

Title 15

BUILDINGS AND CONSTRUCTION

Chapters:

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Chapter 15.04**UNIFORM BUILDING AND RELATED
CODES****Sections:**

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15.04.010 Building Code.

Certain code in book form to which more particular reference is herein made, regulating the construction, erection, alteration, repair, removal, demolition, conversion, equipment, use, height, area and maintenance of buildings in the city of Lindsay, together with the amendments thereof, herein specifically set forth, together with the penalty herein set forth to be known as the Building Code compiled by and adopted by the International Code Council, Inc., together with the following Appendix Chapters 1, B, C, G, H, I, J; the entire Chapter of California Part 8 Historical Building with Appendix A1 and Reference Standards 21-4, 21-6, 21-7, 21-8, 21-13; and the 2007 California Existing Building Code Part 10, thereto is adopted and enacted by the council of the city of Lindsay, to all intents and purposes and to the same effect as if each and every sentence, paragraph, work and clause in said code mentioned are referred to herein or therein were fully and specifically set forth herein, with the exception of the penalty provi-

sion thereof. A copy of these documents known as the Building Code of the city of Lindsay, shall be on file in the office of the building official (city services department), and shall be available for public inspection during normal business hours of the city of Lindsay. (Ord. 524 § 1 (A), 2007)

15.04.060 Dangerous Building Abatement Code.

Certain documents known as the "Uniform Code for the Abatement of Dangerous Buildings, 1997 Edition," published by the state of California, shall hereafter be known as the dangerous building abatement code of the city of Lindsay and shall be the code for regulating the abatement of dangerous buildings through repair, removal or demolition. A copy of this document, known as the "Uniform Code for the Abatement of Dangerous Buildings," shall be on file in the office of the city of Lindsay building official and available for public review during normal business hours. (Ord. 508 § 1 (part), 2003; Ord. 494 § 1 (part), 1999; Ord. 463 § 1 (part), 1995; Ord. 449 (part), 1992; Ord. 400 (part), 1985; Ord. 385 (part), 1983; Ord. 362 § 2, 1981)

15.04.070 Mechanical Code.

Certain code in book form to which more particular reference is herein made regulating the installation and maintenance of heating, ventilating, cooling and refrigeration systems, to be known and referred to as the California Mechanical Code is adopted and enacted by the council of the city of Lindsay as an ordinance of the city of Lindsay, to all intents and purposes and to the same effect as if each and every sentence, comma, paragraph, work, phrase, and clause in said code mentioned or referred to herein or herein were and each thereof was fully and specifically set forth herein. A copy of these documents known as the Mechanical Code of the city of Lindsay, shall be on file in the office of the building official (city services department), and shall be available for public inspection during normal business hours of the city of Lindsay. (Ord. 524 § 1 (B), 2007)

15.04.080 Building Security Code.

That certain document known as the "Uniform Building Security Code, 1997 Edition," published by the International Conference of Building Officials (ICBO), shall hereafter be known as the building security code of the city of Lindsay and shall be the code for regulating and providing minimum standards to make dwelling units resistant to unlawful entry. A copy of this document known as the Uniform Security Code shall be on file in the office of the building official of the city of Lindsay and shall be available for inspection and review by the public during normal business hours. (Ord. 508 § 1 (part), 2003: Ord. 494 § 1 (part), 1999: Ord. 463 § 1 (part), 1995: Ord. 449 (part), 1992)

15.04.090 Sign Code.

That certain document known as the "Uniform Sign Code, 1997 Edition," published by the International Conference of Building Officials (ICBO), shall hereafter be known as the sign code of the city of Lindsay and shall be the code for regulating the construction, installation, location, electrification and maintenance of all signs and sign structures in the city of Lindsay. A copy of this document known as the Uniform Sign Code shall be on file in the office of the building official of the city of Lindsay and shall be available for inspection and review by the public during normal business hours. (Ord. 508 § 1 (part), 2003: Ord. 494 § 1 (part), 1999: Ord. 463 § 1 (part), 1995: Ord. 449 (part), 1992)

