

1 [Building Code - Mandatory Seismic Retrofit Program - Wood-Frame Buildings]

2

3 **Ordinance amending the Building Code, to establish a Mandatory Seismic Retrofit**  
4 **Program for wood-frame buildings of three or more stories and containing five or more**  
5 **dwelling units where the permit to construct was applied for prior to January 1, 1978,**  
6 **and the building has not been seismically strengthened; establishing a fee for**  
7 **administering the program; adopting environmental findings, and findings of local**  
8 **conditions under California Health and Safety Code, Section 17958.7; establishing an**  
9 **operative date; and directing the Clerk of the Board to forward the legislation to**  
10 **specified State agencies.**

11 NOTE: Additions are *single-underline italics Times New Roman*;  
12 deletions are *strike-through italics Times New Roman*.  
13 Board amendment additions are double-underlined;  
14 Board amendment deletions are ~~strike-through normal~~.

15 Be it ordained by the People of the City and County of San Francisco:

16 Section 1. General Findings.

17 (a) At a duly noticed public hearing held on \_\_\_\_\_, the  
18 Building Inspection Commission considered this ordinance.

19 (b) The Planning Department has determined that the actions contemplated in this  
20 ordinance comply with the California Environmental Quality Act (California Public Resources  
21 Code Section 21000 et seq.). Said determination is on file with the Clerk of the Board of  
22 Supervisors in File No. \_\_\_\_\_ and is incorporated herein by reference.

23 (c) In Section 19160 of the California Health & Safety Code, the State Legislature  
24 declared that because of the generally acknowledged fact that California will experience  
25 moderate to severe earthquakes in the foreseeable future, increased efforts to reduce

1 earthquake hazards should be encouraged and supported. California Health and Safety Code  
2 Section 19161 authorizes each city, city and county, or county to assess the earthquake  
3 hazard in its jurisdiction and to identify buildings that are potentially hazardous to life in the  
4 event of an earthquake. Health and Safety Code Section 19162 authorizes the governing  
5 body of any city, city and county, or county to establish by ordinance seismic retrofit standards  
6 for these buildings.

7 (d) Among the potentially hazardous buildings identified in Health and Safety Code  
8 Section 19161 are wood-frame, multi-unit residential buildings constructed before January 1,  
9 1978 having soft, weak or open front wall lines (a “soft-story condition”). These conditions  
10 generally arise in a building because the first story has perimeter walls that have large  
11 openings for garage doors or windows, has few interior partitions, and/or is constructed of  
12 materials that have deteriorated over time.

13 (e) In enacting Health and Safety Code Section 19160 et seq., the State Legislature  
14 found that residential buildings with a soft-story condition are particularly vulnerable to severe  
15 damage and collapse. Their collapse can ignite fires that threaten trapped occupants and  
16 neighboring buildings in the event of an earthquake and could complicate emergency  
17 response. In addition, these buildings are an important component of the State's housing  
18 stock that are in jeopardy of being lost in the event of a major earthquake. Soft-story  
19 residential buildings were responsible for 7,700 of the 16,000 housing units rendered  
20 uninhabitable by the Loma Prieta earthquake and over 34,000 of the housing units rendered  
21 uninhabitable by the Northridge earthquake. As noted in subsection (j) of Health and Safety  
22 Code Section 19160, the Association of Bay Area Governments estimates that soft-story  
23 residential buildings will be responsible for 66 percent of the uninhabitable housing following a  
24 seismic event on the Hayward fault. In subsections (l) and (n) of Health and Safety Code  
25 Section 19160, the Seismic Safety Commission recommended to the State Legislature that

1 any mandatory mitigation programs adopted significantly reduce unacceptable hazards in  
2 buildings by 2020 and the Legislature stated its intent that local jurisdictions be encouraged to  
3 address the seismic safety of soft-story residential buildings and to initiate efforts to reduce  
4 the seismic risk in these vulnerable buildings.

