

Chapter 15.44

EARTHQUAKE HAZARD REDUCTION IN
UNREINFORCED MASONRY BUILDINGS

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15.44.010 Purpose. (a) The purpose of this chapter is to promote public safety and welfare by reducing the risk of death or injury that may result from the effects of earthquakes on unreinforced masonry buildings, constructed prior to 1946 (the adoption date of the Building Code requiring earthquake resistant design of buildings). Of secondary benefit is the reduction of property damage. Such buildings have been widely recognized for sustaining life-hazardous damage during moderate to strong earthquakes.

(b) The provisions of this chapter are intended as minimum standards for structural seismic resistance established primarily to reduce the risk of life loss or injury. Compliance with these standards will not necessarily prevent earthquake damage to rehabilitated buildings. This chapter does not require alteration of existing electrical, plumbing, mechanical or fire safety systems unless they constitute a hazard to life or property.

(c) This chapter provides systematic procedures and standards for the identification and classification of unreinforced masonry buildings based upon their present use. Priorities, time periods and standards are also established under which these buildings are required to be structurally analyzed and strengthened. Where the analysis finds deficiencies, this chapter requires the building to be strengthened, abandoned, or demolished. (Ord. 479 §1(part), 1990).

15.44.020 Scope. The provisions of this chapter shall apply to all buildings constructed or under construction prior to 1946 (adoption date of local earthquake resistant code requirements), or for which a building permit was issued prior to 1946, which on the effective date of the ordinance codified in this chapter are of unreinforced masonry construction as defined herein.

EXCEPTION: This division shall not apply to detached one or two family dwellings and detached apartment houses containing less than five dwelling units and used solely ' for residential purposes. (Ord. 479 §1(part), 1990).

15.44.030 Definitions. For purposes of this chapter, the applicable definitions in Sections 2302 and 2312 of the 1988 Uniform Building Code shall apply. For purposes of this chapter, the following additional definitions shall apply:

(a) "High risk building" means any building having an occupant load of one hundred or more as determined herein.

(b) "Low risk building" means any building having an occupant load of less than twenty as determined herein.

(c) "Medium risk building" means any building having an occupant load of less than one hundred and not classified as a low risk building.

(d) "Occupant load" means the maximum number of persons within a building as determined in accordance with Section 3302 of the 1988 Uniform Building Code.

EXCEPTION: The director of public works may allow a lower occupant load for a building, provided no extraordinary hazard will result and the building is posted for the reduced maximum number of occupants.

(e) "Qualified historical building" means any structure or building deemed of importance to the history, architecture, or culture of an area by an appropriate local, state, or federal governmental jurisdiction. This shall include designated structures on official existing or future national, state or local historical registers or official inventories, such as the National Register of Historic Places, State Historical Landmarks, State Points of Historical Interest, and officially adopted town or county registers or inventories of historical or architecturally significant buildings, sites, places or landmarks. A procedure for designation of structures or buildings deemed of historical importance to the town shall be established by resolution.

(f) "Unreinforced masonry construction" means a building or structure constructed with unreinforced masonry bearing walls as herein defined or a steel or concrete framed building with unreinforced masonry in-filled walls.

(g) "Unreinforced masonry bearing wall" means a masonry wall having all of the following characteristics:

(1) Provides the vertical support for a floor or roof;

(2) The total superimposed load is over one hundred pounds per linear foot;

(3) The area of reinforcing steel is less than fifty percent of that required under the 1946 Edition of the Uniform Building Code. (Ord. 479 §1(part), 1990).

15.44.040 Rating classifications. Each building within the scope of this chapter shall be classified by the director of public works as follows:

<u>Type of Building</u>	<u>Classification</u>
Essential Building	I
High Risk Building	II
Medium Risk Building	III
Low Risk Building	IV

For the purposes of this chapter, portions of buildings which are constructed to act independently when resisting seismic forces may be placed in separate rating classifications. (Ord. 479 §1(part), 1990).

15.44.050 General requirements. The owner of each building within the scope of this chapter shall cause a structural analysis as described below, of the building to be made by a civil or structural engineer or architect licensed by the state of California. If the results of said structural analysis indicates that the building does not meet the minimum earthquake standards specified in this chapter, the owner shall either cause the building to be structurally altered to

conform to said standards or cause the building to be abandoned or demolished.

