

## ORDINANCE NO. 7,318–N.S.

AMENDING CHAPTER 19.39 OF THE BERKELEY MUNICIPAL CODE ADOPTING MANDATORY SEISMIC RETROFIT REQUIREMENTS FOR WOOD-FRAME BUILDINGS CONTAINING SOFT, WEAK OR OPEN FRONT STORIES WITH FIVE OR MORE DWELLING UNITS

BE IT ORDAINED by the City Council of the City of Berkeley as follows:

Section 1. That Chapter 19.39 in the Berkeley Municipal Code is amended to read as follows:

**Chapter 19.39**

**POTENTIALLY HAZARDOUS BUILDINGS CONTAINING SOFT, WEAK, OR OPEN FRONT STORIES**

**Sections:**

- 19.39.010 Title, findings, and purpose.**
- 19.39.020 Scope and applicability.**
- 19.39.030 Reserved.**
- 19.39.040 Establishment of the Inventory of Potentially Hazardous Buildings with Soft, Weak or Open Front Conditions.**
- 19.39.050 Notice to owners and administration.**
- 19.39.060 Owner and tenant obligations.**
- 19.39.070 Reserved.**
- 19.39.080 Removal of building from the inventory.**
- 19.39.090 Reserved.**
- 19.39.100 Adoption of engineering criteria for seismic retrofits submitted after January 1, 2014.**
- 19.39.110 Compliance schedule for completion of seismic retrofits.**
- 19.39.120 Automatic gas shut-off valves in retrofitted buildings.**
- 19.39.130 Fifteen-year exemption for retrofitted buildings.**
- 19.39.140 Seismic engineering evaluation report (Required for buildings on the SWOF inventory prior to January 1, 2014).**
- 19.39.150 Adoption and modifications of Chapter A4 of the 2003 IEBC for seismic engineering evaluation reports submitted prior to January 1, 2014.**
- 19.39.160 Public nuisance.**

**19.39.170 Remedies cumulative.**

**19.39.180 Severability.**

**19.39.010 Title, findings, and purpose.**

A. This Chapter shall be known as the "Soft Story Ordinance."

B. The Council finds as follows:

1. A survey of Berkeley buildings in 1996 identified nearly 400 wood frame buildings with five or more units with a ground level containing large openings such as storefronts, garages, or tuck-under parking.
2. The openings on the ground floor of such buildings can create a soft, weak or open front condition.
3. Buildings with soft, weak, or open front ground stories are recognized by engineers and other seismic safety experts as having the potential for sustaining serious damage including collapse in the event of strong earthquakes.
4. Earthquakes in California and elsewhere have demonstrated such damage, injuring and killing people, displacing residents, and causing severe economic loss and disruption to communities.
5. The City of Berkeley conducted an assessment project in 2001 that identified approximately 5,000 residential units in buildings that may have such stories.
6. A sidewalk assessment was done of 150 identified buildings by professional engineers and found that 46% have severe or considerable vulnerability to damage in a major earthquake and that another 49% had moderate vulnerability.
7. Advances in the design of construction and retrofit of structures to better withstand seismic forces have occurred since such buildings were constructed and resulted in new requirements in current codes.
8. The establishment of an inventory and notification to owners and residents is a necessary first step in developing a mitigation program and will provide the basis for obtaining input from affected parties for such a program.
9. Although the general vulnerability of such buildings is known, determining the seismic adequacy of each of the structures and the appropriate elements of a retrofit to remedy vulnerabilities requires a detailed evaluation by an approved licensed engineering design professional.
10. Such an evaluation is also necessary for the City Council and staff to identify more fully the risks to the City and its inhabitants and to determine the feasibility of programs to address the vulnerabilities.

