



Home	Bill Information	California Law	Publications	Other Resources	My Subscriptions	My Favorites	
------	------------------	----------------	--------------	-----------------	------------------	--------------	--

Code:  Section:

[Up^](#) [Add To My Favorites](#)

**HEALTH AND SAFETY CODE - HSC**

**DIVISION 13. HOUSING [17000 - 19997]** ( *Division 13 enacted by Stats. 1939, Ch. 60.*  )

**PART 3. MISCELLANEOUS [19000 - 19892]** ( *Part 3 enacted by Stats. 1939, Ch. 60.*  )

**CHAPTER 2. Earthquake Protection [19100 - 19217]** ( *Chapter 2 enacted by Stats. 1939, Ch. 60.*  )

**ARTICLE 4. Earthquake Hazardous Building Reconstruction [19160 - 19168]** ( *Article 4 added by Stats. 1979, Ch. 510.*  )

**19160.** The Legislature finds and declares that:

- (a) Because of the generally acknowledged fact that California will experience moderate to severe earthquakes in the foreseeable future, increased efforts to reduce earthquake hazards should be encouraged and supported.
- (b) Tens of thousands of buildings subject to severe earthquake hazards continue to be a serious danger to the life and safety of hundreds of thousands of Californians who live and work in them in the event of an earthquake.
- (c) Improvement of safety to life is the primary goal of building reconstruction to reduce earthquake hazards.
- (d) In order to make building reconstruction economically feasible for, and to provide improvement of the safety of life in, seismically hazardous buildings, building standards enacted by local government for building reconstruction may differ from building standards which govern new building construction.
- (e) "Soft story" residential buildings are a subset of multistory woodframe structures that may have inadequately braced lower stories that may not be able to resist earthquake motion.
- (f) Soft story residential buildings are an important component of the state's housing stock and are in jeopardy of being lost in the event of a major earthquake.
- (g) Soft story residential buildings were responsible for 7,700 of the 16,000 housing units rendered uninhabitable by the Loma Prieta earthquake and over 34,000 of the housing units rendered uninhabitable by the Northridge earthquake.
- (h) During an earthquake, soft story residential buildings may create dangerous conditions as illustrated in the Northridge Meadows apartment failure that claimed the lives of 16 residents.
- (i) The collapse of soft story residential buildings can ignite fires that threaten trapped occupants and neighboring buildings and complicates emergency response.
- (j) The Association of Bay Area Governments (ABAG) estimates that soft story residential buildings will be responsible for 66 percent of the uninhabitable housing following an event on the Hayward fault.
- (k) The failure of soft story residential buildings is estimated by ABAG to be the source of a disproportionate share of the public shelter population because they tend to be occupied by the very poor, the very old, and the very young.
- (l) The Seismic Safety Commission has recommended that legislation be enacted to require state and local building code enforcement agencies to identify potentially hazardous buildings and to adopt mandatory mitigation programs that will significantly reduce unacceptable hazards in buildings by 2020.
- (m) The current nationally recognized model code relating to the retrofit of existing buildings is Appendix Chapter A4 of the International Existing Building Code. However, it is not the intent of the Legislature, if other model codes relating to the retrofit of existing buildings are developed, to limit the California Building Standards Commission or a local government, pursuant to Section 19162, to adopting a particular model code.

(n) Therefore, it is the intent of the Legislature to encourage cities and counties to address the seismic safety of soft story residential buildings and encourage local governments to initiate efforts to reduce the seismic risk in vulnerable soft story residential buildings.

(Amended by Stats. 2005, Ch. 525, Sec. 1. Effective January 1, 2006.)

**19161.** (a) Each city, city and county, or county, may assess the earthquake hazard in its jurisdiction and identify buildings subject to its jurisdiction as being potentially hazardous to life in the event of an earthquake. Potentially hazardous buildings include the

following:

(1) Unreinforced masonry buildings constructed prior to the adoption of local building codes requiring earthquake resistant design of buildings that are constructed of unreinforced masonry wall construction and exhibit any of the following characteristics:

(A) Exterior parapets or ornamentation that may fall.

(B) Exterior walls that are not anchored to the floors or roof.

(C) Lack of an effective system to resist seismic forces.

(2) Woodframe, multiunit residential buildings constructed before January 1, 1978, where the ground floor portion of the structure contains parking or other similar open floor space that causes soft, weak, or open-front wall lines, as provided in a nationally recognized model code relating to the retrofit of existing buildings or substantially equivalent standards.

(b) Structural evaluations made pursuant to this section shall be made by an architect as defined in Section 5500 of the Business and Professions Code, or a civil or structural engineer registered pursuant to Chapter 7 (commencing with Section 6700) of Division 3 of the Business and Professions Code, or staff of the enforcing agency, as described in Section 17960, supervised by an architect or civil or structural engineer authorized by this subdivision to make the structural evaluations.

*(Amended by Stats. 2006, Ch. 538, Sec. 375. Effective January 1, 2007.)*

**19162.** (a) Notwithstanding the provisions of Section 19100 or 19150 or any other provision of law, the governing body of any city, city and county, or county may, by ordinance, establish building seismic retrofit standards applicable to the seismic retrofit of any buildings identified pursuant to paragraph (1) of subdivision (a) of Section 19161 by the city, city and county, or county as being potentially hazardous to life in the event of an earthquake.

