#### SECTION 000 — TITLE OF SECTION

# Chapter 1 SCOPE AND ADMINISTRATION

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# **Chapter 2 – DEFINITIONS SECTION 202 – GENERAL DEFINITIONS**

#### **SECTION 202 – GENERAL DEFINITIONS**

Revise this definition as follows:

SUBSTANTIAL STRUCTURAL ALTERATION. An alteration in which the gravity load-carrying structural elements altered [←] since the original construction support more than 30 percent of the total floor and roof area of the building or structure. The areas to be counted toward the 30 percent shall include mezzanines, penthouses, and in-filled courts and shafts tributary to the altered structural elements.

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## **Chapter 3 PROVISIONS FOR ALL COMPLIANCE METHODS**

# SECTION 303 304 – STRUCTURAL DESIGN LOADS AND EVALUATION AND DESIGN PROCEDURES

<del>303.3.2</del> <u>304.3.2</u> Revise item 2 as follow: 1

- 303.3.2 Compliance with reduced seismic forces. Where seismic evaluation and design is permitted to use reduced seismic forces, the criteria used shall be in accordance with one of the following:
- 2. Except where these requirements are triggered by Section 503.11, structures or portions of structures that comply with the requirements of the applicable chapter in Appendix A as specified in Items 2.1 through 2.5 and subject to the limitations of the respective Appendix A chapters shall be deemed to comply with this section.

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#### SECTION 303.4 304.4 - Minimum Lateral Force for Existing Buildings.

303.4 304.4 Add the following sections:

303.4 304.4 Minimum Lateral Force for Existing Buildings.

**303.4.1 304.4.1 General.** This section is applicable to existing buildings when invoked by SFEBC Section 503. 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 the dates shown in Table 303.4.1 304.4.1 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. Where multiple building types apply, the later applicable date shall be used. Where none of the building types apply, compliance shall be at the discretion of the Director. Building type definitions are given in ASCE 41, Table 3-1.

TABLE 303.4.1 <u>304.4.1</u> – DATES REQUIRED TO DEMONSTRATE BUILDING COMPLIANCE

•

303.4.2 Wind forces. Buildings and structures shall be capable of resisting wind forces as prescribed in San Francisco Building Code Section 1609.

303.4.3 Seismic forces. Buildings and structures shall comply with the reduced seismic forces, as defined in Section 303.3.2 304.3.2. The building separation limitations of Section ASCE 7-16 Section 12.12.3 need not be considered.

When upper floors are exempted from compliance by Section <u>503</u>.11.1, 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.

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# SECTION 314 – EXISTING HIGH-RISE BUILDINGS [SFM]

314.27 Revise this section as follows:

314.27 Automatic sprinkler system – Existing high-rise buildings.

314.27.1 General. Regardless of any other provisions of ← Ithis code, every existing highrise building as defined in San Francisco Building Code Chapter 2shall 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.

•

- **314.27.3 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 San Francisco Building Code Section <u>903</u>.3.1.1.1 for additional permissible sprinkler omissions.

. . . .

- **314.27.7 Appeal of high-rise sprinkler requirements.** Application may be made to the Board of Examiners in accordance with San Francisco Building Code Section <u>105A</u>.1 for approval of alternate methods, materials or types of construction or for variances from the provisions of this section.
- **314.27.8 Implementation.** The requirements stated in Section <u>314</u>.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 San Francisco Building Code Section <u>102A</u>.

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# SECTION 326 – EXISTING BUILDINGS OR OTHER STRUCTURES LOCATED ON A MILITARY BASE SELECTED FOR CLOSURE

326 Add the following section:

# SECTION 326 – EXISTING BUILDINGS OR OTHER STRUCTURES LOCATED ON A MILITARY BASE SELECTED FOR CLOSURE

**326.1 General.** As authorized by Assembly Bill 1644 California Military Base Reuse and Preservation Act of 2012, 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:

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# SECTION 327 – WORK PRACTICES FOR LEAD-BASED PAINT ON PRE-1979 BUILDINGS AND STEEL STRUCTURES

327 Add the following section:

# SECTION 327 – WORK PRACTICES FOR LEAD-BASED PAINT ON PRE-1979 BUILDINGS AND STEEL STRUCTURES

**327.1 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.

. . .

