

Introduced by: \_\_\_\_\_

ORDINANCE NO. \_\_\_\_\_

**AN ORDINANCE OF THE CITY OF PASADENA AMENDING PASADENA MUNICIPAL CODE TITLE 4, CHAPTER 4.32 REGARDING CONSTRUCTION TAX AND ADDING PASADENA MUNICIPAL CODE TITLE 14, CHAPTER 14.08 ENTITLED "MANDATORY SEISMIC STRENGTHENING PROVISIONS FOR EXISTING WOOD-FRAME BUILDINGS WITH SOFT, WEAK OR OPEN-FRONT WALLS"**

The People of the City of Pasadena ordain as follows:

**SECTION 1.** This ordinance, due to its length and corresponding publication costs, will be published by title and summary as permitted by Section 508 of the Charter of the City of Pasadena. The approved summary of this ordinance is as follows:

**"Summary**

Ordinance No. \_\_\_\_\_. This ordinance amends Pasadena Municipal Code Title 4, Chapter 4.32 regarding Construction Tax and adds Pasadena Municipal Code Title 14, Chapter 14.08 entitled "Mandatory Seismic Strengthening Provisions For Existing Wood-Frame Buildings With Soft, Weak Or Open-Front Walls." Ordinance No. \_\_\_\_\_ shall take effect upon publication by title and summary. The full text of the ordinance is on file in the Clerk's Office."

**SECTION 2.** The following Section of Title 4, Chapter 4.32 is amended to read as follows:

"4.32.050 - Exemption.

A. Any residential housing unit which is affordable to persons of very low, low or moderate income as defined in Section 17.80.020(A) is exempt or partially exempt from payment of the tax required by this chapter, according to the schedule provided each year on the resolution of fees, taxes and charges adopted by the board. Such schedule shall reflect the formula approved by the board on November 21, 1991, and may be amended from time to time by the board.

B. The city council, by resolution, may authorize an exemption from the payment of plan check and building permit fees for projects meeting the following criteria:

1. A project sponsored by an organization having nonprofit status under Section 501(c)(3) of the Internal Revenue Code, which project will rehabilitate housing occupied by low-income (or very low-income) senior citizen homeowners, or low-income (or very low-income) or handicapped homeowners. The terms "low-income" and "very low-income" shall have the meanings specified in Section 17.12.129(A) of the Pasadena Municipal Code;

2. A single-family residential remodeling project not exceeding 250 square feet, or, in the event of remodeling projects or improvements which do not result

in an expansion of the square footage of the residence, less than \$20,000 in valuation;

3. A reroofing project valued at \$5,000 or less for a single-family residence;

4. A seismic retrofit project for a single-family residence.

C. Any construction project with the 'Research and Development-Office' or 'Research and Development-Non-Office' land use designation as defined in Chapter 17 of the Pasadena Municipal Code. The director shall determine whether a full or partial waiver will be granted and shall base his/her decision on his/her determination as to what portion of the construction project is being built to specifically accommodate 'Research and Development' uses.

D. Hotels or motels converted to residences which are rented or sold to persons and families of low or moderate income (as defined in Health and Safety Code Section 50093) pursuant to a Hotel Conversion Permit are exempt from the payment of the tax required by this chapter.

E. Wood-Framed Multiple-Family Buildings which are retrofitted pursuant to Chapter 14.08 are exempt from the payment of the tax required by this chapter."

**SECTION 3.** Title 14, Chapter 14.08 – Mandatory Seismic Strengthening

Provisions For Existing Wood-Frame Buildings With Soft, Weak Or Open-Front Walls, is added to read as follows:

**“Chapter 14.08 Mandatory Seismic Strengthening Provisions for Existing Wood-Frame Buildings with Soft, Weak or Open-Front Walls.**

**14.08.010 Purpose.**

The provisions of this Chapter are intended to promote the public welfare and safety by reducing the risk of death or injury that may result from the effects of earthquakes on existing wood-framed multi-story buildings with Soft, Weak or Open-Front Walls. Generally, this type of structure consists of partial tuck-under parking on the first floor level with living space in the floors above. In past earthquakes many of these types of structures have performed poorly and collapsed causing loss of life, personal injury, and substantial property damage. This Chapter creates minimum standards intended to reduce the risk of collapse and improve the performance of these buildings during earthquakes, but not necessarily prevent, the loss of life, injury and damage to property.

