

## ADMINISTRATIVE BULLETIN

**NO. AB-094** :

**DATE** : April 13, 2010 (Updated 01/01/14 for code references)  
(Revises bulletin dated May 26, 2009)

**SUBJECT** : Permit Review and Operation

**TITLE** : **Definition and Design Criteria for Voluntary Seismic Upgrade of Soft-Story, Type V (Wood-Frame) Buildings**

**PURPOSE** : The purpose of this Bulletin is to establish definitions and acceptable design criteria for voluntary seismic upgrade projects for soft-story Type V (wood-frame) buildings that may qualify for various incentives, such as expedited permit review and fee adjustments.

**REFERENCES** : 2013 San Francisco Building Code  
                   - Section 1613, Earthquake Loads  
                   - Section 3401.10, Lateral Force Design requirements for Existing Buildings  
                   - Section 1604.11, Minimum Lateral Forces for Existing Buildings  
 City and County of San Francisco Ordinance 54-10, Seismic Strengthening of Soft- Story, Wood-Frame Buildings  
 AB-004, Priority Permit Processing Guidelines  
 2012 International Existing Building Code, Appendix Chapter A4  
 2013 California Historical Building Code, Chapter 8-7 and 8-8  
 ASCE/SEI Standard 31-03, Seismic Evaluation of Existing Buildings  
 ASCE/SEI Standard 41-06, Seismic Rehabilitation of Existing Buildings Ordinance 54-10, Seismic Strengthening of Soft-Story, Wood-Frame Buildings

**DISCUSSION** : A clear definition of “soft-story Type V (wood-frame) building” and the basic design criteria for seismic upgrades to such buildings are essential to the permit submittal and approval of projects that wish to take advantage of City-sponsored voluntary incentives to implement seismic upgrades of potentially seismically hazardous buildings.

Permits for voluntary structural work that do not reference meeting a specific code standard or that do not qualify for incentives for voluntary seismic upgrade work permit processing may meet any level of upgrade if such work does not increase the hazard of the building.

Chapter 34B of the San Francisco Building Code requires the mandatory retrofit of Soft Story Type V (wood-frame) buildings, built prior to 1978 with 2 or more stories over a weak story and having 5 or more residential units. Buildings falling within the scope of SFBC Chapter 34B are not eligible for the incentives offered in this bulletin. The application and incentives of AB-094 apply to buildings with 4 or fewer residential units or other occupancy classifications.

### IMPLEMENTATION

Building owners who wish to take advantage of voluntary seismic upgrade incentives must meet the definition of a soft-story Type V (wood-frame) building and must comply with the retrofit standards as detailed below.

## DEFINITIONS

For the purpose of this Administrative Bulletin the following definitions shall apply:

**Soft-story Type V (wood-frame) building** means a building that meets the following criteria:

- A. a Type V (wood-frame) building as defined in the San Francisco Building Code, and
- B. was constructed prior to May 21, 1973, and
- C. has a ground floor (1st story) level in which
  - a. at least 50% of the floor area of the ground floor is used for Occupancy Classifications A (assembly), B (business), M (mercantile), S (storage, open or enclosed parking garages), or U (private garages), or
  - b. the building has been determined to have either a Weak Story or Soft Story deficiency when evaluated using the ASCE 31 Tier 2 procedure, or
  - c. the building has been determined to have a soft-story deficiency based on engineering analysis acceptable to the Building Official.

## RETROFIT STANDARDS

The standards to be applied to the seismic upgrade of soft-story wood-framed buildings in order to qualify for voluntary upgrade incentives shall be one of the following:

- A. Meets the requirements of Appendix Chapter A4 of the 2012 International Existing Building Code, IEBC, or
- B. Meets the requirements of ASCE 41 for the Partial Rehabilitation Objective (Section 1.4.3) (Life Safety Performance Level: S-3) in the BSE-1 earthquake hazard level, or
- C. Meets any other alternate rational design and/or construction methodology that demonstrates compliance with the intent of San Francisco Building Code Section 1604.11. For qualified historic buildings, seismic upgrade designs may use the provisions and analysis techniques referenced in the California Historical Building Code, Chapter 8-7, Structural Regulations, and Chapter 8-8, Archaic Materials and Methods of Construction to assist in meeting the retrofit standards.