**327.6.1 Authority to inspect.** The Director 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 San Francisco Building Code Section 104A.2.3.

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# SECTION 328 – ASBESTOS INFORMATION AND NOTICE

328 Add the following section:

**328.1 Definitions.** For the purpose of this chapter the following definitions shall apply: *ASBESTOS* means naturally occurring fibrous hydrated mineral silicates, chrysotile, crocidolite, amosite, fibrous tremolite, fibrous anthophyllite and fibrous actinolite.

**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 San Francisco Building Code Section <u>106A</u>.2;

328.3.2 Time of posting. Unless the requirement for plans and specifications is waived by the Director of the Department pursuant to San Francisco Building Code 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:

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# SECTION 329 – EARTHQUAKE EVALUATION OF PRIVATE SCHOOL STRUCTURES

329 Add the following section:

**329.1** General. Every building classified as an Educational Group E occupancy under San Francisco Building Code Section 305 of this code that is not under the jurisdiction of the Division of State Architect's Structural Safety section, and all non-building structures accessory to such buildings, shall be evaluated in accordance with the provisions of this Section 329. All evaluations required by Section 329 shall be conducted under the supervision of a licensed structural engineer.

. . .

**329.7** Enforcement. Buildings and non-building structures in violation of this Section 329 may be considered to be unsafe. The Department may apply the provisions of San Francisco Building Code Section 102A, including 102A.13, Repair and Demolition Fund, in remedying such unsafe conditions. Enforcement action may be initiated by the Department for failure to comply with any of the requirements of Section 329, including failure to submit an Evaluation Scope document or Evaluation Report within the time designated by Sections 329.3 and 329.4.

**329.8** Fees. Fees based on standard hourly rates in accordance with the SFBC Table 1A-D – Standard Hourly Rates shall be charged to compensate the Department for review and for related evaluation processing.

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#### 405.2 Repairs to damaged buildings.

405.2 Revise this section as follows:

**405.2 Repairs to damaged buildings.** Repairs to damaged buildings shall comply with this section. 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 <u>303.4</u> <u>304.4</u> 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."

405.2.1.2 Add the following section:

**405.2.1.2 Other damage.** For damage less than substantial structural damage that is not Disproportionate Earthquake Damage, repairs shall be allowed that restore the building to its predamage state, based on material properties and design strengths applicable at the time of original construction. New structural members and connections used for this repair shall comply with the detailing provisions of this code for new buildings of similar structure, purpose and location.

405.2.2 Add the following as a second paragraph:

## 405.2.2 Disproportionate earthquake damage.

Permit applications for required rehabilitation work shall be submitted to the Department within one year after the earthquake, and the work shall be completed as specified in Table B of San Francisco Building Code Section 106A.4.4.

405.2.3.1 Revise this section as follows:

**405.2.3.1 Evaluation.** The building shall be evaluated by a registered design professional, and the evaluation findings shall be submitted to the code official within 60 days of completion of the evaluation. The evaluation shall establish whether the damaged building, if repaired to its predamage state, would comply with the provisions of  $[\leftarrow]$  this code for  $[\leftarrow]$  wind  $[\leftarrow]$  and earthquake  $[\leftarrow]$  loads. Evaluation for earthquake loads shall be

required if the substantial structural damage was caused by or related to earthquake effects or if the building is in Seismic Design Category C, D, E or F.

Wind loads for this evaluation shall be those prescribed in San Francisco Building Code Section 1609. Earthquake loads for this evaluation, if required, shall be according to section 303.4 304.4.

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# **SECTION 501 – GENERAL**

501.1.3 Add the following section:

## 501.1.3 Additions, alterations, or repairs to buildings, structures and property.

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 501.4 501.6 for provisions requiring installation of smoke detectors in existing Group R, Division 3 Occupancies.

501.4 501.6 Add the following section:

501.4 501.6 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 San Francisco Building Code Section 907.