5  
6 Section 2. Findings of Local Conditions Under California Health and Safety Code  
7 Section 17958.7.

8 (a) The Applied Technology Council (ATC) is a nonprofit organization that develops  
9 and promotes state-of-the-art, user-friendly engineering resources and applications to mitigate  
10 the effects of natural and other hazards on the built environment. Beginning in 1998, ATC was  
11 contracted to perform a study called the San Francisco Community Action Plan for Seismic  
12 Safety (CAPSS), which was initiated by the San Francisco Building Inspection Commission.  
13 Under CAPSS, ATC, together with the CAPSS Public Advisory Committee, studied buildings  
14 in San Francisco that are vulnerable to collapse or severe damage in an earthquake.

15 (b) The purpose of the CAPSS study was to develop earthquake safety policy  
16 recommendations founded on clear technical bases. "Here Today, Here Tomorrow," ATC's  
17 first policy report under CAPSS, was published in February 2009 and focused on the City's  
18 wood-frame structures that have five or more residential units, three or more stories, and were  
19 built before the adoption of codes regulating earthquake-resistant construction. It was  
20 determined that the possible collapse of many of San Francisco's wood-frame, multi-story  
21 buildings containing residential units represents one of the most significant earthquake  
22 impacts to the City. The final CAPSS report, issued December 31, 2010, also addressed other  
23 vulnerable building types that present risks to the people of the City and County of San  
24 Francisco.

1 (c) In 2010, the San Francisco Planning and Urban Research Association (SPUR)  
2 published a white paper entitled "The Resilient City – Part I," containing SPUR's  
3 recommendations regarding how San Francisco can prepare for and rebound quickly from a  
4 major earthquake. As noted in the Preface to "Here Today – Here Tomorrow," there has been  
5 significant cooperation and communication between the CAPSS Public Advisory Committee  
6 and SPUR's hazard mitigation task force. The CAPSS recommendations were strongly  
7 influenced by SPUR's vision of city-wide mitigation actions to be taken to assure San  
8 Francisco's speedy recovery after a future earthquake .

9 (d) At the request of participants in the CAPSS project, in May 2009 the Federal  
10 Emergency Management Agency (FEMA) commissioned ATC to prepare guidelines for the  
11 seismic retrofit of so-called soft-story wood frame buildings. Technical advisors to the CAPSS  
12 project had concluded that existing engineering procedures were not adequate to fully  
13 evaluate the complex behavior of these vulnerable buildings, and were not necessarily  
14 yielding optimal retrofit designs. Those advisors recommended that new evaluation and  
15 design procedures were needed to ensure more reliable, cost-effective engineering practices  
16 for evaluation and retrofit and to provide guidance for practical and enforceable retrofit  
17 regulations.

18 (e) In May 2012 FEMA issued a guidelines document entitled FEMA P-807, Seismic  
19 Evaluation and Retrofit of Multi-Unit Wood-Frame Buildings with Weak First Stories, which  
20 details procedures for the analysis and seismic retrofit of vulnerable wood-frame buildings that  
21 are common in Northern and Southern California and the Pacific Northwest. The guidelines  
22 are suitable for implementation through model code provisions that ensure uniform application  
23 and enforcement. The retrofit requirements contained in this Ordinance allow the use of  
24 FEMA P-807 and other approved methodologies. The retrofit provisions of FEMA P-807 focus  
25 on projects in which work is limited to the first story and the second floor diaphragm. Such

1 retrofits can improve performance and reduce risk of collapse but will not necessarily provide  
2 a comprehensive building retrofit to a specific performance objective.

3 (f) In early 2010, then Mayor Newsom convened a Soft-Story Retrofit Task Force with  
4 the aim of crafting a mandatory seismic retrofit program for weak-story buildings in San  
5 Francisco, including consideration of a phased implementation program and possible  
6 financing mechanisms. In 2011, Mayor Lee initiated the Earthquake Safety Implementation  
7 Program (ESIP) to implement the recommendations of the CAPSS program, including  
8 completing the development of an ordinance for retrofit of weak-story buildings. That work has  
9 resulted in the mandatory seismic retrofit program established in this ordinance.

