

Ordinance No. 5564

Ordinance of the Council of the City of Palo Alto Repealing Chapter 16.04 of the Palo Alto Municipal Code and Adopting a New Chapter 16.04, California Building Code, and a New Chapter 16.19, California Historical Building Code and California Existing Building Code, 2022 Editions, and Local Amendments and Related Findings

The Council of the City of Palo Alto does ORDAIN as follows:

SECTION 1. Chapter 16.04 of the Palo Alto Municipal Code is hereby amended by repealing it in its entirety and adopting a new Chapter 16.04 to read as follows:

**CHAPTER 16.04
CALIFORNIA BUILDING CODE,
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2, VOLUMNS 1 & 2**

Sections

- 16.04.010** 2022 California Building Code, Title 24, Part 2, Volumes 1 & 2 adopted and amended.
- 16.04.020** Cross - References to California Building Code.
- 16.04.030** Local Amendments.
- 16.04.040** Adoption of 2022 California Building Code Chapter 1, Division II – Scope and Administration, Part 1 – Scope and Application and Part 2 – Administration and Enforcement.
- 16.04.050** Section 101.1 Title.
- 16.04.060** Section 101.2.1 Appendices.
- 16.04.070** 101.4 Referenced codes.
- 16.04.080** Section 103 Code Compliance Agency.
- 16.04.090** Section 104.2.1 Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas.
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- 16.04.170** Section 110.2.1 Preliminary accessibility compliance inspection.

- 16.04.180 Section 110.3.3 Lowest floor elevation.**
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- 16.04.200 Section 111.3 Temporary occupancy.**
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- 16.04.225 Section 114 Violations.**
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- 16.04.240 Section 502.1 Address identification.**
- 16.04.250 Section 702A Definitions – Wildland-Urban Interface Fire Area.**
- 16.04.260 Section 903.2 Automatic sprinkler systems, where required.**
- 16.04.270 Section 903.3.1.1 NFPA 13 sprinkler systems.**
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- 16.04.290 Section 903.3.1.3 NFPA 13D sprinkler systems.**
- 16.04.300 Section 903.3.1.3.1 Increase in fire sprinkler design criteria.**
- 16.04.310 Section 903.4.3 Floor control valves.**
- 16.04.320 Section 905.3.1 Height.**
- 16.04.330 Section 907.2.11.10 Replacement.**
- 16.04.340 Section 909.20.8 Smoke control systems schedule.**
- 16.04.350 Section 1008.3.3 Rooms and spaces.**
- 16.04.360 Section 1031.2 Where required.**
- 16.04.370 Reserved.**
- 16.04.380 Section 1205.3.4 Roof guards at courts.**
- 16.04.390 Section 1208.5 Dwelling unit and congregate residence superficial floor area.**
- 16.04.400 Section 1503.2.1 Locations.**
- 16.04.410 Section 1612.1.1 Palo Alto Flood Hazard Regulations.**
- 16.04.420 Section 1613.5 Suspended ceilings.**
- 16.04.430 Section 1613.5 ASCE 7, Section 13.1.4 Seismic design requirements for nonstructural components.**
- 16.04.440 Section 1705.3 Concrete construction.**
- 16.04.450 Section 1803.2 Investigations required.**
- 16.04.460 Section 1803.5.11 Seismic design categories C through F.**
- 16.04.470 Section 1809.7 Prescriptive footings for light-frame construction.**
- 16.04.480 Section 1809.8 Plain concrete footings.**
- 16.04.490 Section 1901.2 Plain and reinforced concrete.**
- 16.04.500 Section 1905.1.7 ACI 318, Section 14.1.4.**
- 16.04.510 SECTION 1906 FOOTINGS FOR LIGHT-FRAME CONSTRUCTION**
- 16.04.520 Section 1906.1 Plain concrete footings.**

- 16.04.530 Section 1907.1 General.**
- 16.04.540 Section 2305.4 Hold-down connections.**
- 16.04.550 Section 2307.2 Wood-framed shear walls.**
- 16.04.560 Section 2308.6.4 Braced wall panel construction.**
- 16.04.570 Section 2308.6.5 Alternative bracing.**
- 16.04.580 TABLE 2308.6.1 WALL BRACING REQUIREMENTS.**
- 16.04.590 TABLE 2308.6.3(1) BRACING METHODS.**
- 16.04.600 Section 2308.6.9 Attachment of sheathing.**
- 16.04.610 SECTION 2505 SHEAR WALL CONSTRUCTION.**
- 16.04.620 Section 2508.6 Horizontal gypsum board or gypsum panel product diaphragm ceilings.**
- 16.04.630 Chapter 31B Public Pools.**
- 16.04.640 Section 3304.1 Excavation and fill.**

- 16.04.010 2022 California Building Code, Title 24, Part 2, Volumes 1 & 2 adopted and amended.**

The California Building Code, 2022 Edition, Title 24, Part 2, Volumes 1 & 2 of the California Code of Regulations, together with those omissions, amendments, exceptions, and additions thereto, is adopted and hereby incorporated in this Chapter by reference and made a part hereof the same as if fully set forth herein.

Unless superseded and expressly repealed, references in City of Palo Alto forms, documents and regulations to the chapters and sections of any former iteration of the California Code of Regulations, Title 24, shall be construed to apply to the corresponding provisions contained within the California Code of Regulations, Title 24, 2022. Ordinance No. 5508 of the City of Palo Alto and all other ordinances or parts of ordinances in conflict herewith are hereby expressly repealed.