15.04.150 Housing Code.

That certain document known as the "Uniform Housing Code, 1997 Edition," published by the International Conference of Building Officials (ICBO), shall hereafter be known as the housing code of the city of Lindsay and shall be the code for regulating and providing minimum standards to safeguard life, limb, health and safety of all residential buildings and structures in the city of Lindsay. A copy of this document known as the Uniform Housing Code shall be on file in the office of the building official of the city of Lindsay and shall be available for inspection and review by the public during normal business

hours. (Ord. 508 § 1 (part), 2003: Ord. 494 § 1 (part), 1999: Ord. 463 § 1 (part), 1995: Ord. 449 (part), 1992: Ord. 400 (part), 1985: Ord. 385 (part), 1983: Ord. 362 § 5, 1981)

15.04.160 Plumbing Code.

A. Certain code in book form to which more particular reference is hereinafter made, regulating the business of plumbing, and the installation of plumbing fixtures and appliances, to be known and referred to as the California Plumbing Code, is adopted and enacted by the council of the city of Lindsay as an ordinance of the city of Lindsay, to all intents and purposes and to the same effect as if each and every sentence, comma, paragraph, work, phrase, and clause in said code mentioned or referred to herein or herein were and each thereof was fully and specifically set forth herein. A copy of these documents known as the Plumbing Code of the city of Lindsay, shall be on file in the office of the building official (city services department) of the city of Lindsay, and shall be available for inspection and review by the public during normal business hours.

B. The Plumbing Code shall be amended by adding the following requirements relating to water and sewer service:

1. Each dwelling, commercial or industrial property served by community water service shall have an approved cut off valve on the customer's side of the water meter for their needs. It shall be a violation of Penal Code Section 498 for any individual to divert, tamper or reconnect any service. All connections, valves, instruments, etc., on the community water systems side of the meter shall not be tampered with by anyone other than an employee of the city.

2. Each dwelling, commercial or industrial property served by community sewer service shall have an approved lateral cleanout accessible at grade level to provide for service by the customer. The sewer lateral serving the property shall be owned and maintained by the property owner including all laterals from the property out to the city mainline. If service requires work to be performed in the public

right-of-way, the appropriate permits shall be obtained prior to beginning work.

3. The city has adopted the use of aquapex for potable water system with ICBO Evaluation Report No. S142. (Ord. 524 § 1 (C), 2007)

15.04.180 Electrical Code.

The 2007 Edition California Electrical Code, published by the California Building Standards Commission, including all amendments and appendices, is adopted by reference as the Electrical Code of the city. This shall be the code for regulating and providing minimum standards for the protection of the public health, safety and welfare regarding the installation, alteration, addition, repair, relocation, replacements maintenance or use of electrical systems in the city of Lindsay, and providing for the issuance of permits and collection of fees as hereinafter set forth and adopted by the governing body. A copy of these documents, known as the Electrical Code of the city of Lindsay, shall be on file in the office of the building official (city services department) of the city of Lindsay, and shall be available for inspection and review by the public during normal business hours. (Ord. 524 § 1 (D), 2007)

15.04.190 Fire Code.

There is adopted by the council of the city of Lindsay for the purpose of prescribing regulations governing conditions hazardous to life and property from fire or explosion, that certain code known as the California Fire Code, published by the International Code Council, Inc., being particularly the 2007 Edition thereof together with the following appendices thereto. A copy of these documents, known as the Fire Code of the city of Lindsay, shall be on file in the office of the building official (city services department) of the city of Lindsay, and shall be available for inspection and review by the public during normal business hours. (Ord. 524 § 1 (E), 2007)

15.04.200 Swimming Pool Code.

That certain document known as the "Uniform Swimming Pool, Spa and Hot Tub Code, 1997 Edition," published by International Association of

Plumbing and Mechanical Officials (IAPMO), shall hereafter be known as the swimming pool code of the city of Lindsay and shall be the code for regulating the installation of pool, spa and hot tub piping systems, including but not limited to water, wastewater, gas and electrical systems as part of the overall pool system. A copy of this document, known as the "Uniform Swimming Pool, Spa and Hot Tub Code" shall be on file in the office of the building official of the city of Lindsay and shall be available for public inspection and review during normal business hours. (Ord. 508 § 1 (part), 2003: Ord. 494 § 1 (part), 1999: Ord. 463 § 1 (part), 1995: Ord. 449 (part), 1992: Ord. 400 (part), 1985: Ord. 385 (part), 1983: Ord. 362 § 9, 1981)