10 (g) There are approximately 4,300 wood-frame buildings in San Francisco that were  
11 built before January 1, 1978, having five or more dwelling units and three or more stories. The  
12 CAPSS analysis determined that at least 2,800 of these may have a weak-story condition or  
13 similar vulnerability. These vulnerable buildings can be found throughout the City, most  
14 notably in the Mission, Western Addition, Richmond, North Beach, and Marina  
15 neighborhoods.

16 (h) California Health and Safety Code Section 19161(a)(2) has set January 1, 1978 as  
17 a benchmark date for characterizing wood-frame, multi-unit residential buildings. This January  
18 1, 1978 date supersedes the date of May 21, 1973 found in the San Francisco Building Code  
19 that was previously used to distinguish obsolete structural designs from acceptable structures  
20 of this building type. Under the California Health and Safety Code, buildings constructed after  
21 January 1, 1978 are considered to have been designed to meet a life safety standard in the  
22 code-basis earthquake, which has a two percent chance of occurring in any 50-year period. In  
23 San Francisco, the code-basis earthquake is similar to a magnitude 7.9 earthquake on a  
24 nearby segment of the San Andreas fault.

1 (i) Buildings located within the City's potential liquefaction zones may not perform as  
2 well as buildings outside these mapped areas. These liquefaction zones are identified in the  
3 Official Map of the State of California's Seismic Hazard Zones, which was signed by the State  
4 Geologist and released on November 17, 2000. Notwithstanding these possible local  
5 geological impacts, buildings in these areas will benefit significantly from the seismic retrofit  
6 requirements of this ordinance.

7 (j) The CAPSS study estimates that as they now stand, 43 to 85 percent of the most  
8 vulnerable multi-unit, wood-frame buildings would be posted with a red UNSAFE placard  
9 ("red-tagged") following a magnitude 7.2 earthquake on a nearby segment of the San Andreas  
10 fault, representing 1,200 to 2,400 red-tagged buildings. Red-tagged buildings are  
11 uninhabitable and may not be occupied after an earthquake until they are either repaired or  
12 replaced. A quarter of the red-tagged buildings, representing 300 to 850 multi-unit buildings,  
13 would be expected to collapse. The CAPSS study estimates that with appropriate seismic  
14 retrofit the overall rate of collapse in a 7.2 San Andreas fault earthquake drops dramatically.

15 (k) The CAPSS study found that about 58,000 people live in the subset of 2,800  
16 buildings with the largest perimeter wall openings. These buildings house close to 2,000  
17 businesses that employ an estimated 7,000 people. Without retrofit, the heavy damage that  
18 these buildings are likely to sustain and the fires resulting from the earthquake would kill and  
19 injure many people and disrupt many neighborhoods for years after an earthquake. This  
20 disruption would displace tens of thousands of people from their homes and neighborhoods  
21 and thus they could not contribute to bringing communities back to life. Small businesses  
22 along neighborhood shopping streets would suffer severe impacts. Many of these buildings  
23 contain rent-controlled apartments that might be rebuilt as condominiums rather than  
24 apartment buildings or, if rebuilt as apartments, would be exempt from rent control. The  
25

1 demographics and character of neighborhoods that experience substantial damage could  
2 change significantly.