(b) (1) Notwithstanding the provisions of Section 19100, 19150, or any other provision of law, the governing body of any city, city and county, or county may, by ordinance, establish building seismic retrofit standards applicable to the seismic retrofit of any buildings identified pursuant to paragraph (2) of subdivision (a) of Section 19161 by the city, city and county, or county as being potentially hazardous to life in the event of an earthquake. Any standards established pursuant to this section shall apply until the effective date of building standards adopted by the California Building Standards Commission relating to the retrofit of existing buildings, if any, at which time the standards adopted by the commission as amended by the city, county, or city and county pursuant to Section 17958.5 shall apply.

(2) A local ordinance establishing building seismic retrofit standards applicable to soft story residential structures adopted before January 1, 2006, shall remain in full force and effect until the effective date of building standards adopted by the California Building Standards Commission relating to the retrofit of existing buildings unless the city, county, or city and county after January 1, 2006, adopts an ordinance pursuant to paragraph (1).

(c) Building seismic retrofit standards adopted pursuant to this section may be applied uniformly throughout the city, city and county, or county, or may be applied in specific areas designated by the city, city and county, or county.

(d) For purposes of this chapter, "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.

*(Amended by Stats. 2005, Ch. 525, Sec. 3. Effective January 1, 2006.)*

**19163.** Any local ordinance adopted pursuant to Section 19162 shall require the following:

(a) Any seismic retrofit of any building identified pursuant to paragraph (1) of subdivision (a) of Section 19161 as being hazardous to life in the event of an earthquake shall provide for the reasonable adequacy of all of the following:

(1) Unreinforced masonry walls to resist normal and inplane seismic forces.

(2) The anchorage and stability of exterior parapets and ornamentation.

(3) The anchorage of unreinforced masonry walls to the floors and roof.

(4) Floor and roof diaphragms.

(5) The development of a complete bracing system to resist earthquake forces.

(b) Any seismic retrofit of any building identified pursuant to paragraph (2) of subdivision (a) of Section 19161 as potentially hazardous shall comply with a nationally recognized model code relating to the retrofit of existing buildings or substantially equivalent standards. If the city, county, or city and county adopts local amendments to those provisions, it shall determine that the amendments are consistent with Section 17958.5.

(c) Seismic retrofit of any building or portions of any building shall be designed to resist and withstand the seismic forces from any direction as set forth in the building seismic retrofit standards using the allowable working stresses adopted pursuant to this article.

(d) The governing board of any city, city and county, or county may establish, by ordinance, standards and procedures to fulfill the intent of paragraph (2) of subdivision (a) without regard to the remainder of the requirements specified above.

*(Amended by Stats. 2005, Ch. 525, Sec. 4. Effective January 1, 2006.)*

**19163.5.** Except as otherwise provided in Chapter 1 (commencing with Section 129675) of Part 7 of Division 107, an ordinance adopted by a city, city and county, or county pursuant to Section 19163, may establish higher standards for the seismic retrofit of those structures or buildings which are needed for emergency purposes after an earthquake in order to preserve the peace, health, and safety of the general public, including, but not limited to, hospitals and other medical facilities having surgery or emergency treatment areas, fire and police stations, government disaster operations centers, and public utility and communication buildings deemed vital in emergencies.

*(Amended by Stats. 2006, Ch. 890, Sec. 11. Effective January 1, 2007.)*

**19164.** Any city, city and county, or county may assign allowable working stresses to existing materials based on substantiating research data or engineering judgment. Such allowable working stresses shall be limited by a safety factor which is reasonably commensurate with the importance of the element in which the material is used. In the event the local jurisdiction does not have the ability to assign such allowable working stresses, it may employ as a consultant the office of the State Architect. Allowable working stresses prepared by the office of the State Architect for any city, city and county, or county shall be subject to approval by the Seismic Safety Commission.

*(Added by Stats. 1979, Ch. 510.)*

**19165.** Any city, city and county, or county adopting an ordinance establishing building seismic retrofit standards for seismically hazardous buildings shall file for informational purposes with the Department of Housing and Community Development a copy of those standards and all subsequent amendments.

*(Amended by Stats. 2006, Ch. 538, Sec. 376. Effective January 1, 2007.)*

**19166.** Any building identified as being a seismic hazard to life and retrofitted in compliance with building seismic retrofit standards adopted pursuant to this article and properly maintained, shall not, within a period of 15 years, be identified as a seismic hazard to life pursuant to any local building standards adopted after the date of the building seismic retrofit unless the building no longer meets the seismically hazardous building retrofit standards under which it was retrofitted.

*(Amended by Stats. 2005, Ch. 525, Sec. 7. Effective January 1, 2006.)*

**19167.** No city, city and county, or county, nor any employee of any such entity, shall be liable for damages for injury to persons or property, resulting from an earthquake or otherwise, on the basis of any assessment or evaluation performed, any ordinance adopted, or any other action taken pursuant to this article, irrespective of whether such action complies with the terms of this article, or on the basis of failure to take any action authorized by this article. The immunity from liability provided herein is in addition to all other immunities of the city, city and county, or county provided by law.

*(Amended by Stats. 1979, Ch. 1131.)*

**19168.** Nothing in this article shall apply to those buildings and structures governed by the provisions of Chapter 1 (commencing with Section 15000) of Division 12.5 of this code or Article 3 (commencing with Section 39140) of Chapter 2 of Part 23 of the Education Code or Article 7 (commencing with Section 81130) of Chapter 1 of Part 49 of the Education Code or any state-owned buildings or structures located in any city, city and county, or county.

*(Added by Stats. 1979, Ch. 510.)*