For the purposes of this bulletin, mitigation of the soft-story conditions at the ground floor (1st story) shall be considered the part of the voluntary soft-story wood-frame upgrade work eligible for incentives. Additional seismic upgrade work may be undertaken on the floors above the ground floor; however such additional seismic retrofit work is not considered part of the voluntary soft-story upgrade work and will be subject to standard permitting requirements.

## PERMIT PROCESSING

### Submittal Documents and Building Permit Application

Building permit applications for voluntary, soft-story Type V (wood-frame) building upgrade work must clearly state the intention to qualify for voluntary incentives in the Project Description portion of the building permit application form. Submittal documents should include the following:

- A. Dimensioned plans showing all exterior walls, interior partitions and any lateral load-resisting, or plans showing Occupancy Classifications and uses of the ground floor if that is the method of qualifying as a soft-story building under this Administrative Bulletin, and
- B. A photograph of the building exterior, and
- C. Structural upgrade plans and necessary supporting calculations and documents prepared by a licensed design professional showing how seismic upgrade will meet the standards adopted in this Administrative Bulletin. Included in these submittal documents should be a listing of archaic materials and values for those materials, if these are to be used as part of the lateral force resisting system.

**Expedited Permit Processing**

Building permit applications for voluntary soft-story wood-frame seismic retrofit will be expedited as authorized under AB-004 and will be tracked by the Department of Building Inspection for reporting purposes.

Signed by:

Vivian L. Day, C.B.O.                      April 21, 2010  
Director  
Department of Building Inspection

Attachment: Excerpts from Ordinance 54-10, Seismic Strengthening of Soft-Story, Wood-Frame Buildings

<b>ATTACHMENT</b>
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**Excerpts from Ordinance 54-10, Seismic Strengthening of Soft-Story, Wood-Frame Buildings**

File No. 09113	Substitute 11/10/2009	ORDINANCE NO. 54-10
[Seismic Strengthening of Soft-Story, Wood-Frame Buildings]		

Ordinance finding a compelling public policy basis for expediting the processing and review of permits for voluntary seismic retrofit upgrades of soft-story, wood-frame buildings and amending the Planning Code, Building Code, Fire Code, and Public Works Code to waive permit processing fees for the proportionate share of work related to such seismic retrofit upgrades; making environmental findings and findings of consistency with the City's General Plan and Planning Code Section 101.1.

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

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

**Section 1. City Policy Concerning Seismic Retrofit Upgrades for Soft-story, wood-frame Construction.****(a) Findings.**

(1) Soft-story, wood-frame buildings are structures where the first story is substantially weaker and more flexible than the stories above due to lack of walls or moment-resisting frames at the first floor and a significant number of walls in the floors above. Typically, these are apartments and condominiums that have parking or open commercial space—for businesses such as restaurants or grocery stores—on the first floor, which makes the first story “soft” and likely to lean or collapse in earthquakes. As a consequence, such buildings are highly vulnerable during seismic events, as the City witnessed during the Loma Prieta earthquake in 1989.

(2) The San Francisco Department of Building Inspection (DBI) is responsible for enforcing the San Francisco Building Code and serves the City and County, and the general public, by ensuring that life and property within the City is safeguarded. DBI fulfills its responsibilities through plan check review of construction documents; the issuance of permits; the inspection of construction as stipulated by permits; and through code enforcement procedures that compel property owner compliance and that may include prosecution of code violations. DBI and its governing body, the Building Inspection Commission, also provide a public forum for community involvement in permit review, approval and enforcement processes.