15.04.210 Energy Code.

Certain code in book form to which more particular reference is made, together with the amendments thereof, herein specifically set forth, known as the 2007 Edition of the California Energy Code, compiled by and adopted by the International Code Council, Inc., thereto is adopted and enacted the council of the city of Lindsay, to all intents and purposes and to the same effect as if each and every sentence, paragraph, work and clause in said code mentioned are referred to herein or therein were fully and specifically set forth herein, with the exception of the penalty provision thereof. A copy of these documents, known as the Energy Code of the city of Lindsay, shall be on file in the office of the building official (city services department) of the city of Lindsay, and shall be available for inspection and review by the public during normal business hours. (Ord. 524 § 1 (F), 2007)

15.04.220 Administrative Code.

That certain document known as the "California Administrative Code," published by the state of California, shall hereafter be known as the California Administrative Code of the city of Lindsay and shall be the code for the purpose of providing administration and enforcement of the technical codes adopted by the city of Lindsay. Permit fees shall be as set forth in the "California Administrative Code" for

plan review, building mechanical, plumbing, elevator, grading and special investigations. All fees indicated in the administrative code shall prevail. Any fees indicated in the technical codes but not covered in the administrative code shall prevail. Technical codes referred to in this section and in the "California Administrative Code" shall include the following: "California Building Code, 2001 Edition," "Uniform Code for the Abatement of Dangerous Buildings, 1997 Edition", California Mechanical Code, 2001 Edition."

"Building Security Code, 1997 Edition," Uniform Sign Code, 1997 Edition," "Uniform Housing Code, 1997 Edition," "California Plumbing Code, 2001 Edition," "California Electrical Code, 2001 Edition," "California Fire Code, 2001 Edition," "Uniform Swimming Pool, Spa and Hot Tub Code, 1997 Edition," "California Energy Code, 2001 Edition," and all amendments, supplements, standards, errata, appendices to the above-named codes. A copy of the document known as the "California Administrative Code" shall be on file in the office of the building official of the city of Lindsay and shall be available for inspection and review by the public during normal business hours. (Ord. 508 § 1 (part), 2003: Ord. 494 § 1 (part), 1999: Ord. 463 § 1 (part), 1995: Ord. 449 (part), 1992)

15.04.230 Penalty for violation.

A. Any person, firm, corporation or other organization or entity violating any provision of this title shall be guilty of a misdemeanor and, upon conviction thereof, and said conviction shall be punishable by a fine of not more than one thousand dollars, or by imprisonment for a term of not more than six months, or by both fine and imprisonment. In the alternative, with the concurrence of the city attorney, any person violating any of the provisions or failing to comply with any of the mandatory requirements of this title, and any state code specifically adopted by reference in the applicable chapters of this title, may be prosecuted for an infraction. The fines shall be assessed in the following amounts: (1) a fine not exceeding one hundred dollars for the first violation, (2) a fine not exceeding five hundred dollars for a second

violation of the same ordinance within twelve months, or (3) a fine not exceeding one thousand dollars for each additional violation of the same ordinance within twelve months. A person, firm, corporation, organization or other entity shall be deemed guilty of a separate offense for each day during any portion of which a violation of this title is committed, continued or permitted by the person, firm, corporation, organization or other entity.

B. Any structure erected, moved, altered, enlarged or maintained and any use of a site contrary to the provisions of this title shall be, and is declared to be, unlawful and a public nuisance, and the city attorney shall immediately institute necessary legal proceedings for the abatement, removal and injunction thereof in the manner provided by law and shall take such other steps as may be necessary to accomplish these ends, and shall apply to a court or competent jurisdiction to grant such relief as will remove or abate the structure of use and restrain or enjoin the person, firm, corporation, organization or other entity from erecting, moving, altering or enlarging the structure or using the site contrary to the provisions of this title. As an alternative to criminal prosecution or civil action, the city may elect to proceed with any other remedy available pursuant to the municipal code. (Ord. 524 § 1 (G), 2007)

15.04.240 Interpretation of provisions and substitution of titles.

This chapter shall be interpreted and applied in conjunction with the subdivision ordinance and building code of the city and the word "city inspector" shall be substituted for the words "building official" or "administrative authority" within each of the codes. (Ord. 508 § 1 (part), 2003: Ord. 463 § 1 (part), 1995: Ord. 449 (part), 1992: Ord. 362 § 13, 1981)