**EXCEPTION:** Repairs to the exterior surfaces of a Group R Occupancy are exempt from the requirements of this section.

501.5 501.7 Add the following section:

501.5 501.7 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 San Francisco Building Code 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.

501.6 501.8 Add the following section:

**501.6 501.8 Fire alarm systems.** For all buildings that are required to have a fire alarm system under this Code, the Fire Code, the Housing Code, or any other law, the building owner shall upgrade the fire alarm system, if necessary, to comply with the sound level requirement for sleeping areas set forth in Section 18.4.5.1 of NFPA 72, as amended from time to time, upon either (a) completion of work under a building permit with a cost of construction of \$99,000 or more, (b) July 1, 2023, whichever occurs first.

*Exception.* Subsection 501.6(a) 501.8(a) shall not apply to mandatory seismic strengthening alterations being performed pursuant to Chapter 5E of this Code, or to transient Hotels within the Residential Group R-1 Occupancy Classification of Section 310.2 of the Building Code. (Am. Ord. 77-21, File No. 210259, App. 5/28/2021, Eff. 6/28/2021) 501.7 501.9 Add the following section:

**501.7 501.9 Open, accessible attics.** When performing additions, alterations, or repairs in Group 3 R occupancies of six units or more under a building permit with a cost of construction

of \$50,000 or more, fire blocks, draftstops, or fire safing insulation (approved noncombustible material used as a fire barrier) shall be installed in open attics of 30 inches in height or greater that are accessible from other than an occupied residential unit.

*Exception.* This requirement shall not apply to mandatory seismic strengthening alterations being performed pursuant to <a href="Chapter 5E">Chapter 5E</a> of this Code.

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# **SECTION 502 – ADDITIONS**

502.9 502.10 Add the following section:

502.9 502.10 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 San Francisco Building Code Section 403 shall comply with the provisions of that section.

502.10 502.11 Add the following section:

**502.10 502.11 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 ASCE 7-16 Section 12.12.3, the entire structure shall comply with Section 303.4 304.4.

For the purpose of this Section <u>502.10</u> <u>502.11</u>, the term "original building or structure" shall mean the building or structure as it existed on the force based trigger date per IEBC. The combined building or structure may be used for more restrictive occupancy classifications as determined in San Francisco Building Code <u>Chapter 3</u> only when the structure as a whole meets the requirements in this code for such occupancy.

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# **SECTION 503 – ALTERATIONS**

503.1.1 Add the following section:

**503.1.1 Stairways.** For stairway replacement, see San Francisco Building Code Section 1011.12.3.

503.11 Revise this section as follows:

**503.11 Substantial structural alteration.** Where  $[\leftarrow]$  work involves a substantial structural alteration, the lateral load-resisting system of the altered building shall satisfy the requirements of Sections 1609 and 1613 of the  $[\leftarrow]$  San Francisco Building Code. Reduced seismic forces shall be permitted.

#### **Exceptions:**

- 1. Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes that are altered based on the conventional light-frame construction methods of the  $\lceil \leftarrow \rceil$  San Francisco Building Code.  $\lceil \leftarrow \rceil$
- 2. Where the intended alteration involves only the lowest story of a building and Section <u>506</u> does not apply, only the lateral load-resisting components in and below that story need comply with this section.

503.11.1 Add the following section:

**503.11.1 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 <u>303.4 304.4</u>. 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.

Removal and replacement of interior gypboard or plaster in Type V (wood framed) R3 occupancy (one or two residential units) is not to be considered as "Substantial Change".

The replacement gypboard must be 5/8" Type X with 5d cooler nails @ 4 inches on center or equivalent screws.

503.17 503.19 *Add the following section:* 

503.17 503.19 Mandatory Seismic Retrofit. Submittal documents shall include plans indicating locations and construction of existing, new and modified building elements used to comply with Chapter 5E.