**14.08.020 Applicability.**

The provisions of this Chapter shall apply to all existing buildings of wood-frame construction, or wood-frame portions thereof, where:

1. A permit for construction of a new building was applied for on or before November 12, 1976, or if no permit can be located, the structure is determined by the Building Official to have been built under Building Code standards enacted prior to November 12, 1976, and
2. The Ground Floor or basement portion of the structure contains parking or other similar open floor space that causes Soft, Weak, Open-Front Wall Lines.

Exceptions:

1. The provisions of this chapter shall not apply to single family residences.

2. The provisions of this chapter shall not apply to a multiple-family residential parcels containing four or less units.
3. The provisions of this Chapter shall not apply to ground floor or basement concrete podium levels where a rigid concrete diaphragm exist, however the first wood frame story above the podium shall be subject to the provisions of this chapter where a soft, weak, or open front walls exist.

Notwithstanding any provision of the Building Code, compliance with this Chapter shall not require existing electrical, plumbing, mechanical or fire-safety systems to be altered to comply with the current Building Code unless they constitute a hazard to life or property as determined by the Building Official.

#### **14.08.030 Definitions.**

Notwithstanding the applicable definitions, symbols and notations in the Building Code, the following definitions shall apply for the purposes of this Chapter:

*Building Code* is the current Building Code of the City of Pasadena.

*Cripple Wall* is a wood-framed stud wall extending from the top of the foundation wall to the underside of the lowest floor framing.

*Ground Floor* is any floor within the wood-frame portion of a building whose elevation is immediately accessible from an adjacent grade by vehicles or pedestrians. The ground floor portion of the structure does not include any floor that is completely below adjacent grades.

*Historical Building* is any building designated as a "qualified historical building" as defined in Part 8, Title 24 of the California Code of Regulations (also referred to as the "California Historical Building Code").

*Notice to Owner* means the letter sent by the City to Owner, via certified mail to the address on title of the property, which advises Owner of the retrofit requirement.

*Open-Front Wall Line* is an exterior Wall Line, without vertical elements of the lateral force-resisting system, which requires tributary seismic forces to be resisted by diaphragm rotation or contains an excessive cantilever beyond parallel lines of shear walls. Diaphragms that cantilever more than 25 percent

of the distance between lines of lateral force resisting elements from which the diaphragm cantilevers shall be considered excessive. Diaphragm cantilevers or exterior balconies of 6 feet or less in width shall not be considered excessive cantilevers.

*Owner or Building Owner* is the individual(s), firm, corporation, trust or entity in whom the title to such property is vested.

*Person* means an individual, partnership, corporation or association of any of the foregoing.

*Retrofit* is an improvement of the lateral force resisting system by alteration of existing structural elements or addition of new structural elements.

*City Seismic Design Guidelines* are framework guidelines developed by the Building Official which are intended to calibrate, delineate and detail technical requirements to be used for the retrofitting of buildings subject to this Chapter.

*Soft Wall Line* is a deficiency in a Wall Line in which the lateral stiffness is less than what is required by story drift limitations and deformation compatibility requirements of this Chapter. In lieu of the engineering analysis required by this Chapter to determine whether a wall line's lateral stiffness is less than the aforementioned story drift limitations and deformation compatibility requirements, a Soft Wall Line deficiency may be defined as a Wall Line in a Story where the wall stiffness is less than 70 percent of the stiffness of the exterior wall above for the direction under consideration.

*Story* is as defined in the Building Code, but includes any basement or under-floor space of a building with Cripple Walls exceeding four feet in height.

*Story Strength* is the total strength of all seismic-resisting elements sharing the same Story shear in the direction under consideration.

*Wall Line* is any length of a wall along a principal axis of the building used to provide resistance to lateral loads.

*Weak Wall Line* is a deficiency of a Wall Line at the Ground Floor in which the wall strength is less than 80 percent of the strength of the wall above in the direction under consideration

#### **14.08.040 Compliance Requirements.**

The Owner of each building subject to the provisions of this Chapter shall cause an investigation of the existing construction and a structural analysis to be performed on the building by a Registered Civil or Structural Engineer licensed in the State of California and if the building does not meet the minimum standards specified in this Chapter, the Owner shall cause it to be structurally altered to conform to such standards.

Each applicable building within the scope of this Chapter which has been analyzed to demonstrate compliance or has been structurally altered to comply with the minimum standards in this Chapter shall be maintained in conformity with the requirements of this Chapter in effect at the time of structural alteration.