15.04.250 Building official duties.

The building official shall be the official responsible for the enforcement of this title. In the discharge of this duty, the building official or his designated representative shall have the right to enter on any site or to enter any structure for the purpose of investigation and inspection; provided that the right of entry

shall be exercised only at reasonable hours and that in no case shall any structure be entered in the absence of the owner or tenant without the written order of a court of competent jurisdiction. The building official may serve notice requiring the removal of any structure or use in violation of this title on the owner or his authorized agent, on a tenant or on any architect, builder, contractor or other person who commits or participates in any violation. The building official may call upon the city attorney to institute necessary legal proceedings to enforce the provisions of this

title, and the city attorney is authorized to institute appropriate actions to that end. The building official may call upon the chief of police and his or her authorized agents to assist in the enforcement of this title. (Ord. 508 § 1 (part), 2003; Ord. 463 § 1 (part), 1995; Ord. 449 (part), 1992)

Chapter 15.05

UNREINFORCED MASONRY BUILDINGS

Sections:

15.05.010	Purpose.
15.05.020	Scope.
15.05.030	Definitions.
15.05.040	Material requirement.
15.05.050	Quality control.
15.05.060	Allowable design values.
15.05.070	Detailed system design requirements.
15.05.080	Tables and standards.

15.05.010 Purpose.

A. The purpose of this chapter is to promote public safety, health and welfare by reducing the risk of death or injury that may result from the effects of earthquakes on unreinforced masonry buildings.

B. The provisions of this chapter establishes minimum standards for structural seismic resistance primarily to reduce the risk of death or injury, but cannot prevent loss of life or injury or prevent earthquake damage to an existing building even though it complies with these standards. (Ord. 508 § 1 (part), 2003; Ord. 463 § 1 (part), 1995)

15.05.020 Scope.

A. The provisions of these requirements shall apply to all buildings having unreinforced masonry bearing walls as defined herein. It is recognized that strengthening was done to some unreinforced masonry buildings following the 1952 Kern County earthquake. The engineer or architect retained by the building owner and the city building official shall give full consideration to any strengthening done when analyzing the existing condition of the building as required by this chapter. Where strengthening was done which may not fully comply with the provisions of this chapter, approval may be granted by the city building official if the building's condition complies with the intent of this chapter.

B. Nothing in this chapter shall prevent the building owner, his architect or engineer from em-

ploying accepted alternative methods to prove the minimum seismic safety of a building. In the event an alternative method is employed by the building owner, his architect or engineer which is not accepted by the city building official, the building owner shall have the right to appeal that decision to the board of building appeals. (Ord. 508 § 1 (part), 2003; Ord. 463 § 1 (part), 1995)

15.05.030 Definitions.

For the purpose of this chapter, certain terms are defined as follows:

“Architect or engineer” means a California licensed architect or California licensed civil or structural engineer in responsible charge of the structural design work for the project.

“Cross walls” means interior walls of masonry or wood stud construction. In order to be considered as a cross wall within the intent of this chapter, cross walls shall be not more than forty feet apart in each story, and shall be full story height between diaphragms. Existing cross walls shall be a minimum length of one and one-half times the story height. Existing wood frame cross walls shall be sheathed with one of the following: wood lath and plaster, one-half inch thick gypsum wallboard on two sides, or solid one inch nominal thickness straight or diagonal wood board sheathing. New cross walls shall have a rational shear path to the ground, and shear values in Chapter 25 of the California Building Code, and shall have a total shear capacity equivalent to that of a wall one and one-half times the story height that is sheathed with a material that has an allowable shear value of one hundred fifty pounds per foot.

“Unreinforced masonry bearing walls” means masonry walls having all of the following characteristics:

1. Provide 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 twenty-five percent of the minimum steel ratios required by the Uniform Building Code for reinforced

masonry. (Ord. 508 § 1 (part), 2003; Ord. 463 § 1 (part), 1995)

15.05.040 Material requirement.

A. Existing Materials. All existing materials utilized as part of the lateral force resisting system shall be in sound condition or shall be removed and replaced with new materials.