(3) DBI has initiated the Community Action Plan for Seismic Safety (CAPSS) Initiative to better understand the types of buildings in San Francisco that are most vulnerable to seismic events and recommend measures, including legislation to retrofit and improve the public safety related to soft-story, wood-frame buildings. The CAPSS recently completed identification of one type of soft-story wood-frame buildings in San Francisco and their location; evaluated a range of vulnerability factors; and designing retrofit options and costs, all while engaging and alerting the public to make property owners and tenants aware of potential seismic vulnerabilities. The CAPSS initiative completed its seismic soft-story report in February 2009 and recommended to the Mayor elements to include in a seismic strengthening ordinance for vulnerable soft-story wood-frame buildings.

(4) In furtherance of this effort and other City actions to ensure and enhance public protection during seismic events, Mayor Newsom, on July 7, 2008, issued Executive Directive No. 08-07 concerning seismic strengthening of soft-story, wood-frame buildings. Said Directive is on file with the Clerk of the Board of Supervisors in File No. 091113 and is incorporated herein by reference.

(5) The public and media outlets share in the concern of the City's elected and appointed officials that City government do all that it can to significantly expand and accelerate ongoing efforts to ensure the safety of life and property in the City and County of San Francisco. Such concern is demonstrated in articles such as those of the New

York Times dated February 21, 2009, and San Francisco Chronicle, dated February 13, 2009, January 22, 2009, and June 29, 2008, and other media coverage promoting voluntary retrofits as an immediate action. Said articles are on file with the Clerk of the Board of Supervisors in File No. 091113 and are incorporated herein by reference.

(6) On January 21, 2009, at a duly noticed public hearing, the Building Inspection Commission reviewed, approved, and recommended to Mayor Newsom, the CAPSS report entitled, *Here Today – Here Tomorrow: Earthquake Safety for Soft-Story Buildings*. Said report is on file with the Clerk of the Board of Supervisors in File No. 091113 and is incorporated herein by reference. The Department finalized said report, which included various recommendations for City actions to address soft-story buildings, and delivered it to the Mayor on February 20, 2009.

(7) As a consequence of this public concern on the vulnerability of soft-story buildings to seismic events, during the pendency of the abovementioned CAPSS process and the City's ability to implement one or more of the recommendations of the CAPSS report on soft-story buildings, and in response to Mayor Newsom's Executive Directive No. 08-07, the City should encourage residents and property owners to voluntarily perform seismic retrofit upgrades for soft-story, wood-frame buildings.

(8) The intent of this legislation is to provide such encouragement through specified permit fee waivers and permit expediting in the near term, while the City develops and implements long-range strategies, including legislation, to address this issue.

(9) The City further declares, as a matter of public policy, that if properties owners take advantage of this voluntary program and complete the seismic retrofit upgrade within the permitted time frame, such projects would be exempt for 15 years from compliance with any subsequent CAPSS-related legislation that imposes mandatory seismic retrofit upgrades for soft- story, wood frame buildings.

(b) (1) In accordance with San Francisco Campaign and Governmental Conduct Code Section 3.400(b), the City hereby finds there is a compelling public policy basis to expedite the review and permitting process for projects where the scope of work

includes voluntary seismic retrofit upgrades to soft- story, wood-frame buildings, as defined by the Director of the DBI (the "Building Official"). The Ethics Commission, Building Official, Director of Planning, Fire Marshal, Director of Public Works, and directors of other affected departments are urged to amend their respective codes of conduct for permit processing to reflect this City policy.

(2) To assist the public and City departments in ascertaining what types of structures can take advantage of this voluntary program and the seismic retrofit necessary to qualify, the Department of Building Inspection ~~will issue an~~ issued Administrative Bulletin 094 on the definition of soft-story and the design criteria for seismic upgrades. ~~A draft of~~ Said Bulletin is on file with the Clerk of the Board of Supervisors in File No. 091113 and is incorporated herein by reference. The Building Inspection Commission, at a duly notice public hearing on May 20, 2009, reviewed and approved said Bulletin.

(3) On January 20, 2010, the Building Inspection Commission held a duly noticed public hearing on this legislation and recommended its approval to the Board of Supervisors.

