the state or federal government and exempt from the building permit requirements under Section 106A.2;
3. A school building as defined in 15 U.S.C. 2642.

SURFACING MATERIAL means material in a building that is sprayed-on, troweled-on or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members or other materials on surfaces for acoustical, fireproofing or other purposes.

THERMAL SYSTEM INSULATION means material in a building applied to pipes, fittings, boilers, breeching, tanks, ducts or other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes.

TRANSFER OF TITLE means the conveyance of title to real property by one or more persons as

a result of sale or exchange, and including the execution of a real property sales contract as defined in Section 2985 of the California Civil Code and any change in ownership described in subdivisions (c) and (h) of Section 61 and subdivision (c) of Section 64 of the California Revenue and Taxation Code, with the following exceptions:

1. Transfers pursuant to court order, including, but not limited to, transfers ordered by a probate court in administration of an estate, transfers pursuant to a writ of execution, transfers by a trustee in bankruptcy, transfers by eminent domain or transfers resulting from a decree for specific performance;
2. Transfers to a mortgage by a mortgagor in default, transfers to a beneficiary of a deed of trust by a trustor in default, transfers by any foreclosure sale after default in an obligation secured by a mortgage, or transfer by a sale under a power of sale after a default in an obligation secured by a deed of trust or secured by any other instrument containing a power of sale;
3. Transfers by a fiduciary in the course of the administration of a guardianship, conservatorship or trust;
4. Transfers from one co-owner to one or more co-owners;
5. Transfers made to a spouse, or to a person or persons in the linear line of consanguinity of one or more of the transferors;
6. Transfers between spouses resulting from a decree of dissolution of a marriage or a decree of legal separation or from a property settlement agreement incidental to such decrees;
7. Transfers by the State Controller in the course of administering the Unclaimed Property Law, Chapter 7 (commencing with Section 1500) of Title 10 of Part 3 of the Code of Civil Procedure;
8. Transfers under the provisions of Chapter 7 (commencing with Section 3691) and Chapter 8 (commencing with Section 3771) of Part 6 of Division 1 of the Revenue and Taxation Code;
9. Transfers resulting by operation of law;
10. Transfers by which title to real property is reconveyed pursuant to a deed of trust.

3426.2 Asbestos Information Notice.

3426.2.1 Nonresidential disclosure. The seller of any nonresidential building, except a nonresidential building for which a building permit to erect the structure was filed with the Department on or after January 1, 1979, shall disclose to the buyer, prior to transfer of title, what efforts, if any, the seller has made to determine if the building contains asbestos-containing construction materials and provide relevant documentation of these efforts.

3426.2.2_ Knowledge of seller. The seller of any nonresidential building, except a nonresidential building for which a building permit to erect the structure was filed with the Department on or after January 1, 1979, who knows that the nonresidential building contains asbestos-containing construction materials, shall provide notice to the buyer prior to transfer of title of the following:

1. The existence of, conclusions from and a description or list of the contents of any survey conducted to determine the existence and location of asbestos-containing construction materials within

the nonresidential building. The seller shall provide copies of any documentation of the final survey results, including any documentation of the inspector's, laboratory's or consultant's asbestos inspection qualifications and state certification.

2. Locations within the nonresidential building identified by the survey or known to the seller where asbestos-containing construction materials in the form of surfacing material, thermal system insulation or miscellaneous material are present.

3. Any final operation and management plans prepared for the seller by consultants, agents or employees of the seller identifying procedures or handling restrictions to minimize or prevent disturbance, release or exposure to the asbestos-containing construction material.

4. Results of any bulk sample analysis or air monitoring conducted for or by the seller or within the seller's control, including reference to sampling and laboratory procedures utilized, and copies of the laboratory reports, monitoring data and sampling procedures.

5. Information in a final survey or other document prepared for the seller by consultants, agents or employees of the seller that (a) assesses the condition of asbestos-containing construction material in the form of surfacing material, thermal system insulation or miscellaneous material; or (b) evaluates the potential for exposure to building occupants.