#### **14.08.050 Time Period for Compliance/Priority Designation.**

a. Plan, Permits and Construction. Each building within the scope of this Chapter shall be structurally altered to comply with the minimum standards in this Chapter within the time periods shown in Table A. Minimum plan requirements shall be as specified by the Building Official.

b. Screening Form. Within the time limits allowed in Table A, if the Owner of any building believes he/she is not subject to the provisions of this Chapter, Owner shall submit a screening form to the Building and Safety Division. The Screening Form shall be completed by a licensed civil or structural engineer and shall state whether the structure conforms to the earthquake design provisions contained in this Chapter. Retrofit of said building shall not be required if Screening Form determines that the structure conforms with the earthquake design provisions of this Chapter, as determined by the Building Official. Retrofit of said building shall be required if Owner fails to submit the Screening Form within the time limit specified in Table A or if the Screening Form determines that the structure does not conform with the design requirements of this Chapter. The requirement for said retrofit is not appealable if the Screening Form states that the structure does not conform to the earthquake design provisions contained in this Chapter.

**TABLE A**  
**TIME PERIOD FOR COMPLIANCE**

Required Action by Owner	Submit Screening Form (Optional)	Retrofit Plans, & Obtain Permit	Complete Construction
Milestone	1 year from Notice to Owner	3 years from Notice to Owner	7 years from Notice to Owner

c. Priority Designations. The Building Official shall prioritize enforcement of this Chapter as defined in Table B.

**TABLE B**  
**PRIORITY DESIGNATION**

Priority	Description
Priority I.	Parcels containing buildings with 3 or more stories, or containing 25 or more dwelling units total, or Qualified Historic buildings (any size or number of units)
Priority II.	Parcels containing 10 to 24 units total
Priority III.	All parcels containing non-historic, 2-story buildings with 5 to 9 units total

**14.08.060 Administration.**

a. Issuance of Notice to Owner. The Building Official shall, in accordance with the priorities set forth in Table B, issue a Notice as provided in this Section to the Owner of each building that is expected to be within the scope of this Chapter.

b. Contents of Notice to Owner. The Notice to Owner shall be addressed to the Owner as shown on the last equalized Los Angeles County assessment roll of the building. The Notice to Owner shall specify that the building has been determined by the



Building Official to be within the scope of this Chapter and, therefore, is required to meet the standards of this Chapter.

c. Service of Notice to Owner. Proper service of a Notice to Owner shall be sent by certified mail, postage prepaid, return receipt requested. Simultaneously, the same notice may be sent by regular mail. If a notice sent by certified mail is returned unsigned, then service shall be deemed effective pursuant to regular mail, provided the notice that was sent by regular mail is not returned. The designated period within which the Owner is required to comply with such Notice to Owner shall begin as of the date Notice to Owner is mailed via certified mail/regular mail.

d. Failure to Receive Notice to Owner. Failure of any Owner, party concerned or other person to receive such Notice to Owner shall not affect the validity of any proceedings taken thereunder.

e. Extensions. With the exception of the 1-year period to submit the Screening Form, the Building Owner may request an extension to the time period for compliance with the timelines set forth in Table A of section 14.08.050. The Building Owner has the burden of proof to establish with substantial evidence that he or she is unable to continue work within the time required by this section due to circumstances beyond the control of the permittee. The written request must demonstrate that:

- i. Due to circumstances beyond the owner's or permittee's control, construction could not be commenced, continued or completed in the authorized time period; or
- ii. If the construction has started, substantial progress has been made; or
- iii. If construction has started, the condition of the property presents no health or safety hazard; or
- iv. The continued delay will not create any unreasonable aesthetic impact to the neighborhood or substantial economic detriment to the neighboring property owners; or
- v. Due to unforeseen conditions, as deemed appropriate by the Building Official, construction could not be commenced, continued or completed in the authorized time period.

The Owner must also provide a new proposed schedule for compliance, and plan to comply with the provisions of this chapter during that timeframe. The Building Official may extend the time for action by the permittee for a period not exceeding six calendar months.

f. The Building Official may promulgate implementing regulations and policies consistent with this Chapter, as approved by the City Manager.

#### **14.08.070 Occupancy and Tenant Advisory.**

Notification to Tenants and Occupants. The Owner shall advise all current and prospective residential and non-residential tenants, subtenants, lessees, sublessees, or any other person(s) entitled to the use and/or occupancy of the building of a proposed project submitted pursuant to this Chapter. The notice shall include the information for the project, as determined by the City, including the scope of work, expected duration, and contact information for a representative of the contractor. Proof of written notification is required to be kept by the Owner and made available to the City upon request at any time until such permit is final and construction is completed.

#### **14.08.080 Historical Buildings.**

Nothing in this chapter shall exempt historic buildings from §17.62.090.