11. Model codes have been developed for analyzing and retrofitting such structures to provide for risk reduction with less design effort, construction cost, and tenant disruption than the California Building Code.
12. While these codes are not intended to provide structural performance equivalent to that provided by new construction built to the current Building Code, they identify and provide for improving the structure's more vulnerable portions and, if improvements to the identified vulnerabilities are made, can be expected to substantially reduce the likelihood of excessive building drift or collapse and substantially lessen the loss of human life.
13. In 2005, Health and Safety Code Sections 19162 and 19163 were amended to expressly authorize cities to adopt ordinances requiring building owners to comply with a national recognized model code relating to the retrofit of existing buildings or substantially equivalent standards.
14. Pursuant to Health and Safety Code Section 19160 (m), the current nationally recognized model code for the retrofit of existing buildings with soft, weak or open front walls is Appendix Chapter A4 of the International Existing Building Code as published by the International Code Council. However, it is not the intent of the Legislature, if other model codes relating to retrofit of existing buildings are developed, to limit the local government to adopting a particular code.
15. Pursuant to Health and Safety Code Section 19162(d), "seismic retrofit means either structural strengthening or providing the means necessary to modify the seismic response that would otherwise be expected by an existing building during an earthquake, to significantly reduce hazards to life and safety while also providing for the substantial safe ingress and egress of the building occupants immediately after an earthquake".
16. Health and Safety Code Section 19161(a)(2) has set January 1, 1978 as a benchmark date for characterizing wood-frame, multi-unit residential buildings with soft, weak or open-front wall lines. Under the Health and Safety Code, buildings constructed after January 1, 1978 are considered to have been designed to meet acceptable seismic standards.
17. The date of January 1, 1978 supersedes the date of the adoption of the 1997 Uniform Building Code as amended by the State of California that was previously used by the City of Berkeley to distinguish obsolete structural designs from acceptable structures of this building type.
18. The City Council has determined that it is essential for the safety of its residents to make this Chapter's seismic hazard mitigation standards mandatory for multi-unit residential buildings falling within the scope and applicability of this ordinance as set forth below and to require that these buildings be retrofitted to comply with the adopted standards within the timetable set forth herein.

C. The purposes of this Chapter are to protect the public health, safety and welfare, to alert the general public and the owners and residents of certain types of existing multi-unit residential buildings to the vulnerability of such buildings in strong earthquakes, to determine the specific seismic vulnerabilities and necessary improvements for each such building, to inform decision making about needed mitigation measures, to promote such efforts, and to require buildings to be retrofitted to comply to the standards as established herein.

D. This Chapter requires the establishment of an inventory of potentially hazardous buildings that contain a soft, weak or open front condition on the ground floor and that have at least five residential units, provides for notification to the owners, residents and users of such buildings, adopts the International Existing Building Code, requires owners to provide an analysis of their building's seismic adequacy, and requires owners to perform retrofit work to comply with the standards established herein.

**19.39.020 Scope and applicability.**

A. The provisions of this Chapter shall apply to all existing wood frame multi-unit residential buildings that contain five or more dwelling units, as defined in BMC Title 23, and that were designed under a building permit applied for before January 1, 1978, where:

1. The Ground Floor, whether itself constructed of wood or other materials, of the wood frame structure contains parking or other similar open floor or basement space that causes Soft, Weak, or Open-Front Wall lines and there exists one or more levels above, or;
2. The walls of any story or basement of wood construction are laterally braced with Nonconforming Structural Materials as defined in this IEBC Chapter A4 and there exist two or more floor levels above.

Such buildings are referred to in this Chapter as potentially hazardous buildings with "soft, weak, or open front" conditions or "SWOF".

B. Potentially hazardous SWOF buildings listed on national, state or local historical registers shall also comply with the provisions of this Chapter. At the Building Official's discretion, reasonably equivalent alternatives to the structural standards established in this Chapter may be permitted when such alternatives are consistent with the provisions of the State Historical Building Code.

**19.39.030 Reserved.**

**19.39.040 Establishment of the Inventory of Potentially Hazardous Buildings with Soft, Weak or Open Front Conditions.**

Multi-unit wood frame residential buildings with five or more dwelling units identified by the 1996 survey conducted by the City as containing a Soft, Weak, or Open Front Ground Floor shall be placed on the Inventory of Potentially Hazardous SWOF Buildings. The inventory shall be maintained and revised as necessary by the Building Official. A copy shall be available for inspection in the office of the Building Official.

**19.39.050 Notice to owners and administration.**

A. Contents of Notice and Order. When the Building Official determines that a building is within the scope of this Chapter, the Building Official shall issue a notice and order as provided herein. The notice and order shall specify that the building has been determined by the Building Official to be within the scope of this Chapter, placed on the inventory, and, therefore, is required to meet the provisions of this Chapter unless removed on appeal. The notice and order shall specify the building type classification, if known, and shall set forth the owner's obligations under this Chapter, the time limits for compliance, and appeal rights. The Building Official's determination shall be final at the end of 180 days unless a timely request for reconsideration is filed as provided below.