3426.3 Asbestos-Related Work Sign Posting and Affidavits. In addition to any other requirements for notice set forth in this code, any person filing an application for a building permit to perform work in an apartment house or a residential hotel [as defined in Section 41.4(p) of the San Francisco Administrative Code], which work includes asbestos-related work as defined in this code, shall comply with the following requirements:

3426.3.1 Sign posting. Prior to commencement and for the duration of any asbestos-related work, post a sign readable at 20 feet (6.096 m) at each noncontiguous location where any asbestos-related work is performed in the apartment house or residential hotel, or in any appurtenant buildings thereto and facilities supplied in connection with the use or occupancy thereof, including garage and parking facilities, stating "Danger - Asbestos. Cancer and Lung Hazard. Keep Out." Notwithstanding this requirement, if an owner or contractor of the owner subject to the requirements of California Labor Code Sections 6501.5 et seq., and regulations promulgated pursuant thereto, is in compliance with the requirements for posting locations of asbestos-related work, such owner or contractor shall be deemed to have complied with this requirement.

3426.3.2 Time of posting. Unless the requirement for plans and specifications is waived by the Building Official of the Department pursuant to Section 106A.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:

1. 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.

3426.3.2.1_ Affidavits. The applicant shall thereafter submit an affidavit signed under penalty of perjury stating that the notice has been posted in the building or mailed or personally delivered to each person who rents or leases residential space in the building. See Section 110A, Schedule 1A-L – Affidavit Record Maintenance, for fee to defray the cost of maintaining records of said affidavits. If there is reason to believe that the notice was not posted, mailed or personally delivered as required, the Building Official shall investigate the matter, shall provide the applicant an opportunity to respond to any complaint of noncompliance, shall determine whether the requirements of this section have been substantially met and shall revoke the permit if it is determined they have not been substantially met.

3426.3.3_ Apartment house and residential hotel exclusions. Notwithstanding the definitions of apartment house or residential hotel [as defined in Section 41.4(p) of the San Francisco Administrative Code], those terms shall not include:

1. Any “school building” as defined in 15 U.S.C. Section 2642 as that section read on January 1, 1989;

2. Any “building” as defined in California Health and Safety Code Section 25920, as that section read on September 27, 1989; or

3. The residential area of any multi-use building where the asbestos-related work is to occur solely in a commercial area, the commercial and residential areas of the building do not share supply air or return air handling systems, and the commercial area does not contain facilities supplied in connection with the use or occupancy of the residential area.

NOTE: Contact Bay Area Air Quality Management District for pre-permit requirements for demolition and alteration work and other requirements for asbestos related work.

Chapter 34A
EXISTING STRUCTURES

No San Francisco Building Code Amendments

Chapter 35
REFERENCED STANDARDS

No San Francisco Building Code Amendments

Chapter 36
CALIFORNIA RESIDENTIAL CODE (CRC)

(CRC) CHAPTER 1
SCOPE AND APPLICATION

Replace this chapter with Chapter 1 & 1A of the San Francisco Building Code.

See Chapter 1A for the Administration provisions of the San Francisco Building Code.

(CRC) CHAPTER 2
DEFINITIONS

Replace this chapter with Chapter 2 through 35 of the San Francisco Building Code.

(CRC) CHAPTER 3
BUILDING PLANNING

Replace this chapter with Chapter 2 through 35 of the San Francisco Building Code

(CRC) CHAPTER 4
FOUNDATIONS

Replace this chapter with Chapter 2 through 35 of the San Francisco Building Code

(CRC) CHAPTER 5
FLOORS

Replace this chapter with Chapter 2 through 35 of the San Francisco Building Code

(CRC) CHAPTER 6
WALL CONSTRUCTION

Replace this chapter with Chapter 2 through 35 of the San Francisco Building Code

(CRC) CHAPTER 7
WALL COVERING

Replace this chapter with Chapter 2 through 35 of the San Francisco Building Code

(CRC) CHAPTER 8
ROOF CEILING CONSTRUCTION

Replace this chapter with Chapter 2 through 35 of the San Francisco Building Code

**(CRC) CHAPTER 9
ROOF ASSEMBLIES**

Replace this chapter with Chapter 2 through 35 of the San Francisco Building Code