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# SECTION 506 – CHANGE OF OCCUPANCY

506.4.3 506.5.3 Revise this section as follows:

506.4.3 Seismic loads (seismic force-resisting system). Where a change of occupancy results in a building being assigned to a higher risk category, or where the occupant load of the entire building or structure is increased by more than 10 percent and 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 permitted, the building shall  $[\leftarrow]$  comply with Section 303.3.1 for the new risk category using full seismic forces.

#### **Exceptions:**

- 1. [←] Unreinforced masonry bearing wall buildings assigned to Risk Category III and to Seismic Design Category A or B, shall be permitted to use Appendix Chapter A1 of this code.
- 2. [ $\leftarrow$ ] 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 reduced seismic forces in Section  $\frac{303.3.2}{304.3.2}$ .
- 3. [←] 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 reduced seismic forces in Section 303.3.2 304.3.2 as provided in Exception 2 above.

A building changing occupancy to an E occupancy, and is otherwise subject to Section  $\underline{329}$ , shall comply with Section  $\underline{329}$ .

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# **SECTION 508 – MOVED STRUCTURES**

Add the following sections:

## **SECTION 508 – MOVED STRUCTURES**

**508.1 Conformance.** Structures moved into or within the jurisdiction shall comply with the provisions of the San Francisco Building Code for new structures.

**508.2 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.

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# Chapter 5B EARTHQUAKE HAZARD REDUCTION IN UNREINFORCED MASONRY BEARING WALL BUILDINGS

(**NOTE:** The time limits for compliance with the provisions of <u>Chapters 5B</u> and  $\underline{5C}$  have passed, but the ordinance and the time limits therein are still in effect.)

# **SECTION 501B - 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 <u>Chapter 5C</u>.

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# **SECTION 502B - SCOPE**

## **SECTION 502B – SCOPE**

The provisions of this chapter shall apply to all existing buildings having one or more bearing walls of unreinforced masonry as defined in <a href="#">Chapter 5C</a>.

#### **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 SFEBC Section 303.4 304.4 in effect on or after May 21, 1973.

Compliance with the provisions of <u>Chapters 5B</u> and <u>5C</u> does not supersede the requirement for compliance with SFEBC Section <u>303.4</u> <u>304.4</u> when otherwise required under SFEBC.

A permit issued solely for compliance with any of the procedures of <u>Chapters 5B</u> and <u>5C</u> of this code shall not be considered "substantial change" or "structural work" as defined in SFEBC and compliance with SFEBC Section 303.4 304.4 will not be required.

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#### **SECTION 503B – DEFINITIONS**

For the purpose of <u>Chapters 5B</u> and <u>5C</u>, 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-feet 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.

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## **SECTION 504B – COMPLIANCE REQUIREMENTS**

**504B.1 General.** The owner of each unreinforced masonry bearing wall building within the scope of this chapter and <u>Chapter 5C</u> 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 <u>Chapters 5B</u> and <u>5C</u>, 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.

**504B.2 Program Implementation.** The requirements stated in Section <u>504B</u>.1 above shall be accomplished by submitting to the Building Official the following:

**504B.2.1 Inventory form.** The owner is required to submit to the Department, within the time limits set forth in Table 5B-A, a properly completed inventory form, signed and sealed by the owner's civil or structural engineer or architect. See San Francisco Building Code Section <u>110A</u>, 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 5B-A is a violation of this code.

#### 504B.2.2 Risk assessment.

**504B.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.

#### 504B.2.2.2 Level of risk assigned.

- 1. Level 1 buildings are buildings containing Groups 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 5B-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.
- **504B.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 Building Official 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 <u>Chapters 5B</u> and <u>5C</u> 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 509C.2 is proposed, the necessary measures for compliance with the Special Procedure

of Section 511C 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 San Francisco Building Code Section 104A.2.1 after consultation with the Seismic Safety Retrofit Bond Program Board. See San Francisco Building Code Section 110A, Table 1A-S for the applicable fee for the review of the engineering report.

**504B.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 5B-A.

**504B.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 5B-A. **504B.2.6** Transfer of title. No transfer of title shall alter the time limits for compliance set forth in Table 5B-A.