B. Service of Notice and Order. The notice and order shall be in writing and may be given either by personal delivery thereof to the owner or by deposit in the United States mail in a sealed envelope, postage prepaid, addressed to the owner of the property as shown on the last equalized assessment roll of the county, or as known to the Building Official, as well as to the following, if known: the holder of any mortgage or deed of trust or other lien or encumbrance of record; the owner or holder of any lease of record; and the holder of any other estate or legal interest of record in the building or the land on which it is located. The failure to serve any person required herein to receive service shall not invalidate any proceeding hereunder as to any person duly served or relieve any such person from any duty or obligation imposed by the provisions of this Section.

C. Appeal to Building Official. Any person entitled to service of notice under the preceding subdivision may request the Building Official to reconsider a determination to include a building on the inventory by submitting information that the building's ground floor is not soft, weak, or open as defined by the applicable standard, that the building has been substantially reconstructed in accordance with the 1976 or later Uniform Building Code, or that the building has been retrofitted in compliance with Article 5 of the current Berkeley Building Code or the IEBC. The request for reconsideration shall be filed within 180 days from the date of the service of such notice and order of the Building Official.

D. Appeal to Housing Advisory Commission. Any person entitled to service of notice under the preceding subdivision who disagrees with the decision of the Building Official on reconsideration pursuant to that subdivision may appeal within 30 days of the date of notice of the Building Official's decision to the Housing Advisory Commission (HAC) as provided for in BMC Chapter 19.44. For purposes of this Chapter, the appeal shall be set for hearing at the next regular HAC meeting more than 20 days, but not more than 60 days, from the date of filing of the appeal, provided that the Commission may set the hearing at a different time for good cause.

E. Recordation. Once the Building Official's determination is final, the Building Official shall file with the Office of the County Recorder a certificate stating that the subject building is within the scope of this Chapter, unless the property has been removed from the inventory. The certificate shall also state that the owner thereof has been ordered to conduct a structural analysis of the building in compliance with this Chapter. When a

building is removed from the inventory, the Building Official shall promptly file with the Office of the County Recorder a certificate so stating.

F. Costs of Additional Compliance Actions. In addition to any penalties authorized by the Berkeley Municipal Code, an owner who fails to comply with the provisions of this Chapter may be charged reasonable fees, as adopted by City Council resolution, to compensate for staff time spent to bring the building into compliance.

**19.39.060 Owner and tenant obligations.**

A. Obligation of Owners to Notify Tenants and Post Notice regarding the status of the building. Once the Building Official's determination is final, owners of buildings on this inventory shall do the following:

1. Within 30 days, notify each tenant in writing, using the Notice to Tenants form provided by the Building and Safety Division, and notify each prospective tenant prior to a change of tenancy, that the building is included on the inventory. Thereafter, the Rent Stabilization Board may provide such notice on an annual basis.
2. Post in a conspicuous place within five feet of each main entrance of the building, and maintain until the building is removed from the inventory, a clearly visible warning sign not less than 8" by 10" with the following statement, with the first two words printed in 50-point bold type and the remaining words in at least 30-point type:

"Earthquake Warning. This is a building with a soft, weak, or open front ground floor. You may not be safe inside or near such buildings during an earthquake."

3. Mail, within 30 days of initial service, a copy of each tenant notification form in compliance with this Section and a completed proof of service addressed to: Soft Story Program, Building and Safety Division, 2120 Milvia Street, Berkeley, CA 94704. Any tenant's name so provided shall be used by the City only for purposes of confirmation.
4. Private right of action - Any person aggrieved by an owner's failure to comply with the requirements of Section 19.39.060.A may bring a civil action against the owner for all appropriate relief. In any such action, the prevailing party(ies) shall be entitled to reasonable attorneys' fees in addition to other costs, and in addition to any liability for damages imposed by law.