**(CRC) CHAPTER 10
CHIMNEYS AND FIREPLACES**

Replace this chapter with Chapter 2 through 35 of the San Francisco Building Code

**(CRC) CHAPTER 44
REFERENCED STANDARDS**

Replace this chapter with Chapters 35 of the San Francisco Building Code

**(CRC) APPENDIX A
SIZING AND CAPACITIES OF GAS PIPING**

This appendix is not adopted in San Francisco

**(CRC) APPENDIX B
SIZING OF VENTING SYSTEMS SERVING APPLIANCES EQUIPED WITH DRAFT HOODS,
CATEGORY 1 APPLIANCES, AND APPLIANCES LISTED FOR USE WITH TYPE B VENTS**

This appendix is not adopted in San Francisco

**(CRC) APPENDIX C
EXIT TERMINALS OF MECHANICAL DRAFT AND DIRECT-VENT VENTING SYSTEMS**

This appendix is not adopted in San Francisco

**(CRC) APPENDIX D
RECOMMENDED PROCEDURE FOR SAFETY INSPECTION OF AN EXISTING APPLIANCE
INSTALLATION**

This appendix is not adopted in San Francisco

**(CRC) APPENDIX E
MANUFACTURED HOUSING USED AS DWELLINGS**

This appendix is not adopted in San Francisco

**(CRC) APPENDIX F
RADON CONTROL METHODS**

This appendix is not adopted in San Francisco

**(CRC) APPENDIX G
SWIMMING POOLS, SPAS AND HOT TUBS**

This appendix is not adopted in San Francisco

**(CRC) APPENDIX H
PATIO COVERS**

Replace this chapter with Appendix I of the San Francisco Building Code

**(CRC) APPENDIX I
PRIVATE SEWAGE DISPOSAL**

This appendix is not adopted in San Francisco

**(CRC) APPENDIX J
EXISTING BUILDINGS AND STRUCTURES**

This appendix is not adopted in San Francisco

**(CRC) APPENDIX K
SOUND TRANSMISSION**

This appendix is not adopted in San Francisco

**(CRC) APPENDIX L
PERMIT FEES**

This appendix is not adopted in San Francisco

**(CRC) APPENDIX M
HOME DAY CARE R-3 OCCUPANCY**

This appendix is not adopted in San Francisco or applicable in California

(CRC) APPENDIX N

VENTING METHODS

This appendix is not adopted in San Francisco

(CRC) APPENDIX O
GRAY WATER RECYCLING SYSTEMS

This appendix is not adopted in San Francisco

(CRC) APPENDIX P
SIZING OF WATER PIPING SYSTEM

This appendix is not adopted in San Francisco

(CRC) APPENDIX Q
ICC INTERNATIONAL RESIDENTIAL CODE ELECTRICAL PROVISIONS/NATIONAL
ELECTRICAL CODE CROSS-REFERENCE

This appendix is not adopted in San Francisco

(CRC) APPENDIX R
AREAS PROTECTED BY THE FACILITIES OF THE CENTRAL VALLEY FLOOD PROTECTION
PLAN

Replace this chapter with Appendix K of the San Francisco Building Code

**(CBC) APPENDIX A
EMPLOYEE QUALIFICATIONS**

This appendix is not adopted in San Francisco

**(CBC) APPENDIX B
BOARD OF APPEALS**

This appendix is not adopted in San Francisco

**(CBC) APPENDIX C
GROUP U-AGRICULTURAL BUILDINGS**

No San Francisco Building Code Amendments

**(CBC) APPENDIX D
FIRE DISTRICTS**

This appendix is not adopted in San Francisco

**(CBC) APPENDIX E
RESERVED**

This appendix is not adopted in San Francisco

**(CBC) APPENDIX F
RODENT PROFFING**

This appendix is not adopted in San Francisco

**(CBC) APPENDIX G
FLOOD-RESISTANT CONSTRUCTION**

This appendix is not adopted in San Francisco

**(CBC) APPENDIX H
SIGNS**

This appendix is not adopted in San Francisco

**(CBC) APPENDIX I
PATIO COVERS**

No San Francisco Building Code Amendments

Appendix J
GRADING

San Francisco adopts Appendix J as amended below for grading in San Francisco

SECTION J103 – PERMITS REQUIRED

J103.2 Add the following five exemptions:

- 8. Grading performed incidental to and in connection with the construction of a building or structure on a single lot, pursuant to a valid building permit issued therefor. The cost of such grading shall be included in the total valuation of the building for determining permit fees, and a separate grading permit will not be required.**
- 9. Grading necessary for and incidental to and in connection with the construction of any parks, public streets or roadways, or the construction of sewers, or utilities under or within the boundaries of such roadways or streets when such work is under the direct supervision of the Recreation and Park Department, the Department of Public Works, the Public Utilities Commission or other governmental agencies.**
- 10. Grading operations which in the opinion of the Building Official are of such a minor nature that the proposed work will not affect the adjoining land, or any existing structures, either those on the same or adjoining land. For such grading operations, the requirements of this chapter may be waived in whole or in part.**
- 11. An excavation that (1) is less than 2 feet (610 mm) in depth or (2) does not create a cut slope greater than 5 feet (1524 mm) in height and steeper than 1 unit vertical in 1 1/2 units horizontal (66.7% slope).**
- 12. A fill less than 1 foot (305 mm) in depth and placed on natural terrain with a slope flatter than 1 unit vertical in 5 units horizontal (20% slope) or less than 3 feet (914 mm) in depth not intended to support structures, that does not exceed 50 cubic yards (38.3 m³) on any one lot and does not obstruct a drainage course.**

SECTION J104 – PERMIT APPLICATION AND SUBMITTALS

J104.3 Replace the Exception as follows:

Exception: ~~A geotechnical report is not required where the building code official determines that the nature of the work applied for is such that a report is not necessary.~~ **Grading conforming to all of the following requirements:**

- 1. No cut section is greater than 10 feet (3.048 m) in vertical height.**
- 2. No cut slope is steeper than 2 horizontal to 1 vertical.**
- 3. The tops of cut banks are separated from any structure or major improvement by a distance, measured horizontally, equal to not less than the height of the bank.**

4. Not more than 5,000 cubic yards (3825 m³) shall be involved in grading.
5. Grading performed at a site outside the limits of known slide areas.

All other grading shall require soils report and the grading plans shall include, but not limited to, the following information:

- (1) The design of retaining walls or other structures used to support cuts or fills. Such retaining walls or structures, except when part of a building, may be constructed under this permit, provided the cost of same is included in the valuation shown on the application.
- (2) The sequencing of cut and fill operations in a manner that assures interim stability of the site.

SECTION J106 – EXCAVATIONS

J106.1 Delete the exceptions in this section as follows:

J106.1. Maximum slope. The slope of cut surfaces shall be no steeper than is safe for the intended use, and shall be no steeper than two units horizontal to one unit vertical (50-percent slope) unless the owner or authorized agent furnishes a geotechnical report justifying a steeper slope.

Exceptions:

1. A cut surface shall be permitted to be at a slope of 1.5 units horizontal to one unit vertical (67 percent slope) provided that all of the following are met:
 - 1.1 It is not intended to support structures or surcharges.
 - 1.2 It is adequately protected against erosion.
 - 1.3 It is no more than 8 feet (2438 mm) in height.
 - 1.4 It is approved by the building code official.
 - 1.5 Ground water is not encountered.
2. A cut surface in bedrock shall be permitted to be at a slope of one unit horizontal to one unit vertical (100-percent slope).

SECTION J109 – DRAINAGE AND TERRACING

J109 Add the following section:

J109.5 Surface Drainage. All areas which are surfaced with asphalt, concrete or other paving of similar imperviousness, and which exceed a total area of 200 square feet (18.58 m²), shall have storm- and casual water drained directly to a public sewer or storm drain.

Drainage shall not be directed to flow onto adjacent property or to drain onto public sidewalks. See Section 1503.4 for roof drainage.

J112 Add a section as follows:

SECTION J112 – GRADING FEES

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

(CBC) APPENDIX K
GROUP R-3 AND GROUP R-3.1 OCCUPANCIES PROTECTED BY THE FACILITIES OF THE
CENTRAL VALLEY FLOOD PROTECTION PLAN

No San Francisco Building Code Amendments