3 (l) A resilient city is a city that can rebound from a natural disaster and quickly resume  
4 normal function. The purpose of this ordinance is to promote the resiliency goals as identified  
5 in the Community Safety Element of San Francisco's General Plan, as well as to protect the  
6 health, safety, and welfare of San Francisco residents by reducing the possible collapse,  
7 major structural damage, loss of housing stock, or risk of fire caused by an earthquake to the  
8 most vulnerable wood-frame, residential buildings. This ordinance requires retrofits that will  
9 greatly increase the probability of a building being safety occupiable within 24 hours of an  
10 expected moderate earthquake, using standards that limit retrofit costs. This moderate  
11 earthquake has a magnitude of 7.2 on the Peninsula segment of the San Andreas Fault. For  
12 most of the City, the shaking associated with this scenario is expected to occur at least once  
13 during the useful life of a structure and more than once if the structure is renovated  
14 periodically to extend its useful life.

15 (m) As the CAPSS study showed, the seismic retrofitting of multi-unit, wood-frame  
16 buildings as required by this ordinance would dramatically reduce the consequences of  
17 earthquakes to San Francisco by substantially reducing the collapse hazard and allowing up  
18 to 58,000 San Franciscans to remain in their homes rather than be relocated to temporary or  
19 emergency housing. It would retain significant amounts of housing, preserve architectural and  
20 cultural attributes, contribute to sustainability through conservation of energy and resources,  
21 improve public safety, and shorten the time that the City requires to recover from large  
22 earthquakes.

23  
24 Section 3. The San Francisco Building Code is hereby amended by adding Chapter  
25 34B, to read as follows:

1 **CHAPTER 34B**

2 **MANDATORY EARTHQUAKE RETROFIT OF WOOD-FRAME BUILDINGS**

3 **Section 3401B. Purpose and Intent.** The purpose of this Chapter is to promote the  
4 health, safety, and welfare of San Francisco residents as well as the ability of the City and  
5 County of San Francisco to recover from a major earthquake by reducing the possibility of  
6 collapse, major structural damage, or risk of fire caused by an earthquake to certain wood-  
7 frame buildings.

8 In furtherance of this purpose, this Chapter establishes seismic retrofit requirements  
9 intended to significantly reduce the collapse risk of residential buildings with critically  
10 vulnerable first stories and to increase the likelihood that these buildings will be structurally  
11 safe to occupy shortly after an earthquake. The engineering criteria established by this  
12 Chapter generally limit the structural retrofit work to the ground story, where the most critical  
13 vulnerabilities are typically located, thereby improving building performance while limiting  
14 retrofit costs and impacts.

15 **Section 3402B. Scope.** This Chapter shall apply to existing buildings, including mixed-  
16 occupancy buildings, that are Type V (wood-frame) construction of three or more stories and  
17 containing five or more dwelling units and for which a permit for construction of a new building  
18 was applied for before January 1, 1978.

19 **Exceptions:**

20 1. A building that has been seismically strengthened to meet or exceed the  
21 standards of Section 1604.11 of this Code or its predecessor provisions within 15 years prior  
22 to the operative date of this Chapter is exempt from this Chapter upon the submittal of  
23 documentation showing that such work was properly permitted, completed, and maintained as  
24 required by this Code, and that the Department has approved such documentation.



1           2. A building that has completed voluntary seismic strengthening under the  
2 provisions of Administrative Bulletin AB-094 is exempt from the requirements of this Chapter.

3           **Section 3403B. Definitions.**

4           In addition to the definitions in Chapter 2 of this Code, the following definitions shall  
5 apply for purposes of this Chapter:

6           **DWELLING UNIT.** A dwelling unit shall include any individual residential unit within  
7 either an R-1 or an R-2 occupancy building. It shall also include a guestroom, with or without a  
8 kitchen, within either a tourist or residential hotel or motel but shall not include a  
9 "housekeeping room." A dwelling unit shall include an area that is occupied as a dwelling unit,  
10 whether such is approved or unapproved for residential use.

11          **STORY.** The first story of any building shall be considered a story, whether or not  
12 previously exempted from story count under an earlier edition of the San Francisco Building  
13 Code.