Wherever the phrases “California Building Code” or “Building Code” are used in this code or any ordinance of the City, such phrases shall be deemed and construed to refer and apply to the California Building Code, 2022 Edition, Title 24, Part 2 of the California Code of Regulations, as adopted by this chapter.

One (1) copy of the California Building Code, 2022 Edition, has been filed for use and examination of the public in the Office of the Chief Building Official of the City of Palo Alto.

16.04.020 Cross - References to California Building Code.

The provisions of this Chapter contain cross-references to the provisions of the California Building Code, 2022 Edition, in order to facilitate reference and comparison to those provisions.

16.04.030 Local Amendments.

The provisions of this Chapter shall constitute local amendments to the cross-referenced provisions

of the California Building Code, 2022 Edition, and shall be deemed to replace the cross-referenced sections of said Code with the respective provisions set forth in this Chapter. Where used in this Chapter 16.04, ellipses shall indicate text of the California Building Code, 2022 Edition, that has been adopted without amendment but is omitted for brevity.

16.04.040 Adoption of 2022 California Building Code Chapter 1, Division II – Scope and Administration, Part 1 – Scope and Application and Part 2 – Administration and Enforcement

Chapter 1, Division II, Parts 1 – Scope and Application and Part 2 – Administration and Enforcement of the 2022 California Building Code are adopted in their entirety, as amended herein.

16.04.050 Section 101.1 Title.

Section 101.1 of the California Building Code is amended to read:

101.1 Title. These regulations shall be known as the *Building Code of City of Palo Alto*, hereinafter referred to as “this code”.

16.04.060 Section 101.2.1 Appendices.

Section 101.2.1 of the California Building Code is amended to read:

The following Appendix chapters and sections of the California Building Code, 2022 Edition, are adopted and hereby incorporated in this Chapter by reference and made a part hereof the same as if fully set forth herein:

- A. Appendix I – Patio Covers (Sections I101 through I105)
- B. Appendix J – Grading (Section J109.4 Drainage across property lines)
- C. Appendix P – Emergency Housing (Sections P101 through P110)

16.04.070 101.4 Referenced codes.

Section 101.4 of the California Building Code is amended to add subdivisions 101.4.8 through 101.4.12, as follows:

101.4 Referenced codes. The other codes listed in Section 101.4.1 through 101.4.12 and referenced elsewhere in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference.

[. . .]

101.4.8 Historical Buildings. The provisions of the *California Historical Code* shall apply to the alteration, addition, and relocation to qualified historical buildings or properties.

101.4.9 Electrical. The provisions of the *California Electrical Code* shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

101.4.10 Residential Buildings. The provisions of the *California Residential Code* shall apply to all matters governing the design and construction of detached, one- and two-family dwellings, townhouses not more than three stories and separate means of egress, and structural accessory thereto.

101.4.11 Green Building Standards. The provisions of the *California Green Building Standards Code* shall apply to all matters governing the "green building" related planning, design construction, operation, use and occupancy of newly constructed and altered buildings.

101.4.12 International Swimming and Spa Code. The provisions of the *2021 International Swimming and Spa Code* shall apply to the installation of private swimming pools and spa facilities.

16.04.080 Section 103 Code Compliance Agency.

Section 103 of the California Building Code is amended to read:

103.1 Creation of enforcement agency. The Planning and Development Services Department is hereby created and the official in charge thereof shall be known as the chief building official, also referred to as building official or code official. The function of the department shall be the implementation, administration, and enforcement of the provisions of this code.

103.2 Appointment. The building official shall be appointed by the chief appointing authority of the jurisdiction.

103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the building official shall have the authority to appoint assistant chief building officials, manager supervisors, and other technical officers, inspectors, and other employees. Such employees shall have powers as delegated by the building official.

16.04.090 Section 104.2.1 Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas.

Section 104.2.1 of the California Building Code is amended to read:

104.2.1 Determination of substantially improved or substantially damaged existing

buildings and structures in flood hazard areas. For applications for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the city engineer or designee shall determine if the proposed work constitutes substantial improvement or repair of substantial damage. Where the city engineer or designee determines that the proposed work constitutes substantial improvement or repair of substantial damage, and where required by this code, the city engineer or designee shall require the building to meet the requirements of Section 1612 of the *California Building Code*, Section R322 of the *California Residential Code as amended*, or Palo Alto Municipal Code 16.52 Flood Hazard Regulations, whichever is more stringent.

16.04.100 Section 104.10.1 Flood hazard area.

Section 104.10.1 of the California Building Code is amended to read:

104.10.1 Flood hazard areas. The city engineer or designee shall not grant modifications to any provision required in flood hazard areas as established by Section 1612.3 unless a determination has been made that:

1. A showing of good and sufficient cause that the unique characteristics of the size, configuration or topography of the site render the elevation standards of Section 1612 inappropriate.
2. A determination that failure to grant the variance would result in exceptional hardship by rendering the lot undevelopable.
3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
4. A determination that the variance is the minimum necessary to afford relief, considering the flood hazard.
5. Submission to the applicant of written notice specifying the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation, and stating that construction below the design flood elevation increases risks to life a property.