B. Existing Unreinforced Masonry.

1. General. Unreinforced masonry walls shall be tested as specified in this subsection. Masonry that does not meet or exceed the minimum standards established by this chapter shall be removed and replaced by new materials and anchored to supporting elements; design of anchorage shall comply with requirements for anchorage of masonry veneer of Section 15.05.070(G).

2. Lay-up of Walls. The facing and backing shall be bonded so that not less than four percent of the wall surface of each face is composed of solid headers extending not less than four inches into the backing. The distance between adjacent full-length headers shall not exceed twenty-four inches either vertically or horizontally. In walls in which a single header does not extend through the wall, headers from opposite sides shall overlap at least four inches, or headers from opposite sides shall be covered with another header course overlapping the header below at least four inches. Wythes of walls not bonded as described above shall be considered as veneer. The veneer wythe shall not be included in the effective thickness used in calculating the height to thickness ratio of the wall unless it is bonded and anchored to the backing in a manner acceptable to the city building official.

3. Mortar A. Tests. The quality of mortar in unreinforced masonry walls shall be determined by performing in-place shear tests in accordance with Uniform Building Code Standard (21-6). Alternate methods of testing to establish compliance with the minimum requirement of Section 15.05.040(E) may be approved by the city building official.

C. Location of Tests. Shear tests shall be taken at locations representative of the mortar conditions throughout the entire building. The exact test location

shall be determined at the building site by the architect or engineer. An accurate record of such tests and their location in the building shall be recorded and these results shall be submitted to the city building official for approval as part of the structural analysis.

D. Number of Tests. The minimum number of tests per wall or line of wall elements providing a common line of resistance to lateral forces shall be as follows: Two tests per wall with a minimum total number of eight tests or one test per one thousand five hundred square feet of wall area, whichever results in the greater number of tests.

E. Minimum Quality Mortar.

1. Mortar shear test values V_{10} shall be obtained for each in-place shear test in accordance with the following equation:

$$V_{10} = (V_{\text{test}}/Ab) - P_{D+L} / A_w \dots \dots \dots (A1-1)$$

where

V_{10} = Mortar shear test value, in psi.

V_{test} = Shear stress at incipient cracking for each in-place test per Standard No. 21.6.

P_{D+L} = Actual dead+live load in place at the time of testing, in pounds.

A_w = Area of the wall supporting P_{D+L} at each in-place shear test.

2. Individual unreinforced masonry wall with V_{10} less than thirty psi shall be pointed prior to retesting.

3. The mortar shear strength, V_1 is the value in psi representing a minimum of eighty percent of all the mortar shear test values, V_{10} .

4. Unreinforced masonry with mortar shear strength, V_1 less than thirty psi shall be removed or pointed and retested.

F. Pointing. All deteriorated mortar joints in unreinforced masonry walls shall be pointed according to Standard No. 21-8. Nothing shall prevent pointing with mortar of all masonry walls joints be-

fore the tests are made, except as required in Section A107.1. (Ord. 508 § 1 (part), 2003; Ord. 463 § 1 (part), 1995)

15.05.050 Quality control.

A. Pointing. Special inspection shall be provided during preparation and mortar pointing.

Exception: Incidental pointing may be performed without special inspection, at the discretion of the building official, and has been approved by the architect or engineer.

B. Existing Floor or Roof Level Wall Anchors.

1. Floor Level Tension Anchors Embedded in Brick. If existing rod anchors embedded in brick are to be utilized as all or part of the required wall anchorage system at the floor level, not less than five percent of such existing rod anchors shall be tested by an approved testing laboratory or under the supervision of the architect or engineer. The minimum number of anchors tested shall be four per floor, with two tests at walls with joists framing into the wall and two tests at walls with joists parallel to the wall but not less than five percent of the total number of existing tension anchors at each level. The test apparatus shall be supported on the masonry wall at a minimum distance of the wall thickness from the anchor tested. The rod anchor shall be given a preload of three hundred pounds prior to establishing a datum for recording elongation. The tension test load reported shall be recorded at one-eighth inch relative movement of the anchor and the adjacent masonry surface. Results of all tests shall be reported. The report shall include the test results as related to the wall thickness and joist orientation. Ends of existing anchors shall be secured into the wood framing by a positive mechanical attachment.