#### **14.08.090 Minimum Standards.**

a. Scope of Analysis. This Chapter requires the alteration, repair, replacement or addition of structural elements to meet the strength and stiffness in conformance with the Building Code except as modified herein. The lateral-load-path analysis shall include the resisting elements and connections from the wood diaphragm immediately above any Soft, Weak or Open-Front Wall lines to and including the foundation. Stories above the Weak Wall Line shall be considered in the analysis but need not be modified. The Engineer shall investigate existing conditions as applicable for the required analysis, including performing initial material testing and verification of existing conditions.

b. Design Base Shear and Design Parameters. The design force in a given direction shall not be less than 75% of that derived from the Base Shear as determined from the seismic provisions of the American Society of Civil Engineers (ASCE) standards that are currently in effect, with design parameters as specified by the current City Seismic Design Guidelines. The structure shall be analyzed and/or strengthened in order to mitigate the Weak and/or Soft Wall Line deficiencies defined in Section 14.08.030.

Exception: Alternatively, the structure may be retrofitted per the currently adopted *Guidelines for the Seismic Retrofit of Existing Buildings* in the California Existing Building Code, provided the entire Story is analyzed and/or strengthened in order to mitigate the Weak and/or Soft Wall Line deficiencies defined in Section 14.08.030.

- c. Lateral Vertical Systems. Strengthening systems with concrete walls or masonry walls, or steel braced frames shall be not be permitted unless a full building analysis considering diaphragm stiffness and torsional behavior is performed.
- d. Horizontal Structural Irregularities in Buildings with Three or More Stories. Structures with three or more stories having horizontal structural irregularities of either type 2, 3, 4, or 5 listed in the currently adopted ASCE, "Horizontal Structural Irregularities", shall be altered to meet the additional requirements of those sections referenced in the table for the Weak, Soft or Open-Front Wall lines being considered.
- e. Alternate Analysis, Base Shear and Design Parameters. The Building Official may approve alternate analysis and/or design methodologies that meet the same performance intent as those prescribed by this Chapter and that achieve the objectives established by this Chapter. A design criteria shall be submitted to the City for review and approval prior to submission of plans.
- f. Additional Anchorage Requirements for Buildings on Hillside. Where any portion of a building within the scope of this Chapter is constructed on or into a slope steeper than one-unit vertical in three units horizontal (33-percent slope), the lateral-force-resisting system, at and below the base level diaphragm, shall also be analyzed for the effects of concentrated lateral loads caused at the building base from the hillside conditions and comply with the provisions of the City Seismic Design Guidelines.
- g. Story Line Drift Limitations. The story drift at the strengthened line shall not exceed the allowable deformation as specified in the City Seismic Design Guidelines.
- h. Pole Structures. The effects of rotation and soil stiffness shall be included in the calculated story drift where lateral loads are resisted by vertical elements whose required depth of embedment is determined by pole formulas. The coefficient of subgrade reaction used in deflection calculations shall be based on an approved geotechnical investigation conducted in accordance with approved geotechnical engineering reports.
- i. P-Delta Effect. P-Delta effects shall be considered as specified in the City Seismic Design Guidelines.
- j. Ties, Continuity and Collectors. All parts of the structure included in the scope of analysis shall be interconnected and the connection shall be capable of resisting the seismic force created by the parts being connected as required per the Building Code.

#### **14.08.095 Reduction in Parking and Non-Compliance with Development Standards**

Notwithstanding any other provisions of this Code to contrary, approved retrofits that result in deviations from development standards shall be permitted. All deviations shall be approved by the Building Official and Zoning Administrator.

#### **14.08.100 Information Required On Plans.**

a. General. The plans and specifications required by the Building Official shall be of sufficient clarity to indicate the nature, design methodology, and extent of the proposed work and to show in detail that it will conform to the provisions of this Chapter and the Building Code.

b. Engineers Statement. The responsible engineer shall provide the following statement on the approved plans:

"I am responsible for designing this building's seismic strengthening in compliance with the minimum standards of the Mandatory Seismic Strengthening Provisions For Existing Wood Frame Buildings With Soft, Weak or Open-Front Walls (Chapter 14.08)."

c. Owner or Owner's Representative Statement. Unless the entire building has been retrofitted to meet the full intent of the current Building Code, the Owner shall provide and sign the following statement on the cover of the drawings:

I, [Owner Name(s)], understand the seismic evaluation and strengthening performed under this project is limited to that specified in the Mandatory Seismic Strengthening Provisions for Existing Wood Frame Buildings with Soft, Weak or Open-Front Walls (Chapter 14.08) which is intended to reduce the risk under a seismic event. I understand the full building has not been evaluated nor strengthened for other potential structural deficiencies that may cause a life safety concern, injury, or property damage risk under a seismic event."

d. Quality Control and Assurance Requirements. General notes shall show the requirements for material testing, special inspection, structural observation and the proper installation of newly added materials.