16.04.110 Section 105.2 Work exempt from permit.

Section 105.2 of the California Building Code is amended to read:

105.2 Work exempt from permit. Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of

this jurisdiction. Permits shall not be required for the following:

Building:

1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided that the floor area does not exceed 120 square feet (11.15 m²). It is permissible that these structures still be regulated by Section 710A, despite exemption from permit.
2. Wood fences not over 7 feet (2134 mm) high or concrete or masonry wall not over 4 feet (1219 mm) high when not subject to specific city of Palo Alto Planning and Zoning regulations.
3. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.
4. Oil derricks.
5. Water tanks supported directly on grade if the capacity is not greater than 5,000 gallons (18 925 L) and the ratio of height to diameter or width is not greater than 2:1.
6. Sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade and not over any basement or story below and are not part of an accessible route, accessible parking spaces, or required exits.
7. Wood decks not over 30 inches above surrounding grade or finishes, not attached to a structure, or serving any part of the means of egress.
8. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
9. Temporary motion picture, television and theater stage sets and scenery.
10. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 18 inches deep, do not exceed 5,000 gallons and are installed entirely above ground.
11. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
12. Swings and other playground equipment accessory to detached one- and two- family dwellings and not considered a public playground.
13. Window awnings supported by an exterior wall that do not project more than 54 inches (1,372 mm) from the exterior wall and do not require additional support of Group R-3 and U occupancies.
14. Nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.

Electrical:

1. **Repairs and maintenance:** Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.
2. **Radio and television transmitting stations:** The provisions of this code shall not apply to electrical equipment used for radio and television transmissions, but do apply to equipment and wiring for a power supply and the installations of towers and antennas.
3. **Temporary testing systems:** A permit shall not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.
4. **Temporary decorative lighting:** Exterior listed plug-in decorative lighting plugged into a waterproof GFCI receptacle outlet.
5. **Replacement of overcurrent devices:** Replacement of any overcurrent device less than 1,200 amps of the same capacity in the same location.
6. Wiring for temporary theatre, motion picture or television stage sets.
7. Electrical wiring, devices, appliances, apparatus, or equipment operating at less than 25 volts and not capable of supplying more 50 watts of energy.

Gas:

1. Portable heating appliance.
2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

Mechanical:

1. Portable heating appliance.
2. Portable ventilation equipment.
3. Portable cooling unit.
4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code.
5. Replacement of any part that does not alter its listing/approval or make it unsafe.
6. Portable evaporative cooler.
7. Self-contained refrigeration system containing 10 pounds (4.54 kg) or less of refrigerant and actuated by motors of 1 horsepower (0.75 kW) or less.

Plumbing:

1. The stopping of leaks in drains, water, soil, waste or vent pipe, provided,

however, that if any concealed trap, drain pipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.

2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures and the removal and reinstallation of water closets, provided that such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.

[. . .]

16.04.120 Section 105.3.2 Time limitation of application.

Section 105.3.2 of Chapter 1 of the California Building Code is amended to read:

105.3.2 Time limitation of application. An accepted application for a permit for any proposed work shall be deemed to have been abandoned twelve (12) months after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions and/or reactivations for additional periods not exceeding ninety (90) days each. The extension shall be required in writing and justifiable cause demonstrated.

16.04.130 Section 105.5 Expiration.

Section 105.5 of Chapter 1 of the California Building Code is amended to read:

105.5 Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within twelve (12) months after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of twelve (12) months after the time the work is commenced. For the purpose of this section, failure to progress a project to the next level of required inspection, as determined by the chief building official, shall be deemed to be suspension of the work.

The chief building official or designee is authorized to grant, in writing, no more than three extensions and reactivations of permits that would otherwise expire or reactivations of expired permits, for periods not more than 180 days each and may require:

1. that construction documents be revised to partially or fully to comply with current codes and ordinances; and
2. payment of fees; and
3. payment of a penalty pursuant to Chapter 16.62 of the Palo Alto Municipal Code.

Extensions and reactivations shall be requested in writing and justifiable cause

demonstrated. Additional extensions or reactivations beyond three may only be granted with the approval of the City Council.

105.5.1 Term limit for permits. All work associated with a building permit must be completed, and final inspection issued, within forty-eight (48) months of permit issuance. Once a term limit has been exhausted without obtaining an approved final inspection the permit will automatically become void. The chief building official or designee is authorized to allow a new permit application to be applied for the original scope of work and may require:

1. that construction documents be revised to partially or fully to comply with current codes and ordinances; and
2. payment of partial or all plan review and permit fees; and
3. payment of a penalty pursuant to Chapter 16.62 of the Palo Alto Municipal Code.

16.04.140 Section 106.1 Live loads posted.

Section 106.1 of the California Building Code is amended to read:

106.1 Live Loads Posted. In commercial, institutional or industrial buildings, for each floor or portion thereof designed for live loads exceeding 50 psf (2.40 kN/m²), such design live loads shall be conspicuously posted by the owner or the owner's authorized agent in that part of each story in which they apply, using durable signs. It shall be unlawful to remove or deface such notices.

16.04.150 Section 109.6 Refunds.

Section 109.6 of Chapter 1 of the California Building Code is amended to read:

109.6 Refunds. The building official or designee may authorize the refund of any fee paid hereunder which was erroneously paid or collected. The building official or designee may authorize the refund of not more than eighty percent (80%) of the Permit Fee paid when no work has occurred under a permit issued pursuant to this Chapter. The building official or designee may authorize the refund of not more than eighty percent (80%) of the Plan Review Fee paid when a permit application is withdrawn or canceled before any plan review work has started.