2. Floor or Roof Level Anchors Embedded in Concrete. Existing rod anchors at floor or roof levels that are embedded in existing concrete or gunite applied to the opposite side of the wall need not be tested provided such embedment is verified by observation and report by an approved testing agency or the architect or engineer for at least one anchor, and

all anchors observed, in each wall at each level for which such the anchors are to be utilized as all or part of the required wall anchorage system. Other evidence of such embedment may be approved by the city building official.

C. Testing of Bolts. One-fourth of new embedded bolts in unreinforced masonry walls shall be tested by a testing laboratory or architect or engineer using the procedure of U.B.C. Standard No 21-7 and 2001 California Standards Appendix Chapter 1.

Exception: Special inspection in accordance with the building code or continuous observation by the architect or engineer may be provided during installation in lieu of testing.

D. Required Reports. The architect or engineer or testing agency shall submit a signed report to the city building official for each test, observation or inspection required by this section and Section 15.05.070(G). The report shall state the test, observation, or inspection performed, the date, the results of each individual test, observation or inspection, (including those that fail to satisfy the intent of this chapter) and whether to the best of the knowledge of the preparer of the report, the results indicate compliance with this chapter. (Ord. 508 § 1 (part), 2003; Ord. 463 § 1 (part), 1995)

15.05.060 Allowable design values.

A. Tension Anchors. Allowable values for tension anchors are given in Table A-1-E. A one-third increase is not allowed for values listed in this table.

B. Other Materials. Allowable values not specified in this chapter shall be as specified elsewhere in the 2001 California Building Code. (Ord. 508 § 1 (part), 2003; Ord. 463 § 1 (part), 1995)

15.05.070 Detailed system design requirements.

A. Lateral Force on Elements of Structures and Nonstructural Components. Parts or portions of structures, nonstructural components and their anchorage to the main structural system shall be designed for

lateral forces in accordance with the following formula:

$$F_p = C_p W_p \dots \dots \dots (10-1)$$

W_p shall be as defined in Section 2332. The value of C_p need not exceed the values set forth in Table No. 1C.

B. Height to Thickness Limitations. Unreinforced masonry wall height to thickness ratios shall not exceed ratios set forth in Table No. A-1-B. If a wall height to thickness ratio exceeds the specified limits, the wall shall be laterally supported by bracing members complying with Section 113.5.2 or with Section A113.5.3. Bracing systems shall be designed in accordance with Section 15.05.070(A). The wall thickness may include the thickness of plaster, stucco or concrete that is determined by the architect or engineer to be bonded to the full height of the wall between wall anchors.

C. Bracing Methods.

1. **Vertical Bracing Members.** Vertical bracing members shall be attached to floor and roof construction for their design loads independent of required wall anchors. Horizontal spacing of vertical bracing members shall not exceed one-half the unsupported height of the wall nor ten feet. Deflection of such bracing members at design loads, shall not exceed one-tenth of the wall thickness.

2. **Wall Bracing.** The wall height may be measured to bracing elements other than a floor or roof. Horizontal spacing of the bracing elements and wall anchors shall not exceed six feet on center nor six times the wall thickness, whichever is less. Bracing elements shall be detailed to minimize the horizontal displacement of the wall by the vertical displacement of the floor or roof.

D. Wall Anchorage.

1. **Anchor Locations.** Unreinforced masonry walls shall be anchored at roof and floor levels in order to resist the forces specified in this section.

2. **Tension Anchor Requirements.** Tension anchors shall have a maximum spacing of six feet or six times the wall thickness, whichever is less, and shall

comply with the requirements set forth in Table A-1-E. Tension anchors used to resist required forces may be assumed to develop the allowable values listed in Table No. A-1-E. Tension anchors shall be secured to the rafters or joists to transfer the required forces into the roof or floor sheathing.

3. **New Tension Anchors.** New tension anchors installed to meet the requirements of this section shall be combination tension and shear bolts, and shall be secured to the roof or floor framing to develop tension and shear forces into the diaphragm.

4. **Minimum Wall Anchorage Forces.** New or existing tension anchors shall anchor masonry walls to each floor or roof with a capacity to resist a minimum tension force determined in accordance with Chapter 16 of the Building Code or two hundred pounds per linear foot whichever is greater, acting normal to the wall at the level of the floor or roof. In addition, new combination tension and shear bolts shall be connected to the framing to resist a shear force of two hundred pounds per foot acting parallel to the wall at the level of the floor or roof.