B. Obligation of Owners to carry out the retrofit:

1. The owners of potentially hazardous SWOF buildings shall apply for and obtain building permits for seismic retrofitting within the time frame specified in the compliance schedule set out in this Chapter.
2. The owners of potentially hazardous SWOF buildings shall seismically upgrade the buildings within the time frame specified in the compliance schedule

specified in this Chapter to the standard required in this Chapter, or an alternative standard which is in accordance with the City's Building Code and is accepted by the Building Official in writing.

C. Obligation of Owners to Notify Tenants regarding the retrofit.

1. The owners of potentially hazardous SWOF buildings shall notify each tenant in writing of the planned schedule for seismic retrofitting pursuant to this Chapter, at least thirty (30) days in advance of the first planned construction. Such notice shall include any reasonably anticipated major disruption or reduction in service provided to the tenants.
2. The owners of potentially hazardous SWOF buildings shall notify each tenant in writing of any relocation by the tenant that will be reasonably necessitated by mandatory seismic retrofit as provided for in BMC Section 13.84.040.
3. The owners of potentially hazardous SWOF buildings shall notify each tenant that he/she may be eligible for financial assistance to offset the cost of the relocation as provided for in BMC Chapter 13.84 and shall provide a copy of that Chapter to each tenant.

D. Obligations of Tenants to Cooperate. Each tenant of a potentially hazardous SWOF building shall cooperate with the owner and the owner's agents, including but not limited to engineers, contractors, and inspectors, to accomplish the required analysis and retrofit. In so doing, tenants shall allow reasonable access to the building and their unit or space as needed and as permitted by California Civil Code Section 1954.

**19.39.070 Reserved.**

**19.39.080 Removal of building from the inventory.**

A building shall be removed from the inventory under the following circumstances:

- A. A determination by the Building Official that the building does not contain a soft, weak or open front condition and meets the applicable standards; or
- B. The satisfactory completion of a seismic retrofit and appropriate inspections bringing the building up to the applicable standards established in Section 19.39.100; or
- C. A determination by the Building Official or a decision on appeal that the building is not a potentially hazardous SWOF building; or
- D. Demolition or destruction of the building.

**19.39.090 Reserved.**

**19.39.100 Adoption of engineering criteria for seismic retrofits submitted after January 1, 2014.**

A. Potentially hazardous SWOF buildings shall be retrofitted in conformance with one of the following engineering criteria:

1. 2012 edition of the International Existing Building Code (IEBC) Appendix Chapter A-4; or
2. ASCE 41-06, Seismic Rehabilitation of Existing Buildings, using a performance objective of S-5 (Collapse Prevention) in the BSE-C earthquake; or
3. ASCE 41-13, Seismic Evaluation and Rehabilitation of Existing Buildings, using a performance objective of S-5 (Collapse Prevention) in the BSE-2E Earthquake; or
4. FEMA P-807, Seismic Evaluation and Retrofit of Multi-Unit Wood-Frame Buildings With Weak First Stories, as a pre-approved “substantially equivalent standard” under procedures of CBC Section 104.11 for Alternative Materials, Design and Methods of Construction, and with a retrofit objective as established by the Building Official; or
5. Subject to the project specific approval by the Building Official, the 2003 edition of the International Existing Building Code (IEBC) Appendix Chapter A-4, for buildings with Seismic Engineering Evaluation Reports submitted prior to January 1, 2014, that (i) include structural design calculations and construction documents demonstrating conformance to Chapter A4 of the 2003 IEBC; and (ii) are suitable for building permit submittal.

B. Work above the critical story: Regardless of which standard is selected, this Chapter does not require retrofit actions above the critical story (typically the ground story) and the floor diaphragm immediately above it.

C. The Building and Safety Division shall develop and publish Framework Guidelines calibrating, delineating and detailing technical requirements to be used for the retrofitting of buildings on the City of Berkeley inventory required to meet the engineering criteria established in Section 19.39.100.A.

**19.39.110 Compliance schedule for completion of seismic retrofits.**

A. Deadlines.

1. All owners of potentially hazardous SWOF buildings shall submit an application for a building permit to carry out the required retrofit in accordance with this Chapter no later than December 31, 2016.
2. The retrofit shall be completed no later than two years after submittal of the application for a building permit pursuant to Subsection 19.39.110.A.1.