16.04.160 Section 109.7 Re-Inspection fees.

Section 109.7 of Chapter 1 of the California Building Code is added to read:

109.7 Re-Inspection Fees. A re-inspection fee may be assessed/authorized by the building official or designee for each occurrence as itemized below:

1. inspection record card is not posted or otherwise available on the work site;

or

2. approved plans are not readily available for the inspector at the time of inspection; or
3. inspector is unable to access the work at the time of inspection; or
4. when work has substantially deviated from the approved plans without the prior approval of required revision; or
5. when work for which an inspection is requested is not ready for inspection; or
6. when required corrections noted during prior inspections have not been completed.

When a re-inspection fee is assessed, additional inspection of the work will not be performed until the fee has been paid.

16.04.170 Section 110.2.1 Preliminary accessibility compliance inspection.

Section 110.2.1 of Chapter 1 of the California Building Code is added to read:

110.2.1 Preliminary accessibility compliance inspection. Before issuing a permit, the building official or designee is authorized to examine or cause to be examined the pre-construction accessibility compliance conditions of the buildings, structures, and sites for which an application has been filed.

16.04.180 Section 110.3.3 Lowest floor elevation.

Section 110.3.3 of Chapter 1 of the California Building Code is amended to read:

110.3.3 Lowest floor elevation. In flood hazard areas, upon placement of the lowest floor, including the basement, and prior to further vertical construction, the elevation certification shall be submitted to City Public Works Engineering for inspection approval prior to foundation inspection by City Building Inspection.

16.04.190 Section 111.1 Use and occupancy.

Section 111.1 of Chapter 1 of the California Building Code is amended to read:

111.1 Use and occupancy. A building or structure shall not be used or occupied, and a change in the existing occupancy of a building or structure or portion thereof shall not be made, until the chief building official has issued a certificate of occupancy therefor as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction.

Exception: Certificates of occupancy are not required or issued for:

1. Work exempted from permits under Section 105.2

2. Group R – Division 2, 3 occupancies
3. Group U occupancies accessory to R3 and R2 occupancies

111.1.1 Change of occupancy or tenancy. Each change of occupancy, official name or tenancy of any building, structure, or portion thereof, shall require a new certificate of occupancy, whether or not any alterations to the building are required by this code.

Before any application for a new certificate of occupancy is accepted, a fee shall be paid by the applicant to cover the cost of the inspection of the building required by the change of occupancy or tenancy.

When application is made for a new certificate of occupancy under this section, the building official and fire chief shall cause an inspection of the building to be made. The inspector(s) shall inform the applicant of those alterations necessary, or if none are necessary, and shall submit a report of compliance to the building official.

If a portion of any building does not conform to the requirements of this code for a proposed occupancy, that portion shall be made to conform. The building official may issue a new certificate of occupancy without requiring compliance with all such requirements if it is determined that the change in occupancy or tenancy will result in no increased hazard to life or limb, health, property, or public welfare.

16.04.200 Section 111.3 Temporary occupancy.

Section 111.3 of Chapter 1 of the California Building Code is amended to read:

111.3 Temporary occupancy. The building official or designee is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, or as otherwise required, provided that such portion or portions shall be occupied safely. The building official or designee shall set a time period during which the temporary certificate of occupancy is valid.

16.04.210 Section 111.5 Posting.

Section 111.5 of Chapter 1 of the California Building Code is added to read:

111.5 Posting. The temporary certificate of occupancy or certificate of occupancy shall be posted in a conspicuous, readily accessible place in the building or portion of building to be occupied and shall not be removed except when authorized by the building official.

16.04.220 Section 113 Means of Appeals.

Section 113 of Chapter 1 of the California Building Code is amended to read:

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SECTION 113 MEANS OF APPEALS

113.1 Appeals. A person requesting an order, decision, or determination by the building official relative to the California Building Code (as amended) may appeal such order, decision or determination by completing a request for hearing form and returning it to the City within thirty calendar days from the date of the decision, together with all applicable fees authorized by the City's Municipal Fee Schedule. A request for hearing shall be based on a claim that the true intent of the California Building Code (as amended) or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is proposed.

(a) The person requesting the hearing shall be notified of the time and place set for the hearing at least ten days prior to the date of the hearing.

(b) If the building official submits an additional written report concerning the decision to hearing officer for consideration at the hearing, then a copy of this report shall also be served on the person requesting the hearing at least five days prior to the date of the hearing.

(c) The appeal procedure set out in this Section 113.1 *et seq.* does not apply to: (1) decisions by the building official or any other City official related to administrative enforcement actions taken under Chapter 1.12 or Chapter 1.16 of the Palo Alto Municipal Code; (2) decisions by the City to enforce the California Building Code under any provision of criminal law; or (3) any other action taken by the City that specifies its own appeal procedure.

113.2 Hearing Officer. The building official shall designate a hearing officer for the appeal hearing. The hearing officer may consist of one person or a body of people. The hearing officer shall not be the building official or any directly subordinate employees.

(a) The hearing officer does not have authority to waive requirements of the California Building Code (as amended) or interpret the administration of the Code.