#### **14.08.110 Quality Assurance.**

- a. Structural Observation. All structures regulated by this Chapter require structural observation during construction. The Owner shall employ the Engineer of Record responsible for the structural design, or another registered Engineer designated by the Engineer of Record to perform structural observation as defined in the Building Code.
- b. Special Inspection. Special inspections shall be provided as required by the Building Code. Additional inspections shall be noted on drawings as required by Building Official.

#### **14.08.120 Violation/Penalty.**

- a. Violation. It shall be unlawful for any person to own, use, occupy or maintain any building or structure or portion thereof, or cause the same to be done, contrary to, or in violation of, any of the provisions of this Chapter. A building that is found to be within the scope of this Chapter and is not brought into compliance in the time frame indicated in Table A, shall be declared unsafe and subject to the requirements of the currently adopted Building Code.
- b. Penalty. Any person, firm or corporation violating any of the provisions of this Chapter shall be guilty of a misdemeanor, and each such person shall be guilty of a separate offense for each and every day or portion thereof during which any violation of any of the provisions of this Chapter is committed, continued or permitted, and upon conviction of any such violation such person shall be punishable by a fine of not more than \$1,000, (one thousand dollars) or by imprisonment for not more than six months, or by both such fine and imprisonment. The provisions of this section are in addition to and independent of any other sanctions, penalties or costs which are or may be imposed for a violation of any of the provisions of this Chapter.
- c. Recordation of violation. If (A) the Building Official determines that any property, building, or structure, or any part thereof is in violation of any provision of this Chapter; and if (B) the Building Official gives written notice as specified below of said violation; then the Building Official may have sole discretion to, at any time thereafter, record with the County Recorder's Office a notice that the property and/or any building or structure located thereon is in violation of this Chapter. The remedy provided by this section is cumulative to any other enforcement actions permitted by this Chapter.
- d. Notice. The written notice given pursuant to this Section shall indicate:
  - A. The nature of the violation(s); and

B. That if the violation is not remedied to the satisfaction of the Building Official, the Building Official may, at any time thereafter, record with the County Recorder's Office a notice that the property and/or any building or structure located thereon is in violation of this Chapter. The notice shall be posted on the property and shall be mailed to the Owner of the property as indicated on the last equalized County Assessment roll. The mailed notice may be by registered, certified, or first-class mail.

e. Costs. Any person that has violated any provision of this Chapter shall be responsible for the costs of any and all Code Enforcement actions taken by the Building Official in response to such violations. These costs shall be based on the amounts specified by the current fee schedule.

**14.08.130 Severability.**

a. Internal conflict. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. Where, in any specific case, different Sections of this Chapter specify different materials, methods of construction, or other requirements, the most restrictive shall govern.

b. Other laws. The provisions of this Chapter shall not be deemed to nullify any provisions of local, state or federal law.

c. Codes and references. The provisions of the codes and standards referenced in this Chapter shall be considered part of the requirements of this Chapter to the prescribed extent of each such reference. Where there are conflicts between provisions of this Chapter and the provisions of any referenced code or standard, the provisions of this Chapter shall apply.”

**SECTION 4.** The City Clerk shall certify the adoption of this ordinance and shall cause this ordinance to be published by title and summary.

**SECTION 5.** This ordinance shall take effect upon publication.

Signed and approved this \_\_\_\_\_ day of \_\_\_\_\_, 2019.

\_\_\_\_\_  
Terry Tornek  
Mayor of the City of Pasadena

I HEREBY CERTIFY that the foregoing ordinance was adopted by the City Council of the City of Pasadena at its meeting held this \_\_\_\_ day of \_\_\_\_\_, 2019, by the following vote:

AYES:

NOES:

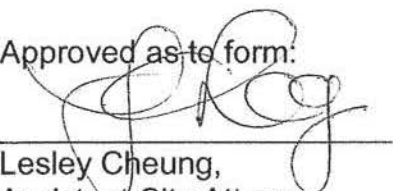
ABSENT:

ABSTAIN:

Date Published:

\_\_\_\_\_  
Mark Jomsky, City Clerk

Approved as to form:

  
\_\_\_\_\_  
Lesley Cheung,  
Assistant City Attorney