14          **Section 3404B. Compliance Requirements.**

15          **3404B.1. General.** The owner of each building subject to this Chapter shall comply  
16 with the reporting requirements of this section. If the building is not exempt and does not meet  
17 the minimum criteria specified in this Chapter, the owner shall cause the building to be  
18 retrofitted to conform to such criteria according to the compliance deadlines set forth in Table  
19 34B-A. Notice of the compliance requirements shall be given by the Department pursuant to  
20 Section 3405B.4.

21          **3404B.2. Screening Form.** The owner of a building who has been notified that their  
22 building is within the scope of this Chapter as well as all other owners of buildings that may be  
23 subject to this Chapter shall engage an architect or engineer to submit to the Department  
24 within the time limits set forth in Table 34B-A a properly completed Screening Form.

1                   **3404B.2.1. Required information.** The Screening Form to be developed by the  
2 Department shall be used to determine whether a building is or is not subject to the  
3 requirements of this Chapter, and to assign a building to the appropriate Compliance Tier. The  
4 Screening Form shall be completed by an architect as defined in Section 5500 of the  
5 California Business and Professions Code or by a civil or structural engineer registered  
6 pursuant to the provisions of Section 6700 et seq. of the California Business and Professions  
7 Code.

8                   The submitted Screening Form shall include:

- 9                                 1. all information required by the Department to be determine compliance  
10 requirements, and
- 11                                 2. whether the building is exempt based based on the exceptions in  
12 Section 3402B of this Chapter, and
- 13                                 3. a Declaration, based on a review of building information, of:
  - 14   (a) whether the building is exempt because it is outside the scope  
15 of this Chapter based on its year of construction, number of dwelling units, or number of  
16 stories, or
  - 17   (b) if not exempt, the appropriate Compliance Tier.

18                   **3404B.2.2. Evaluation Form.** The optional Evaluation Form to be developed by  
19 the Department shall be used to determine if an existing building is exempt because the  
20 building meets the criteria of Section 3406B.2 of this Chapter. The Evaluation Form shall be  
21 completed by an architect as defined in Section 5500 of the California Business and  
22 Professions Code or by a civil or structural engineer registered pursuant to the provisions of  
23 Section 6700 et seq. of the California Business and Professions Code. The Evaluation Form  
24 shall include:

- 25                                 1. dates and scope of any seismic retrofit work, and

1                   2. plans and other information as the Department may require that are  
2 sufficient to support the Declaration below, and

3                   3. shall be accompanied by a completed Screening Form and a  
4 Declaration of whether the building is is exempt because it satisfies the evaluation criteria  
5 given in Section 3406B.2 of this Chapter.

6                   **3404B.3. Compliance Tiers.**

7                   1. Tier I: Buildings that contain a Group A, E, R-2.1, R-3.1 or R-4 occupancy on  
8 any story.

9                   2. Tier II: Buildings containing 15 or more dwelling units, except for buildings  
10 covered in Tier I or Tier IV.

11                   3. Tier III: Buildings not falling within the definition of another tier.

12                   4. Tier IV: Buildings that contain a Group B or M occupancy on the first story  
13 and buildings that are in mapped liquefaction or landslide zones, except for buildings covered  
14 in Tier I.

15                   **3404B.4. Application for a building permit.** For each non-exempt building, the owner  
16 or the owner's authorized agent shall submit to the Department an application for a building  
17 permit accompanied by the necessary permit submittal documents indicating the proposed  
18 seismic retrofit. A permit for this seismic retrofit work may include minor ancillary work but  
19 shall be separate from any other permits for building repairs, renovations, or alterations unless  
20 such work is triggered by or integral to the seismic retrofit work. No work other than is required  
21 under current codes shall be triggered by this seismic retrofit work.

22                   **3404B4.1. Compliance deadlines.** Compliance deadlines for the submission of  
23 the Screening Form, optional Evaluation form, building permit application, and for completion  
24 of seismic retrofit work are given in Table 34B-A. No transfer of title shall alter the time limits  
25 for compliance.