Exception: Where the roof or floor sheathing consists only of one inch nominal thickness single board sheathing, new combination tension and shear bolts may be connected to the framing to resist a shear force of one hundred pounds per foot acting parallel to the wall.

The city building official may approve an analysis by the architect or engineer that demonstrates that the required shear capacity is less than required by this section.

5. **Anchors at Corners.** New combination tension and shear bolts at the roof and floor levels, if required by this section, shall be provided within two feet horizontally from the inside of the corners of the walls.

E. Parapets. Parapets and exterior wall appendages not capable of resisting the forces specified in this section shall be removed, stabilized or braced to ensure that the parapets and appendages remain in their original position.

The maximum height of an unbraced unreinforced masonry parapet above the level of tension anchors shall not exceed the height to thickness ratio shown in Table A-1-F. If the required parapet height exceeds this maximum height, a bracing system designed for the force determined in accordance with Chapter 16 of the Building Code shall be installed to support the parapet. Parapet corrective work shall be performed in conjunction with the installation of tension roof anchors.

The minimum height of a parapet above the wall anchor shall be twelve inches.

Exception: If a reinforced concrete beam is provided at the top of the wall, the minimum height above the wall anchor may be six inches.

F. Mortar Joints. All deteriorated mortar joints in unreinforced masonry walls shall be pointed according to U.B.C. Standard 21-8. Masonry cements shall not be used. Prior to any pointing, the wall surface must be raked and cleaned to remove loose and deteriorated mortar. All preparation for pointing shall be inspected by the architect or engineer or their representative.

G. Masonry Veneer.

1. Veneer shall be anchored to the structures of the building with approved anchor ties conforming to the required design capacity specified in the Building Code and placed at a maximum spacing of twenty-four inches with a maximum supported area of two square feet.

Exception I: Existing masonry veneer anchor ties may be acceptable provided the ties are in sound condition and conform to the following minimum size, maximum spacing and material requirements:

Existing masonry veneer anchors ties shall be corrugated galvanized iron strips not less than one inch in width, eight inches in length and one-sixteenth inch in thickness and shall be located and laid in every alternate course in the vertical height of the wall at a spacing not to exceed seventeen inches on center horizontally. As an alter-

nate, such ties may be laid in every fourth course vertically at a spacing not to exceed nine inches on center horizontally.

Exception II: Masonry veneer, no portion of which six feet is above grade need not be anchored.

2. The location and condition of existing veneer anchor ties shall be verified as follows:

a. The architect or engineer shall determine the location and spacing of the ties.

b. The veneer shall be removed from not less than four locations designated by the architect or engineer for the architect or engineer's evaluation.

c. The architect or engineer shall report to the city building official the veneer anchor tie locations and spacings, their evaluation of the condition and effectiveness of the veneer anchor ties, and their recommendations whether or not the existing veneer anchor ties need to be supplemented with new veneer anchor ties.

3. Unreinforced masonry walls which carry no loads other than their own weight may be considered as veneer if they are adequately anchored to new supporting elements. (Ord. 508 § 1 (part), 2003; Ord. 463 § 1 (part), 1995)

15.05.080 Tables and standards.

For time limits and technical specifications see Table Nos. 1-A, A-1-E, A-1-C and A-1-B; Standard Nos. 24-7 and 24-9.

Table No. 1-A
Time Limits for Proceedings
Following December 31, 1998 Deadline

Required Action By Owner	Obtain Building Permit Within	Commence Construction Within	Complete Construction Within
Anchorage Installation	1 year (1)	180 days (2)	1 year (2)
Buildings to Be Demolished	1 year (1)	180 days (2)	1 year (2)

- (1) Measured from the date of the order.
- (2) Measured from the date of building permit issuance.
- (3) These time limits shall not apply to a change of occupancy involving a Group A occupancy having an occupant load of one hundred or more.