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#### SECTION 505B – ADMINISTRATION

505B.1 Service of Notice. The ordinance enacting Chapters 5B and 5C that the Building Official, not later than February 15, 1993, issue a notice to comply with Section 504B.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. The enacting ordinance further provided that if, on or before February 15, 1993, an owner of an unreinforced masonry bearing wall building had 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 would not relieve the owner of the obligation to comply with the provisions of Chapters 5B and 5C within the time limits set forth in Table 5B-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 had no knowledge that the buildings are unreinforced masonry bearing wall buildings, the ordinance provided that the time limits set forth in Table 5B-A shall commence upon the owners having actual or constructive knowledge that their buildings are unreinforced masonry bearing wall buildings.

The time limits for compliance with the provisions of this <u>Chapter 5B</u> and <u>Chapter 5C</u> have passed, however the compliance requirements are still in effect. As provided above, for those buildings within the scope of <u>Chapters 5B</u> and <u>5C</u> not known to the Department to be unreinforced masonry bearing wall buildings, and whose owners did not have actual or constructive knowledge that their buildings are unreinforced masonry bearing wall buildings, the time limits set forth in Table 5B-B commences upon the owners having such actual or constructive knowledge. Those owners who had actual knowledge on or before February 15, 1993, or are presumed to have had such knowledge, are in violation of this Code and are subject to enforcement action by the Department pursuant to Section <u>102A</u> of the Building Code.

#### **CODIFICATION NOTE**

1. So in Ord. <u>265-19</u>.

**505B.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 San Francisco Building Code Section 105A.1.

**505B.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 5B-A.

**505B.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 5B-A, the

Building Official shall have the power to abate the building in accordance with San Francisco Building Code Section <u>102A</u>.

**505B.5 Removal from Inventory.** After all of the retrofit work required by this chapter and Chapter 5C 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 San Francisco Building Code Section 109, 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 505B.3 or 505B.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 retro-fitted to reduce the risk of death or injury in the event of a major earthquake pursuant to Chapters 5B and 5C of the San Francisco Existing 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.

**505B.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 <a href="#">Chapter 5C</a>.

**505B.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 <u>Chapter 5C</u> will not be subject to future mandatory seismic retrofitting legislation adopted by the Board.

**505B.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 requirements observation in accordance with San Francisco Building Code Section 1704.6; and
- 5. All of the required strengthening work is completed within the time limits set forth in Table 5B-A.

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# SECTION 506B – 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 SFEBC Section 501.5 501.7 relating to homeless shelters does not waive the requirement for compliance with the provisions of this chapter and Chapter 5C within the time limits set forth in Table 5B-A. This section does not exempt any building from compliance with the requirements of State or Federal disability access regulations.

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# **SECTION 507B – 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 SFEBC Section 506, or increases the conditioned space or alters the lighting or mechanical systems.

#### FIGURE 5B-1 – UNREINFORCED MASONRY BUILDING STUDY AREAS

- 1 Downtown
- 2 South of Market
- 3 South of Market/Residential

. . .

#### TABLE 5B-A – PROGRAM IMPLEMENTATION SCHEDULE 1,2

I	II	III	IV	
Risk Level of Building	Submission of Inventory Form to DBI	Application of Building Permit with Plans or Application for Demolition <sup>4</sup>	Permit Processing and Approval <sup>4</sup>	Stı Alt Con
1	1.0	2.0	2.5	
2	1.0	2.5	3.0	
3	1.0	8.0	9.0	
4	1.0	10.0	11.0	

All time periods are in years measured from February 15, 1993.

- 1. The owner demonstrates that an application has been made for funding available under to 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 Occupant

When compliance with this table is required, the time limits and extensions of San Francisco Code <u>Chapter 1A</u> are not applicable.

Official for a building with preexisting lease(s) due to expire, for tenant relocation conditions, to obtaining financing under the City bond fund loan program and for other conditions causing de extension requests must be submitted to the Chief Building Inspector in writing prior to the expit the permit with payment of a fee. Any construction inspection granted under this footnote during period of extension will require payment of an inspection fee in addition to the basic extension extensions are not cumulative with the extensions allowed by Footnote 4.