B. Acceleration of Deadlines. Notwithstanding Subdivision A of this Section, the owners of potentially hazardous SWOF buildings shall submit an application for a building permit to carry out the required retrofit in accordance with this Chapter within

six months from the effective date of this Chapter and complete the retrofit no later than eighteen months after submittal of the application for a building permit whenever any one or more of the following occurs:

1. The Building Official determines that the building or any major portion thereof will be reoccupied after being vacant for six months or longer.
2. The building will undergo a remodel, alteration, addition or structural repairs valued at more than \$50,000 per unit, except for repairs found by the Building Official to be required for routine maintenance or in response to emergency situations.
3. Title to the building is transferred in whole or part or the building is sold to a new owner or owners, except when such transfer results from a change in title due to inheritance or transfers between spouses or registered domestic partners.
4. Additional financing is obtained which is secured by a deed of trust or mortgage recorded on the title to the building. Financing secured solely to refinance existing debt against the property or for structural and maintenance related repairs shall not be considered additional financing for the purposes of this Chapter.
5. The use of the building changes such that Section 3408 of the Berkeley Building Code (BMC Chapter 19.28) applies.
6. The building is declared to be an Unsafe Building as specified in Section 19.28.020 Subsection 116 of the Berkeley Building Code by the Building Official.

C. Hardship Exceptions. The City Manager or his or her designee may grant an exception to the requirements of this Section and extend the deadline for completing all or a part of required seismic retrofit work. An exception may initially extend the building permit application deadline or performance of some or all of required retrofit work by up to one year. The City Manager may grant one additional extension of up to one year to the same owner if a continued exception is justified in accordance with the requirements of this Section. However, any subsequent extension request by the same owner must be approved by the Housing Advisory Commission. Hardship exceptions shall only be granted where:

1. The owner submits to the City Manager a detailed written statement requesting an exception, explaining why an exception should be granted and clearly documenting the reasons for an exception in accordance with the requirements of this Section; and
2. The owner submits a written plan to the City Manager for proceeding with the retrofit work, with any exceptions granted, and agrees to fully cooperate with

the City in identifying all available financing for the seismic retrofit work and any related relocation.

Exceptions granted under this Section are limited to deadlines imposed pursuant to Section 19.39.110 only and shall not apply to any other corrections required by the City.

D. Required Findings. In order to grant an extension, the City Manager, or the Housing Advisory Commission upon a third request for an extension by the same owner, must find that:

1. The building does not present an imminent threat to the life or safety of occupants or the public, based on a report from a California licensed structural or civil engineer. The City may require partial or interim seismic retrofit work in order to grant an extension; and
2. The owner has complied with all other applicable requirements, including submitting an approved engineering evaluation report, tenant notification, and posting of earthquake warning signs; and
3. The owner demonstrates one or more of the following conditions:
  - a. Funds are unavailable for the required seismic retrofit work. The owner shall provide the following information as required to determine financial hardship:
    1. Contractors' bids or a professional cost estimate of the seismic retrofit;
    2. Specific information on building's rents, operating expenses, existing debt, projected rents on the retrofitted building and any other information needed to analyze the ability of the building to support additional debt to perform the retrofit work; and
    3. Statements from lenders that they are unwilling to provide financing for the retrofit work. The City may require an owner to apply for any financing the City determines may be available for the retrofit work before making a determination of hardship.
    4. Any other information requested by the City Manager.
  - b. In order to qualify for necessary financing, very low-income residential tenants will be required to pay a higher rent and the increased monthly contract rent will be more than 30% of the tenants' household income and no subsidy is currently available to reduce the rent to 30% or less than the tenants' household income. For purposes of this part, very low-income residential tenants are households with incomes below 50 percent (50%) of area median income.

- c. There are unique and exceptional circumstances that prevent or hinder the performance of retrofit work.

**19.39.120 Automatic gas shut-off valves in retrofitted buildings.**

Approved automatic gas shut-off valves shall be installed in potentially hazardous SWOF buildings that contain gas piping for which a seismic retrofit permit is issued on or after January 1, 2014, regardless of the valuation of the retrofit work. The valves shall be listed by recognized testing agencies and shall be installed in compliance with the requirements specified in the Berkeley Plumbing Code (BMC Chapter 19.34).