(b) The hearing officer does not have authority to issue an order, decision, or determination on his or her own authority. This includes the issuance or amendment of building permits.

(c) The hearing officer shall be qualified by experience and training to pass on matters pertaining to building construction.

113.3 Hearing procedures.

(a) No appeal hearing before a hearing officer shall be noticed unless the applicable fee(s) been paid in advance in accordance with Section 113.1.

(b) A hearing before the hearing officer shall be set for a date that is not less than fifteen days and not more than sixty days from the date that the request for hearing is filed in

accordance with the provisions of this chapter. The party requesting the hearing may request one continuance for any reason, provided that the hearing officer is given the request for continuance at least forty-eight hours in advance of the scheduled hearing and that the deferred hearing shall not be deferred more than ninety days after the request for hearing was made. A request for continuance made less than forty-eight hours before the scheduled hearing may be granted by the hearing officer based upon exigency only. The parties may stipulate to an alternative hearing date schedule outside of these rules upon a finding of good cause and approval from the hearing officer.

(c) At the hearing, the appellant shall be given the opportunity to testify and to present evidence and cross-examine witnesses concerning the appeal. The appellant may appear personally or through a representative. Prehearing discovery is not authorized, but subpoena of witnesses and documents shall be permitted as authorized by law. The hearing officer may conduct the hearing informally, both as to rules of procedure and admission of evidence, in any manner which will provide a fair hearing.

(d) The failure of the appellant to appear at the hearing or, in the alternative, to present written or demonstrative evidence shall constitute the dismissal of the appeal with prejudice.

(e) The administrative record and any additional report submitted by the building official shall constitute presumptive evidence of the respective facts contained in those documents. The building official shall have the same rights as the appellant to testify, present evidence, and cross-examine witnesses concerning the appeal.

(f) The hearing officer may continue the hearing and request additional information from the building official or appellant prior to issuing a written decision.

113.4 Hearing Officer's decision.

(a) After considering all the testimony and evidence submitted at the hearing, the hearing officer shall issue a written decision to uphold or amend the building official's order, decision or determination, and the reasons for that decision. The decision of the hearing officer shall be issued within thirty days following completion of the hearing. The decision of the hearing officer shall be final upon service on the appellant, subject only to judicial review as allowed by law.

(b) The hearing officer shall consider any written or oral evidence submitted at the hearing consistent with ascertainment of the facts regarding the issues of the appeal.

(c) If the hearing officer determines that the building official's order, decision, or determination should not be upheld as originally given, then the hearing officer shall direct the building official to make any amendments or changes necessary to implement the hearing officer's decision. The hearing officer shall also give the building official a reasonable deadline to complete such actions.

(d) The appellant shall be served with a copy of the hearing officer's written decision within ten calendar days following its issuance.

16.04.225 Section 114 Violations.

Section 114 of Chapter 1 of the California Building Code is amended to read:

**SECTION 114
VIOLATIONS**

114.1 Unlawful acts. It is unlawful for any person to violate any provision or to fail to comply with any of the requirements of this Chapter or any permits, conditions, or variances granted under this Chapter. Violators shall be subject to any penalty or penalties authorized by law, including but not limited to: administrative enforcement pursuant to Chapters 1.12, 1.16 and 16.62 of the Palo Alto Municipal Code; and criminal enforcement pursuant to Chapter 1.08 of the Palo Alto Municipal Code. Each separate day or any portion thereof during which any violation of this Chapter occurs or continues shall be deemed to constitute a separate offense.

When the chief building official determines that a violation of this Chapter has occurred, the chief building official may, in his or her sole discretion, record a notice of pendency of code violation with the Office of the County Recorder stating the address and owner of the property involved. When the violation has been corrected, the chief building official shall issue and record a release of the notice of pendency of code violation.

114.2 Criminal enforcement authority. The employee positions designated in this section are authorized to exercise the authority provided in California Penal Code section 836.5 for violations of this Chapter. The designated employee positions are: (1) chief building official, (2) assistant chief building official, (3) building inspection manager, (4) Building Inspector or Building Inspector Specialist as designated by the chief building official and (5) code enforcement officer.

16.04.230 Section 115 Stop Work Order.

Section 115 of Chapter 1 of the California Building Code is amended to read:

**SECTION 115
STOP WORK ORDER**

115.1 Authority. Whenever the building official finds any work regulated by this code being performed in a manner that is contrary to the provisions of this code, without a permit, beyond the scope of the issued permit, in violation of the Palo Alto Municipal Code or Zoning Ordinance, or dangerous or unsafe, the building official is authorized to issue a stop work order.

115.2 Issuance. The stop work order shall be in writing and shall be posted in a visible location near the location where the work is being conducted. If the owner or owner's agent is not on site at the time of posting, a notice advising the reasons for the stop work order issuance shall be hand delivered or mailed first-class to the owner of the property involved, or to the owner's agent, or to the person doing the work. Upon issuance of a

stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order, the conditions under which the cited work will be permitted to resume, and the name and contact information of the official or agency issuing the order.

115.3 Unlawful continuance. Any person who continues to engage in any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be guilty of a misdemeanor.

115.4 Removal of posted stop work order. Any person who removes a posted stop work order without written consent of the Building Official shall be guilty of a misdemeanor.

115.5 Response required. Violators receiving a stop work order are required to respond to Planning and Development Services within five (5) business days of the issued notice to receive instructions on how to rescind the order.