1                   **3404B4.2. Certificate of Final Completion and Occupancy.** A Certificate of  
2 Final Completion and Occupancy indicating completion of the required seismic retrofit work  
3 shall be obtained upon completion of required seismic retrofit work.

4                   **3404B4.3. Damaged Buildings.** Notwithstanding the provisions of the Table  
5 34B-A Compliance Deadlines, if an as-yet unretrofitted building subject to this Chapter suffers  
6 damage from an earthquake or subsequent fire caused by the earthquake that renders the  
7 building uninhabitable, results in structural damage that triggers retrofit under regulations  
8 adopted by the Department of Building Inspection, or results in “disproportionate damage” as  
9 defined in this Code, such building shall comply with the requirements of this Chapter within  
10 one year of such damage. The Department may grant an extension of this time period for  
11 good cause. Compliance with the provisions of this Chapter does not supersede the  
12 requirement to comply with Section 3405.3 of this Code when otherwise required by this  
13 Code.

14                   **3404B.5. Historic Preservation.** If any portion of the seismic retrofit work will be  
15 visible from the exterior of the subject property and the San Francisco Planning Department  
16 determines that the building is a historic resource, or if the interior of the building has been  
17 given landmark status, the seismic retrofit work shall be conducted in accordance with  
18 guidelines developed by the San Francisco Planning Department, taking into account  
19 provisions of the California Historical Building Code.

20                   **3405B. Program Implementation and Administration; Fee.**

21                   **3405B.1. Administrative Bulletin.** The Department shall prepare an Administrative  
22 Bulletin detailing the procedural and implementation requirements for this Chapter. Such  
23 procedures shall be generally consistent with the requirements set forth in this Chapter. The  
24 Administrative Bulletin may require sign-posting and other public information that the  
25 Department determines is necessary or appropriate.

1                   **3405B.2. Compliance Deadlines.**

2   **TABLE 34B-A**

3   **Compliance Deadlines (in years<sup>1</sup>).**

4

5 <b>Compliance Tier</b>	6 <b>Submission of Screening Form and Optional Evaluation Form</b>	7 <b>Submittal of Permit Application with Plans for Seismic Retrofit Work</b>	8 <b>Completion of Work And Issuance of CFC<sup>2</sup></b>
9                   I	10                   1	11                   2	12                   4
13                   II	14                   1	15                   3	16                   5
17                   III	18                   1	19                   4	20                   6
21                   IV	22                   1	23                   5	24                   7

25                   <sup>1</sup>All time periods are in years measured from 60 days after the operative date of this Chapter.

<sup>2</sup>All time limits and extensions of Chapter 1A of this Code are applicable, except that all work is to be completed by December 31, 2020, as recommended in California Health & Safety Code Section 19160(l).

**3405B.3. Administrative Fee.** The fee for services provided by the Department under this Chapter shall be the Standard Hourly Rate for Plan Review and Administration set forth in Table 1A-D of this Code. A minimum fee corresponding to one hour for plan review and administration is payable when the Screening Form required by Section 3404B.2 is submitted or for two hours when a voluntary Evaluation Form is submitted with the Screening Form. Additional fees may be charged at the Standard Hourly Rate for additional work and will be payable within 30 days of the Department's notice that payment is due.

**3405B.4. Notice.**

**3405B.4.1. Service of notice on owner.** No later than 60 days after the operative date of this Chapter, the Department shall send a notice in accordance with Section 102A.4.2 of this Code to the owner of each building believed to be within the scope of this Chapter. The notice shall inform the owner of the requirement to comply with the provisions of

1 this Chapter, and shall be accompanied by a Screening Form and an informational letter or  
2 brochure. Any person who believes that a building that is within the scope of this Chapter has  
3 not been so identified by the Department may notify the Department of the address or location  
4 of such building. If the Department determines upon review of the building and/or building  
5 records that the building may be within the scope of this Chapter, the Department shall  
6 provide notice to the owner as provided in this Section.