<sup>&</sup>lt;sup>4</sup> For structures containing Occupancy Group A or E and owned by organizations exempt from under the Internal Revenue laws of the United States and the Revenue and Taxation Code of th California as bona fide fraternal, charitable, benevolent, religious or other nonprofit organization extensions of time in increments of not more than three years up to the maximum time limit set Column V of this table may be approved by the Building Official, provided all of the following are met:

buildings only, in lieu of vacation, an owner may agree in writing to limit occupancy of the buuse as an assembly building with an actual occupant load greater than 299 persons to not more hours per week or four hours in any one day. The signs required by California Government Consection 8875.8 shall also be posted at each entrance to the building; and					re than 12
3. When deemed necessary by the Building Official, pedestrian protection canopies complying San Francisco Building Code Chapter 33 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 i satisfactorily mitigated; and					l is
5. The owner for a demolition		ne in which the extension	on is in effect, agre	ees not to file an	application
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#### **Chapter 5C**

# SEISMIC STRENGTHENING PROVISIONS FOR UNREINFORCED MASONRY BEARING WALL BUILDINGS

#### **SECTION 501C - PURPOSE**

The purpose of this chapter is that stated in Section 501B.

. . .

**509C.2 Selection of Procedure.** All buildings shall be analyzed by either the General Procedure of Section <u>510C</u> or, when applicable, buildings may be analyzed by the Special Procedure of Section <u>511C</u>.

#### **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:

...

2. Buildings which are strengthened to conform to the requirements of SFEBC Section 303.4 304.4 in effect on or after May 21, 1973, are exempt from compliance with the provisions of this chapter.

. . .

**513C.4 Ties and Continuity.** Ties and continuity shall conform to SFEBC Section <u>303.4</u> <u>304.4</u>.

. . .

#### TABLE 5C-A – ELEMENTS REGULATED BY THIS CHAPTER

ELEMENT S	SECTION	PROCEDU RE			
		BOLTS- PLUS	SPECIAL	GENERAL	303.4 <sup>2</sup> 304.4
Masonry Shear Strength	506C.3.3	X	X	X	X
Diaphragms	510C.1			X	
	511C.4		X		
	<del>303.4</del> <u>304.4</u>			X	
Diaphragm Shear	510C.1	$X^1$			

Transfer	511C.5	$X^1$	X		
Transfer	3110.3	Λ	A		
	513C.2	X	X	X	
Chords	511C.4			X	
Diaphragm Capacity Ratios	SFBC 1604		X		
Collectors	513C.3			X	
	513C.4		X		
	303.4				X <sup>4</sup>
Analysis of Vertical Elements	512C		X	X	
Crosswalls	511C.3		X		
Shear Walls	510C.3		X		
	511C.6		X		
	<del>303.4</del> <u>304.4</u>				X <sup>3, 4</sup>
Out of Plane Wall	513C.1	X	X	X	
Anchorage	<del>303.4</del> - <u>304.4</u>			X	
Ties & Continuity	513C.4		X	X	
	<del>303.4</del> - <u>304.4</u>			X	X
Wall Bracing	513C.5	X	X	X	X <sup>5</sup>
Parapets	513C.6	X	X	X	X
Veneer	513C.7	X	X	X	X
		1	1	I	

		0000	Jillillent Forn	1	
Nonstructur al Masonry Walls	513C.8		X	X	X
Truss & Beam Supports	513C.9		X	X	X
Adjacent Buildings	513C.10		X	X	X
Subdiaphrag ms	<del>303.4</del> <u>304.4</u>				X
	SFBC 1604.8.2				
	ASCE 7-16 Section 12.11.2 <sup>4</sup>				
1 Diaphrag m 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 SFEBC Section 303-4 304.4.  3 Wood shear walls allowed only for one- or two-story building per					

San Francisco Building Code Section 2305.1.  4 Only inplane shear check required. (Rocking not allowed.)  5 Use (h/t) for "All other walls" from Table 5C-B.				
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#### **Chapter 5D**

#### PARAPETS AND APPENDAGES – RETROACTIVE PROVISIONS

#### **SECTION 501D – 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.

. . .