115.6 Permit application required. A building permit application with construction or demolition plans and supporting (structural calculations, energy calculations, accessible access) documents must be submitted for approval within twenty (20) working days following response to Planning and Development Services. Plans will be reviewed and correction letters issued or permit application approved by Planning and Development Services. A response to any correction letter must be submitted within fifteen (15) working days of the date of the correction letter. Ten (10) working days will be required to review this second submission and a permit approved for issuance. Permits ready for issuance must be issued within five (5) working days thereafter. All construction must be inspected as work progresses and signed off by all (affected) departments within the permit term limits outlined in Section 105.5.1 or as determined by the building official.

115.7 Stop work order penalty. The Building Official may impose Stop Work Order Penalties in accordance with Section 1.14.050 of this code and/or other applicable law.

16.04.240 Section 502.1 Address identification.

Section 502.1 of Chapter 5 of the California Building Code is amended to read:

502.1 Address identification. New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be a minimum of 4 inches (102 mm) high with a minimum stroke width of ½ inch (12.7 mm) unless required to be larger by Section 502.1.2. When required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other approved sign or means shall be used to identify the structure. Address numbers shall be maintained.

502.1.1 Address illumination. Address identification required by Section 501.2 shall be

illuminated.

502.1.2 Address identification size. Address numbers and letters shall be sized as follows:

1. When the structure is between thirty-six (36) and fifty (50) feet from the road or other emergency means of access, a minimum of one-half inch (0.5") stroke by six inches (6") high is required.
2. When the structure is fifty (50) or more feet from the road or other emergency means of access, a minimum of one inch (1") stroke by nine inches (12") high is required.

16.04.250 Section 702A Definitions – Wildland-Urban Interface Fire Area.

Section 702A of Chapter 7A of the California Building Code is amended include the following definition of "**WILDLAND-URBAN INTERFACE FIRE AREA**":

WILDLAND-URBAN INTERFACE FIRE AREA is a geographical area identified by the State of California as a "Fire Hazard Severity Zone" in accordance with Public Resources Code Sections 4201 through 4202 and Government Code Sections 51175 through 51189, or other areas designated by the enforcing agency to beat a significant risk from wildfires. Within the city limits of the City of Palo Alto, "Wild Land-Urban Fire Interface Area" shall also include all areas west of Interstate 280, and all other areas recommended as a "Very High Fire Hazard Severity Zone" by the Director of the California Department of Forestry.

16.04.260 Section 903.2 Automatic sprinkler systems, where required.

Section 903.2 of Chapter 9 the California Building Code is amended to read:

903.2 Automatic sprinkler systems, where required. Approved automatic sprinkler systems in new buildings and structures and in existing modified buildings and structures, shall be provided in the locations described in this section. Automatic fire sprinklers shall be installed per the requirements set forth in Sections 903.2.1 through 903.2.18 and as follows, whichever is the more restrictive:

1. An automatic sprinkler system shall be provided throughout all new buildings and structures
Exception: New non-residential occupancies, buildings or structures that do not exceed 350 square feet of building area and contain no plumbing fixtures.
2. An automatic sprinkler system shall be provided throughout all existing buildings when modifications are made that create conditions described in Sections 903.2.1 through 903.2.18, or that create an increase in fire area to more than 3600 square feet or when the addition is equal or greater than 50% of the existing building square footage whichever is more restrictive.
3. An automatic sprinkler system shall be provided throughout all new or altered

basements used for storage/utility/occupancy or habitable space regardless of size and throughout existing basements that are expanded by more than 50%. If the addition or alteration is only the basement, then only the basement is required to be fire sprinkler protected.

4. An automatic sprinkler system shall be installed throughout when either the roof structure and/or exterior wall structure have been removed, altered, and/or replaced by at least 50% of the existing structure.
5. An automatic sprinkler system shall be installed throughout when any change in use or occupancy creating a more hazardous fire/life-safety condition, as determined by the Fire Chief.

Exception: Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided that those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour fire barriers constructed in accordance with Section 707 or not less than 2-hour horizontal assemblies constructed in accordance with Section 711, or both.

16.04.270 Section 903.3.1.1 NFPA 13 sprinkler systems.

Section 903.3.1.1 of Chapter 9 of the California Building Code is amended to read:

903.3.1.1 NFPA 13 sprinkler systems. Where the provisions of this code require that a building or portion thereof be equipped throughout with an automatic sprinkler system in accordance with this section, sprinklers shall be installed throughout in accordance with NFPA 13 and State and local requirements except as provided in Section 903.3.1.1.

1. For new buildings having no designated use or tenant, the minimum sprinkler design density shall be Ordinary Hazard Group II/1500 square feet.
2. Where future use or tenant is determined to require a higher density, the sprinkler system shall be augmented to meet the higher density.
3. Light hazard occupancy shall be hydraulically designed to a 1500 square feet most remote area or as required by the fire code official
4. Laboratory areas within buildings shall be hydraulically designed to Ordinary Hazard II density.
5. Parking areas where mechanical vehicle storage equipment is used shall be hydraulically designed to Extra Hazard II density.
6. In multi-residential apartments, townhomes, and condominiums.