7 **3405B.4.2. Failure to give or receive notice.** If the owner of a building within  
8 the scope of this Chapter has knowledge that they own such a building, then the failure of the  
9 Department to issue the notice required by this Section, or the failure of the owner to receive  
10 such a notice, shall not relieve the owner of the obligation to comply with the requirements of  
11 this Chapter within the time limits set forth in Table 34B-A. For a building not known to the  
12 Department to be within the scope of this Chapter and whose owner or owners have no  
13 knowledge that the building is within the scope of this Chapter, the time limits set forth in  
14 Table 34B-A shall commence upon an owner having actual or constructive notice that the  
15 building may be within the scope of this Chapter. In no case, however, shall the final  
16 completion date be extended without the approval of the Board of Examiners after hearing an  
17 appeal pursuant to Section 3405B.5.

18 **3405B.4.3. Notice to public on Department's website.** A list of the buildings  
19 by street address and by block and lot for which notice has been given under this Section  
20 shall be maintained and made public on the Department's website.

21 **3405B.5. Appeals.** The owner of any building subject to this Chapter may appeal to  
22 the Board of Examiners any determination made by the Department with respect to  
23 compliance with the technical requirements of this Chapter. Such appeal shall be in  
24 accordance with the provisions of Section 105A of this Code. The time limits for compliance  
25 established by Table 34B-A shall not be extended during any appeal period unless specifically

1 approved by the Board of Examiners. Any person may appeal a determination of the Director  
2 related to this Chapter to the Building Inspection Commission pursuant to Chapter 77 of the  
3 San Francisco Administrative Code.

4 **3405B.6. Enforcement.** Whenever any required action has not been completed within  
5 the time limits set forth in Table 34B-A, the Department shall abate the violation in accordance  
6 with Section 102A of this Code.

7 **3405B.6.1. Posting of notice.** An enforcement action shall, in every case,  
8 include the Department posting of the building with a standard Department notice stating as  
9 follows:

10 "This building is in violation of the requirements of the San Francisco Building Code  
11 regarding earthquake safety."

12 This notice shall not be removed until the building is in compliance with this Chapter. This  
13 notice shall also be recorded against the title of the building.

14 **3406B Engineering Criteria for Evaluation and Retrofit.**

15 **3406B.1. General.** This Chapter requires that evaluation and/or retrofit of buildings  
16 within its scope be undertaken using the engineering criteria established in this section.

17 **3406B.2. Engineering Criteria.** A proposed seismic evaluation and/or retrofit plan  
18 shall demonstrate that the building satisfies one of the following:

19 1. FEMA P-807, Seismic Evaluation and Retrofit of Multi-Unit Wood-Frame  
20 Buildings With Weak First Stories, as detailed in an Administrative Bulletin to be prepared  
21 pursuant to 3406B.3 of this ordinance, with the performance objective of 50 percent maximum  
22 probability of exceedance of Onset of Strength Loss drift limits with a spectral demand equal  
23 to  $0.50 S_{MS}$ , or

24 2. ASCE 41-13, Seismic Evaluation and Rehabilitation of Existing Buildings,  
25 with the performance objective of Structural Life Safety in the BSE-1E earthquake, or

1                   3. ASCE 41-06, Seismic Rehabilitation of Existing Buildings, with the  
2 performance objective of Structural Life Safety in the BSE-1 earthquake with earthquake  
3 loads multiplied by 75 percent, or

4                   4. for evaluation only, ASCE 31-03, Seismic Evaluation of Existing Buildings,  
5 with the performance level of Life Safety, or

6                   5. for retrofit only, 2012 International Existing Building Code (IEBC) Appendix A-  
7 4, or

8                   6. any other rational design basis deemed acceptable by the Department that  
9 meets or exceeds the intent of this Chapter.