Table No. A-1-E
Allowable Values for Tension Anchors

Type of Installation	Allowable Values (1)
Existing Tension Anchors: Anchors at floor level embedded in brick (63.5 mm) hole filled with dry pack (to be tested per Section 15.05.050(B))	40% of the average of the tests for anchors having same wall thickness and joist orientation.
Anchors at floor or roof levels embedded in existing concrete or gunite on the opposite side of the wall. (2)	1,800 lb. per anchor.
Tension Bolts: Bolts extending entirely through unreinforced masonry walls secured with bearing plates on far side of a three-wythe-minimum wall with at least 30 square inches (19.350 mm ²). (4) (5)	1,800 lbs. (8006 N) per bolt. 900 lbs. (4003 N) per bolt for two-wythe walls.
Shear Bolts: Bolts embedded a minimum of 8 inches (203 mm) into unreinforced masonry (63.5 mm) hole filled with dry pack or non-shrink grout. Through bolts with first 8 inches (203 mm) as noted above.	1/2" (12.7 mm) dia. = 350 lbs. (1557 N) 5/8" (15.9 mm) dia. = 500 lbs. (2224 N) 3/4" (19 mm) dia. = 750 lbs. (3336 N)
Tension Bolts: Bolts extending to the exterior face of the wall with a 2 1/2 inch (63.5 mm) round plate under the head and drilled at an angle of 22 1/2 degrees to the horizontal, installed as specified for shear bolts.	1,200 lbs. (5338 N) per bolt

Footnotes for Table A-1-E

1. A one-third increase in allowable stresses is not allowed, except as noted.
2. Values and limitations are for nailed plywood. Higher values may be used for other fastening systems such as wood screws or staples when approved by the building official.
3. In addition to existing sheathing value.
4. Bolts to be one-half inch (12.7 mm) minimum in diameter.
5. Drilling for bolts and dowels shall be done with an electric rotary drill. Impact tools shall not be used for drilling holes or tightening anchors and shear bolt nuts.
6. Other bolt sizes, values and installation methods may be used provided a testing program is conducted in accordance with U.B.C. Standard 21-7. Bolt spacing shall not exceed six feet (1830 mm) on center and shall not be less than twelve inches (305 mm) on center.
7. Embedded bolts to be tested as specified in Section A107.
8. Stresses given may be increased for combinations of loads as specified in the building code.

Table No. A-1-C
Horizontal Force Factor "C_p" for Parts or Portions of
Buildings or Other Structures

Part or Portion of Buildings	Direction of Force	Value of C _p
Exterior bearing and nonbearing walls; interior bearing walls and partitions; interior non-bearing walls and partitions over 10 feet in height	Normal-to-flat	0.3
Cantilever parapet and other cantilever walls except retaining walls	Normal-to-flat	1.00
Exterior and interior ornament	Any direction	1.00
Prefabricated structural elements, other than walls, with force applied at center of gravity of assembly	Any horizontal direction	0.30
Connection for exterior panels or elements	Any direction	2.00

Table No. A-1-B
Allowable Value of Height-Thickness Ratio or
Unreinforced Masonry Walls with Minimum Quality Mortar

	Buildings with Crosswalls As Defined by Section 15.05.030	All Other Buildings
Walls of one-story buildings	16	13
First-story walls of two-story buildings	16	15
Walls in top story of multi-story buildings	14	9
All other walls	16	13

(Ord. 508 § 1 (part), 2003)

Chapter 15.06**PEST CONTROL APPLICATION****Sections:****15.06.010 Pest control application.****15.06.010 Pest control application.**

A. All new construction and additions to dwelling units for habitable purposes shall have an approved soil treatment applied prior to final construction of concrete slabs or wood framed floors.

B. Said treatment shall be applied at an approximate rate of one gallon per every ten square feet of floor area and shall extend a minimum of three feet horizontally beyond the perimeter of the floor area. Said treatment shall guarantee effective control of subterranean termites for a minimum five year period. Treatment shall be applied only by licensed pest control applicators. A certificate of application, signed by the pest control applicator, shall be posted on site before final inspection, with a copy on file with the building permit. (Ord. 508 § 1 (part), 2003; Ord. 463 § 1 (part), 1995)

15.07.010

Chapter 15.07

FLOOD CERTIFICATES

Sections:

15.07.010 Flood certificates.

15.07.010 Flood certificates.

All new construction and additions to all buildings shall have flood certificates prior to pouring concrete slab or constructing wood framed floors. (Ord. 508 § 1 (part), 2003; Ord. 494 § 1 (part), 1999)