16.04.280 Section 903.3.1.2 NFPA 13R sprinkler systems.

Section 903.3.1.2 of Chapter 9 of the California Building Code is amended to read:

903.3.1.2 NFPA 13R sprinkler systems. Where allowed in buildings of Group R Occupancies, automatic sprinkler systems shall be installed throughout in accordance with NFPA 13 and State and local standards.

16.04.290 Section 903.3.1.3 NFPA 13D sprinkler systems.

Section 903.3.1.3 of Chapter 9 of the California Building Code is amended to read:

903.3.1.3 NFPA 13D sprinkler systems. Where allowed, automatic sprinkler systems installed in one-and two-family detached dwellings shall be installed throughout in accordance with NFPA 13D and State and local standards. Fire sprinkler protection is required under rear covered patios extending 4 feet perpendicular from the exterior of the structure.

16.04.300 Section 903.3.1.3.1 Increase in fire sprinkler design criteria.

Section 903.3.1.3.1 of Chapter 9 of the California Building Code is added to read:

903.3.1.3.2 Increase in fire sprinkler design criteria. Structures determined by the fire code official to have higher firefighting hazardous conditions or located in the Wildland-Urban Interface Fire Area shall have an increase in fire sprinkler design criteria as determined by the fire code official.

16.04.310 Section 903.4.3 Floor control valves.

Section 903.4.3 of Chapter 9 of the California Building Code is amended to read:

903.4.3 Floor control valves. Automatic sprinkler systems serving buildings two (2) or more stories in height shall have valves installed so as to control the system independently on each floor including basements.

16.04.320 Section 905.3.1 Height.

Section 905.3.1 of the California Building Code is amended to read:

905.3.1 Height. A Class I standpipe system shall be installed in buildings where the roof edge/parapet is greater than 27 feet above the lowest level of fire apparatus access roadway and in below grade levels.

16.04.330 Section 907.2.11.10 Replacement.

Section 907.2.11.10 of Chapter 9 of the California Building Code is added to read:

907.2.11.10 Replacement. Single and multi-station smoke alarms and carbon monoxide detectors shall be replaced 10 years after date of installation.

16.04.340 Section 909.20.8 Smoke control systems schedule.

Section 909.20.8 is added to the California Building Code to read as follows:

909.20.8 Smoke control systems schedule. A routine maintenance and operational testing program shall be initiated immediately after the smoke control system has passed the acceptance tests. A written schedule for routine maintenance and operational testing shall be established and both shall occur at least annually.

16.04.350 Section 1008.3.3 Rooms and spaces.

Section 1008.3.3 of Chapter 10 of the California Building Code is amended to read:

1008.3.3 Rooms and spaces. In the event of power supply failure, an emergency electrical system shall automatically illuminate all of the following areas:

1. Electrical equipment rooms.
2. Fire command centers.
3. Fire pump rooms.
4. Generator rooms.
5. Public restrooms.

16.04.360 Section 1031.2 Where required.

Section 1031.2 of Chapter 10 of the California Building Code is amended to read:

1031.2 Where required. In addition to the means of egress required by this chapter, emergency escape and rescue openings shall be provided in Group R occupancies.

Basements and sleeping rooms below the fourth story above grade plane shall have not fewer than one emergency escape and rescue opening in accordance with this section. Where basements contain one or more sleeping rooms, an emergency escape and rescue opening shall be required in each sleeping room but shall not be required in adjoining areas of the basement. Such openings shall open directly into a public way or to a yard or court that opens to a public way.

Exceptions:

1. In Group R-1 and R-2 occupancies constructed of Type I, Type IIA, Type IIIA or Type IV construction equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1.
2. Group R-2.1 occupancies meeting the requirements for delayed egress in accordance with Section 1010.2.13 may have operable windows that are

breakable in sleeping rooms permanently restricted to a maximum of 4-inch open position.

3. Emergency escape and rescue openings are not required from basements or sleeping rooms that have an exit door or exit access door that opens directly into a public way or to a yard, court or exterior egress balcony that opens to a public way.
4. Storm shelters and basements used only to house mechanical equipment not exceeding a total floor area of 200 square feet (18.58 m²)

16.04.370 Reserved.

16.04.380 Section 1205.3.4 Roof guards at courts.

Section 1205.3.4 of Chapter 12 of the California Building Code is added to read:

1205.3.4 Roof guards at courts. Roof openings into courts where not bounded on all sides by walls shall be protected with guardrails. The top of the guards shall not be less than 42 inches in height. Required guards shall not have openings that allow passage of a sphere twelve inches (12) in diameter from the walking surface to the required guard height.

Exception: Where the roof opening is greater than 600 square feet in area.

16.04.390 Section 1208.5 Dwelling unit and congregate residence superficial floor area.

Section 1208.5 of Chapter 12 of the California Building Code is added to read:

1208.5 Dwelling unit and congregate residence superficial floor area. Every dwelling unit and congregate residence shall have at least one room which shall have not less than 120 square feet of superficial floor area. Every room which is used for both cooking and living or both living and sleeping purposes shall have not less than 144 square feet of superficial floor area. Every room used for sleeping purposes shall have not less than 70 square feet of superficial floor area. When more than two persons occupy a room used for sleeping purposes the required superficial floor area shall be increased at the rate of 50 square feet for each occupant in excess of two. Guest rooms with cooking shall contain the combined required superficial areas of a sleeping and a kitchen, but not less than 144 square feet. Other habitable rooms shall be not less than 70 square feet.