The owner of a building within the scope of this chapter shall comply with the requirements set forth above by submitting to the director of public works for review, within the time limits as specified at the end of this section, one of the following:

(a) A structural analysis demonstrating that the building meets the minimum requirements of this chapter; or

(b) A structural analysis and plans for the proposed structural alterations of the building necessary to bring the building in compliance with the minimum requirements of this chapter; or

(c) Plans for the demolition or abandonment of the building. Plans for the abandonment of any building shall include provisions for protecting pedestrian traffic which would otherwise be endangered by a complete or partial collapse of the building.

EXCEPTION: Qualified historical buildings shall not be demolished without the prior approval of the town council. Procedures for demolition approval shall be established by resolution.

After plans are submitted and approved by the director of public works, the owner shall obtain the necessary building permits, commence and complete the required construction or demolition within the time limits as set forth herein:

<u>Time Limits for Compliance</u>		<u>Total Project</u>	<u>Alternate Phased Project</u>	
Rating	Complete	Complete	Installation	
Classification	Structural	Construction	of Wall	Complete
<u>Occupant Load</u>	<u>Analysis</u>	<u>or Demolition</u>	<u>Anchors</u>	<u>Construction</u>
II 100 or more	Jan 1, 1991	Jan 1, 1993	Jan 1, 1992	Jan 1, 1996
III 20 to 99	Jan 1, 1992	Jan 1, 1995	Jan 1, 1993	Jan 1, 2001
IV less than 20	Jan 1, 1993	Jan 1, 1996	Jan 1, 1994	Jan 1, 2002

(Ord. 479 §1(part), 1990).

15.44.060 Administration. (a) Service of Order. The director of public works shall issue an order, as described in subsection (b) of this section, to the owner(s) of each building found to be within the scope of this chapter within ninety calendar days of the effective date of this chapter.

(b) Contents of Order. The order shall be in writing and shall be served either personally or by certified or registered mail to the owner as shown on the last equalized assessment, and to the person, if any, in apparent charge or control of the building. The order shall specify that the building has been determined by the director of public works to be a potential earthquake hazard within the scope of this chapter and, therefore, the building is required to meet the minimum seismic standards of this chapter. The order shall specify the rating classification of the building and shall be accompanied by a copy of Section 15.44.050.

(c) Appeal of Order. The owner or person in charge or control of the building may appeal in writing to the director of public works' initial determination that the building is within the scope of this chapter. Such appeal shall be filed within ninety calendar days from receipt of the order described in subsection (b) of this section. Any such appeal shall be decided by the town council.

In order to grant an appeal, the town council shall make a finding that there is sufficient technical justification for such building not to be within the scope of this chapter.

Each appeal shall be accompanied by a filing fee of fifty dollars.

(d) Recordation. At the time that the aforementioned order is served, the director of public works shall file with the office of the county recorder a certificate stating that the subject building is within the scope of this chapter. The certificate shall also state that the owner thereof has been ordered to structurally analyze the building and to structurally alter or demolish it where it is not found to comply with this chapter.

If the building is found not to be within the scope of this chapter, or as a result of structural alterations or an analysis is found to be structurally capable of resisting minimum seismic forces required by this chapter, or is demolished, the director of public works shall file with the office of the county recorder a certificate terminating the status of the subject building as being classified within the scope of this chapter. (Ord. 479 §1(part), 1990).

15.44.070 Analysis and design. Every structure within the scope of this division shall be analyzed and constructed to resist minimum total lateral seismic forces assumed to act nonconcurrently in the direction of each of the main axes of the structure in accordance with the provisions of Appendix Chapter 1 of the Uniform Code for Building Conservation published by the International Conference of Building Officials.

EXCEPTION: Qualified historical buildings shall be analyzed in accordance with the State Historical Building Code (SHBC) established under part 8, Title 24 of the California Administrative Code. (Ord. 479 §1(part), 1990).

15.44.080 Violation--Penalty. If the owner or other person in charge or control of the subject building fails to comply with any order issued by the director of public works pursuant to this chapter within any of the time limits set forth in Section 15.44.050, the director of public works shall order the entire building vacated and remain vacated until said order has been complied with. If compliance with said order to vacate has not been accomplished within ninety calendar days after the date the building has been ordered vacated, or by such additional time as may have been granted by an appeal, the director of public works may order repair or demolition of the building in accordance with Chapter 15.08 of this code. (Ord. 479 §1(part), 1990).