

to a statement of the adequacy or inadequacy of the system or connection based on the lateral load demand it would be required to resist by calculation . If tests reveal inadequacy, a conceptual solution must be included in the report.

- (d) Conclusions. Based on the demand/capacity ratio and the specific evaluation items, a statement shall be provided explaining the overall significance of the deficiencies found to exist in the building's lateral force-resisting system regarding potential collapse or partial collapse failure.
- (e) Recommendations. An appropriate solution that could be used to strengthen the structure to alleviate any collapse or partial collapse threat shall be specified.

(Added 12-9-1997 by O-18451 N.S.; effective 1-1-2000.)

§145.0422 Exceptions and Alternatives to Content of Report

Exceptions to the specific items required to be included in the Structural Survey and Engineering Report may be granted by the Building Official upon review of a written request from the engineer or architect preparing the report. The request shall provide evidence that adequate information concerning the required items can be determined by alternate means or that a conclusion can be made about the item without following the solution called for in this division. The purpose of granting exceptions shall be to reduce the costs of disruption that would result from taking required actions when it can be shown that they are unnecessary to provide information available by equivalent means. In no case will an exception be granted that would result in an item not being completely evaluated.

(Added 12-9-1997 by O-18451 N.S.; effective 1-1-2000.)

§145.0423 Review and Availability of Structural Survey and Engineering Report

- (a) The Building Official will review the submitted Structural Survey and Engineering Report for compliance with the requirements of this division.
- (b) The cost of this review shall be covered by a fee assessed from the building owner based on the time required for review. This amount shall be credited to the plan checking fee collected for any future mitigation of structural inadequacies specified in the Structural Survey and Engineering Report.

- (c) Copies of the Structural Survey and Engineering Report shall be made available to the public for a standard fee or may be reviewed at the Development Services Department.

(Added 12-9-1997 by O-18451 N.S.; effective 1-1-2000.)

§145.0424 Retrofit Guideline Document

When a Retrofit Guideline Document is required, it shall be submitted within 240 calendar days after the Date of Service of the Order to Comply.

(Added 12-9-1997 by O-18451 N.S.; effective 1-1-2000.)

§145.0425 Regulations for Buildings of Archaic Unreinforced Masonry

- (a) A building or structure of archaic unreinforced masonry shall comply with the provisions set forth in this section.
- (b) A qualified Historical Building may comply with the State Historical Building Code in order to fulfill the requirements of this section.
- (c) Existing or re-erected walls of adobe or stone shall conform to the following:

- (1) Exterior bearing walls of unreinforced stone masonry shall not exceed the height-to-thickness or length-to-thickness ratio, and exterior walls of unreinforced adobe masonry shall not exceed the length-to-thickness ratio, specified in Table No. A-1- B of the UCBC Appendix Chapter 1. Exterior walls of unreinforced adobe masonry shall not exceed a height-to-thickness ratio of 6 to 1 for Seismic Zone No. 3, or a ratio of 5 to 1 for Seismic Zone No. 4. The walls shall be provided with a reinforced concrete bond beam at the top that interconnects all walls. The bond beam shall have a minimum depth of 6 inches. The bond beam may have a width equal to the width of the wall less 8 inches, provided the resulting width is not less than 8 inches. Bond beams of other materials or seismic retrofit designs may be used with the approval of the Building Official.

Exterior bearing walls shall have a minimum wall thickness of 18 inches in Seismic Zone Nos. 3 and 4. Interior adobe partitions shall be a minimum of 10 inches in thickness. No adobe or stone structure may exceed one story in height unless the historic evidence, satisfactory to the Building Official, indicates a two-story height. In such cases, the height-to-thickness ratio shall be as above for the first floor based on the total two-story height and the second floor wall thickness shall not exceed a ratio of 6 to 1. Bond beams shall be provided at the roof and second floor levels.

- (2) Foundations shall be reinforced concrete under newly reconstructed walls and shall be 50 percent wider than the wall above, soil conditions permitting, except that the foundation wall may be 4 inches less in width than the wall if a rock, burned brick, or stabilized adobe facing is necessary to provide authenticity.
 - (3) New or existing unstabilized brick and adobe brick masonry shall test to 75 percent of the compressive strength required of new materials by the 2001 California Building Code, as adopted by the City. Unstabilized brick shall only be used where existing brick is unstabilized and where the building is not susceptible to flooding conditions or direct exposure. Adobe may be allowed a maximum value of 3 pounds per square inch for shear with no increase of lateral forces.
 - (4) Mortar may be of the same soil composition and stabilization as the brick, in lieu of cement mortar, if cement mortar is required for new materials under the 2001 California Building Code.
 - (5) Nominal tension forces due to seismic forces that are normal to the wall may be neglected if the wall meets thickness requirements and shear values allowed by this Section.
- (d) Allowable stresses for archaic materials not specified in the 2001 California Building Code, as adopted by the City or in this division shall be based on substantiating research data or engineering judgement with the approval of the Building Official.

(Added 12-9-1997 by O-18451 N.S.; amended 12-6-1999 by O-18728 N.S.; effective 1-1-2000.)

(Amended 3-1-2006 by O-19468 N.S.; effective 4-1-2006.)

§145.0426 Alternate Materials, Designs, and Methods of Construction

- (a) Methods of analysis and design, the design values themselves, and the materials and methods of construction must be in accordance with the 2001 California Building Code, as adopted by the City, except as modified by this division.

- (b) Alternate materials, designs, or methods of construction may be approved and their use authorized by the Building Official in accordance with the provisions of Section 129.0109.
- (c) The proposed materials, designs, or methods of construction must comply with the purposes of this division and be, for the use intended, at least the equivalent of that prescribed in this division in suitability, strength, effectiveness, fire resistance, durability, safety, and sanitation.
- (d) The Building Official may require that sufficient evidence or proof be submitted to substantiate any claims that may be made regarding the use of an alternate.

(Amended 9-24-2002 by O-19102 N.S.)

§145.0427 Table of Hazard Categories and Classifications

**Table 145-05A
Hazard Categories and Classifications**

Relative Hazard	Occupancy - Use Categories
1 (Highest hazard)	A, E, I B (Drinking and dining establishments with a total occupant load in all drinking and dining establishments in the building of 50 or more)
2	R-1
3	H, S-4, S-5 F-2 With noncombustible materials S-2 Low hazard storage
4	S-1 Gas stations, parking garages S-3 Repair garages S-1 Moderate hazard storage B, F-1, F-2, S-2, M
5 (Lowest hazard)	R-3, U

(Added 12-9-1997 by O-18451 N.S.; effective 1-1-2000.)