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#### Chapter 5E

#### MANDATORY EARTHQUAKE RETROFIT OF WOOD-FRAME BUILDINGS

#### **SECTION 501E – PURPOSE AND INTENT**

The purpose of this Chapter is to promote the health, safety, and welfare of San Francisco residents as well as the ability of the City and County of San Francisco to recover from a major earthquake by reducing the possibility of collapse, major structural damage, or risk of fire caused by an earthquake to certain wood-frame buildings.

. . .

#### **SECTION 502E - SCOPE**

This Chapter shall apply to existing buildings, including mixed-occupancy buildings, that are Type V (wood-frame) construction of three or more stories or two stories over a basement or underfloor area that has any portion extending above grade, and containing five or more dwelling units and for which a permit for construction of a new building was applied for before January 1, 1978 or which is determined by the Department to have been originally constructed before January 1, 1978.

#### **Exceptions:**

- 1. A building that has been seismically strengthened to meet or exceed the standards of Section 303.4 304.4 of this Code or its predecessor provisions within 15 years prior to the operative date of this Chapter is exempt from this Chapter upon the submittal of documentation showing that such work was properly permitted, completed, and maintained as required by this Code, and that the Department has approved such documentation.
- 2. A building that has completed voluntary seismic strengthening under the provisions of Administrative Bulletin AB-094 is exempt from the requirements of this Chapter.

. . .

**506E.6** Compliance with this Chapter does not supersede the requirements for compliance with Section <u>501E</u> when otherwise under <u>Chapter 5</u> of this Code. A permit issued solely for compliance with the provisions of this Chapter shall not be considered a "substantial change" or "substantial structural alteration" as defined in Chapter 5 of this code and compliance with Section <u>303.4</u> <u>304.4</u> of this code will not be requirement by such work.

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Chapter 5F BUILDING FACADE INSPECTION AND MAINTENANCE – RETROACTIVE PROVISIONS					
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# **Chapters 6 to Chapter 15**

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# Chapter 16 REFERENCED STANDARDS

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# (CEBC) APPENDIX A CHAPTER A1 SEISMIC STRENGTHENING PROVISIONS FOR UNREINFORCED MASONRY BEARING WALL **BUILDINGS**

No San Francisco Existing Building Code Amendments

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# (CEBC) APPENDIX A CHAPTER A2 EARTHQUAKE HAZARD REDUCTION IN EXISTING REINFORCED CONCRETE AND REINFORCED MASONRY WALL BUILDINGS WITH FLEXIBLE DIAPHRAMS<sup>1</sup>

No San Francisco Existing Building Code Amendments **COMMENT 1:** Name: Date: Comments/Findings: Retain as is: Place an X in one Update as noted: Revise: Delete: of the following: Place an X in one More Restrictive: Less Restrictive: Neither more nor less: of the following: **COMMENT 2:** Name: Date: **Comments/Findings:** Place an X in one Retain as is: Update as noted: Revise: Delete: of the following: Place an X in one More Restrictive: Less Restrictive: Neither more nor less: of the following: Index keywords: COMMENT **TSD Analysis** Name: Date:

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# (CEBC) APPENDIX A CHAPTER A3 PRESCRIPTIVE PROVISIONS FOR SEISMIC STRENGTHENING OF CRIPPLE WALLS AND SILL PLATE ANCHORAGE OF LIGHT, WOODFRAME RESIDENTIAL BUILDINGS

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# (CEBC) APPENDIX A CHAPTER A4 EARTHQUAKE RISK REDUCTION IN WOOD-FRAME RESIDENTIAL BUILDINGS WITH SOFT, WEAK OR OPEN FRONT WALLS

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# (CEBC) APPENDIX A CHAPTER A5 REFERENCED STANDARDS

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SECTION 000 - N	o Changes			
Ch 1, Ch 2, 314.27, 16, Apx A1 – A5	324, 325, 326, 327, 32	8, 329, 508, 501B, 503B,	504B, 505B, 507B,	5D, 5F, Ch 6-
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