10               **3406B.3. Alternative Retrofit Criteria.** A proposed seismic retrofit plan which fails to  
11 meet the criteria of 3406B.2(1) or 3406B.2(5) shall be deemed to comply with this Chapter if,  
12 with the approval of the Department, it satisfies the intent of FEMA P-807, Section 6.4.2 with a  
13 maximum acceptable drift limit probability of exceedance of 70 percent.

14               **3406B.4. Administrative Bulletin for Technical Requirements.** The Department  
15 shall develop and publish one or more Administrative Bulletins that detail the technical  
16 requirements to be used for the evaluation and retrofitting of buildings required to meet the  
17 criteria established in Section 3406B.2.

18               **3406B.5. Conformance Period.** Any building retrofitted in compliance with this  
19 Chapter and properly maintained, shall not, within a period of 15 years after the operative date  
20 of this Chapter, be identified as a seismic hazard pursuant to any local building standards  
21 adopted after the date of the building seismic retrofit unless the building incurred  
22 disproportionate damage, or otherwise has been damaged or altered so that it no longer  
23 meets the engineering criteria under which it was retrofitted.



1           Section 4. The City intends to consider the creation of an optional special tax financing  
2 program to provide financing for the seismic retrofit work required by Chapter 34B. Under this  
3 program, the City would issue bonds to finance the required seismic retrofit work on  
4 participating properties, and each participating property would pay special taxes in an amount  
5 sufficient to pay its share of the debt service on the bonds. The financing would be optional;  
6 only those properties that choose to participate in the program would receive the benefit of the  
7 financing and would be obligated to pay special taxes.

8  
9           Section 5. Reporting. The Department shall maintain current information about  
10 program implementation, including number of buildings at each stage of compliance and  
11 program administration and budget, and shall annually provide a report to the Mayor and the  
12 Board of Supervisors.

13  
14           Section 6. Undertaking for the General Welfare. In enacting and implementing this  
15 ordinance, the City is assuming an undertaking only to promote the general welfare. It is not  
16 assuming, nor is it imposing on its officers and employees, an obligation for breach of which it  
17 is liable in money damages to any person who claims that such breach proximately caused  
18 injury.

19  
20           Section 7. Severability. If any section, subsection, sentence, clause, phrase, or word  
21 of this ordinance is for any reason held to be invalid or unconstitutional by a decision of any  
22 court of competent jurisdiction, such decision shall not affect the validity of the remaining  
23 portions of the ordinance. The Board of Supervisors hereby declares that it would have  
24 passed this ordinance and each and every section, subsection, sentence, clause, phrase, and  
25

1 word not declared invalid or unconstitutional without regard to whether any other portion of  
2 this ordinance would be subsequently declared invalid or unconstitutional.

3  
4 Section 8. Effective and Operative Date. This ordinance shall become effective 30  
5 days after the date of passage and operative 60 days after the date of passage.

6  
7 Section 9. This section is uncodified. In enacting this ordinance, the Board intends to  
8 amend only those words, phrases, paragraphs, subsections, sections, articles, numbers,  
9 punctuation, charts, diagrams, or any other constituent part of the Building Code that are  
10 explicitly shown in this legislation as additions, deletions, Board amendment additions, and  
11 Board amendment deletions in accordance with the "Note" that appears under the official title  
12 of the legislation.

13  
14 Section 10. Directions to Clerk of the Board. The Clerk of the Board is directed to  
15 forward this ordinance to the State Building Standards Commission after final passage, as  
16 required by Health and Safety Code Section 17958.7. The Clerk is further directed to send a  
17 copy of the finally-passed ordinance to the California Department of Housing and Community  
18 Development for informational purposes, as required by Health and Safety Code Section  
19 19165.

20  
21 APPROVED AS TO FORM:  
22 DENNIS J. HERRERA, City Attorney

23 By: \_\_\_\_\_  
24 JUDITH A. BOYAJIAN  
25 Deputy City Attorney

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