**Section 2.** Environmental findings and findings of consistency with the City's General Plan.

(a) Pursuant to Planning Code Section 302, this Board of Supervisors finds that this Ordinance will serve the public necessity, convenience and welfare for the reasons set forth in Planning Commission Resolution No. 17957 and incorporates those reasons herein by reference. A copy of said Planning Commission Resolution is on file with the Clerk of the Board of Supervisors in File No. 091113.

(b) The Board of Supervisors finds that this ordinance is, on balance, consistent with the General Plan and the Priority Policies of Planning Code Section 101.1(b) for the reasons set forth in Planning Commission Resolution No. 17957, and incorporates those reasons herein by reference.

(c) The Planning Department has completed environmental review of this ordinance pursuant to the California Environmental Quality Act ("CEQA"), the CEQA Guidelines, and Chapter 31 of the San Francisco Administrative Code. Documentation of that review is on file with the Clerk of the Board of Supervisors in File No. 09113 and is incorporated herein by reference.

**Section 3.** The San Francisco Planning Code is hereby amended by amending Section 355, to read as follows:

**SEC. 355. PERMIT APPLICATIONS.**

(8) Permit review fees shall be waived for seismic upgrade work on soft-story wood-frame buildings, as defined by the Department of Building Inspection in its Administrative Bulletin. These fees will be waived only if a proposal to retrofit a building triggers Planning Department review. The fee waiver shall not apply to other components of work that may be included in the application.

**Section 4.** The San Francisco Building Code is hereby amended by amending Section 107A.3, to read as follows:

**Sec. 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.

(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.

**Section 5.** The San Francisco Fire Code is hereby amended by adding Section 112.21 of Appendix Chapter 1, to read as follows:

**Sec. 112.21.** Notwithstanding the fees established herein, if a project involves voluntary seismic retrofit upgrades to soft-story, wood-frame buildings, as defined by the Director of the Department of Building Inspection, such project applicant shall be exempt from the proportionate share of plan review fees specified herein that is related to such retrofit work.

**Section 6.** The San Francisco Public Works Code is hereby amended by amending Section 723.2, to read as follows:

**Sec. 723.2. MINOR SIDEWALK ENCROACHMENTS.**

(l) Notwithstanding the fees specified herein, if a project involves voluntary seismic retrofit upgrades to soft-story, wood-frame buildings, as defined by the Director of the Department of Building Inspection, such project applicant shall be exempt from the proportionate share of fees specified under this Section and Sections 2.1.1 et seq. that is related to such retrofit work.

**Section 7.** This Section is uncodified.

(a) In order to facilitate administration of this voluntary seismic retrofit program for soft-story wood-frame buildings, all permit issuing departments may treat the seismic retrofit portion of the project application as a separate permit so long as other related permits for the subject property receive the expedited permit review specified in Section (b)(1) of this Ordinance.

(b) **Reporting requirement.** After the effective date of this Ordinance, the Department of Building Inspection shall submit annual reports to the Building Inspection Commission, Board of Supervisors, and Mayor concerning the effectiveness of the voluntary seismic retrofit program for soft-story wood-frame buildings. The report specifically shall include information on the number of permittees who have taken advantage of the program, the number of retrofits completed, and the permittees' costs for the retrofits. This reporting requirement shall be in effect for 5 years or until the City adopts an alternate program to address seismic retrofit of soft-story wood-frame buildings, whichever first occurs.

March 16, 2010 Board of Supervisors - FINALLY PASSED

Ayes: 9 - Avalos, Campos, Chiu, Chu, Daly, Dufty, Elsbernd, Mar and Maxwell

Excused: 2 - Alioto-Pier and Mirkarimi

File No. 091113

I hereby certify that the foregoing Ordinance was FINALLY PASSED on 3/16/2010 by the Board of Supervisors of the City and County of San Francisco

/signed/

Angela Calvillo, Clerk of the Board

/signed/

Mayor Gavin Newsom

3-19-2010

Date Approved