**19.39.130 Fifteen-year exemption for retrofitted buildings.**

Any building, or any portion of a building that is identified under this Chapter as being a potentially hazardous SWOF building and is retrofitted in compliance with the applicable standards or the City of Berkeley Building Code shall not, within a period of 15 years from the date the mandatory seismic retrofit requirement within this Chapter becomes effective, be identified as a potentially hazardous SWOF building pursuant to any local building standards adopted after the date of the building retrofit unless such building no longer meets the standards under which it was retrofitted.

**19.39.140 Seismic engineering evaluation report (Required for buildings on the SWOF inventory prior to January 1, 2014).**

For buildings placed on the inventory prior to January 1, 2014, within two years of the date of service of the notice of inclusion on the inventory, the owner of each building on the inventory shall submit an Initial Screening and a detailed seismic engineering evaluation report prepared by a qualified California licensed structural or civil engineer that: analyzes the structural ability of the building to resist the seismic effects of earthquakes and the extent to which the building meets the standards for structural seismic adequacy as set forth in Chapter A4 of the 2003 IEBC as modified by this Chapter, identifies any hazardous exterior design elements, describes the elements of work needed to remedy the identified weaknesses, and provides other relevant information as specified by the Building Official. The seismic evaluation report review fee as set by City Council resolution shall apply. The purpose of the analysis is to investigate the structural systems of a building that resist loads imposed by earthquakes and to determine if any individual portion or combination of these systems is inadequate to prevent a collapse or partial collapse or other damage hazardous to life.

**19.39.150 Adoption and modifications of Chapter A4 of the 2003 IEBC for seismic engineering evaluation reports submitted prior to January 1, 2014.**

A. Chapter A4 of the 2003 International Existing Building Code ("IEBC"), as published by the International Code Council or any amendments thereto as determined by the City of Berkeley Building Official is hereby adopted and made a part of this Chapter as though fully set forth herein, subject to modifications set forth in this Chapter. For purposes of this Chapter, the standards in the IEBC shall be used for the analysis of seismic weakness and to formulate the elements of work required to remedy any identified weaknesses. For the purposes of this Chapter, the non-wood frame elements of the ground floor of a designated building shall also be analyzed.

B. The Building Official shall provide guidelines delineating the standards for the use of Chapter A4, including amendments for buildings with non-wood-frame ground floor elements, and for filing the report required by this ordinance. The guidelines shall provide details for items required in the report, procedures to be followed, and a framework for both the assembly of the required information by the professional and for the evaluation of the report by the City.

C. To provide standards for the analysis of non-wood frame ground floor elements, the American Society of Civil Engineers (ASCE) Standard 31 - "Seismic Evaluation of Existing Buildings", 2003 Edition, is hereby adopted by reference.

**19.39.160 Public nuisance.**

Any building for which the owner has failed to file the required Seismic Engineering Evaluation Report , or fails to comply with notification requirements in compliance with Section 19.39.060.A, or fails to perform the required seismic retrofit work in compliance with Sections 19.39.100 and 19.39.110, or fails to comply with any order of the Building Official pursuant to this Chapter, is hereby declared to be a public nuisance and may be abated pursuant to the procedures set forth in BMC Chapter 1.24.

**19.39.170 Remedies cumulative.**

Remedies provided by this Chapter are cumulative.

**19.39.180 Severability.**

If any Section, subsection, sentence, clause or phrase of this Chapter is for any reason held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining portions of this Chapter. The City Council hereby declares that it would have passed this Chapter, and each Section, subsection, sentence, clause and phrase thereof, irrespective of the fact that any one or more Sections, subsections, sentences, clauses or phrases had been declared invalid or unconstitutional.

Section 2. Copies of this Ordinance shall be posted for two days prior to adoption in the display case located near the walkway in front of Old City Hall, 2134 Martin Luther King Jr. Way. Within fifteen days of adoption, copies of this Ordinance shall be filed at each branch of the Berkeley Public Library and the title shall be published in a newspaper of general circulation.

At a regular meeting of the Council of the City of Berkeley held on November 19, 2013 this Ordinance was passed to print and ordered published by posting by the following vote:

Ayes: Anderson, Arreguin, Capitelli, Maio, Moore, Wengraf, Worthington, Wozniak and Bates.

Noes: None.

Absent: None.