Notwithstanding any provision of this Section, children under the age of six shall not be counted for purposes of determining whether a family with minor children complies with the provisions of this Code.

For the purposes of this section, "superficial floor area" means the net floor area within the enclosing walls of the room in which the ceiling height is not less than seven feet six inches, excluding built-in equipment such as wardrobes, cabinets, kitchen units, or fixtures which are not readily removable.

16.04.400 Section 1503.2.1 Locations.

Section 1503.2.1 of Chapter 15 of the California Building Code is amended to read:

1503.2.1 Locations. Flashing shall be installed at wall and roof intersections, gutters, wherever there is a change in roof slope or direction, and around roof openings. Where flashing is of metal, the metal shall be corrosion resistant with a thickness of not less than 0.019 inches (0.483 mm) (e.g. no. 26 galvanized sheet) and shall be primed and painted.

16.04.410 Section 1612.1.1 Palo Alto Flood Hazard Regulations.

Section 1612.1.1 of Chapter 16 of the California Building Code is added to read:

1612.1.1 Palo Alto Flood Hazard Regulations. Notwithstanding the provisions of Section 1612.1, all construction or development within a flood hazard area (areas depicted as a Special Flood Hazard Area on Flood Insurance Rate Maps published by the Federal Emergency Management Agency) shall comply with the City of Palo Alto Flood Hazard Regulations (Palo Alto Municipal Code Chapter 16.52). Where discrepancies exist between the requirements of this code and said regulations, the more stringent requirements shall apply.

16.04.420 Section 1613.5 Suspended ceilings.

Section 1613.5 of Chapter 16 of the California Building Code is added to read:

1613.5 Suspended ceilings. Minimum design and installation standards for suspended ceilings shall be determined in accordance with the requirements of Section 2506.2.1 of this Code and this section.

1613.5.1 Scope. This part contains special requirements for suspended ceilings and lighting systems. Provisions of Section 13.5.6 of ASCE 7 shall apply except as modified herein.

1613.5.2 General. The suspended ceilings and lighting systems shall be limited to 6 feet (1828 mm) below the structural deck unless the lateral bracing is designed by a licensed engineer or architect.

1613.5.3 Sprinkler heads. All sprinkler heads (drops) except fire-resistance-rated floor/ceiling or roof/ceiling assemblies, shall be designed to allow for free movement of the sprinkler pipes with oversize rings, sleeves, or adaptors through the ceiling tile. Sprinkler heads and other penetrations shall have a 2-inch (50mm) oversize ring, sleeve, or adapter through the ceiling tile to allow for free movement of at least 1 inch (25mm) in all horizontal directions. Alternatively, a swing joint that can accommodate 1 inch (25 mm) of ceiling movement in all horizontal directions is permitted to be provided at the top of the sprinkler head extension.

Sprinkler heads penetrating fire-resistance-rated floor/ceiling or roof/ceiling assemblies shall comply with Section 714 of this Code.

1613.5.4 Special requirements for means of egress. Suspended ceiling assemblies located along means of egress serving an occupant load of 30 or more and at lobbies accessory to Group A Occupancies shall comply with the following provisions.

1613.5.4.1 General. Ceiling suspension systems shall be connected and braced with vertical hangers attached directly to the structural deck along the means of egress serving an occupant load of 30 or more and at lobbies accessory to Group A Occupancies. Spacing of vertical hangers shall not exceed 2 feet (610 mm) on center along the entire length of the suspended ceiling assembly located along the means of egress or at the lobby.

1613.5.4.2 Assembly device. All lay-in panels shall be secured to the suspension ceiling assembly with two hold-down clips minimum for each tile within a 4-foot (1219 mm) radius of the exit lights and exit signs.

1613.5.4.3 Emergency systems. Independent supports and braces shall be provided for light fixtures required for exit illumination. Power supply for exit illumination shall comply with the requirements of Section 1008.3 of this Code.

1613.5.4.4 Supports for appendage. Separate support from the structural deck shall be provided for all appendages such as light fixtures, air diffusers, exit signs, and similar elements.

16.04.430 Section 1613.5 ASCE 7, Section 13.1.4 Seismic design requirements for nonstructural components.

Section 1613.5 of Chapter 16 of the California Building Code is added to include the following:

1613.5 ASCE 7, Section 13.1.4 Seismic design requirements for nonstructural components. Nonstructural elements must be seismically designed per ASCE 7, Section 13.1.4.

Exemptions. The following nonstructural components are exempted:

1. Furniture (except storage cabinets as noted in Table 13.5-1).
2. Temporary or movable equipment
3. Architectural components in Seismic Design Category B other than parapets supported by bearing walls or shear walls provided that the component importance factor, I_p , is equal to 1.0.
4. Mechanical and electrical components in Seismic Design Category B.
5. Mechanical and electrical components in Seismic Design Category C provided that the component importance factor, I_p , is equal to 1.0.

6. Mechanical and electrical components in Seismic Design Categories D, E, or F where all of the following apply:
 - a. The component importance factor, I_p , is equal to 1.0;
 - b. The component is positively attached to the structures;
 - c. Flexible connections are provided at seismic separation joints and between the component and associated ductwork, piping, and conduit; and either:
 - i. The component weighs 400 lb. (1,780 N) or less and has a center of mass located 4 ft (1.22 m) or less above the adjacent floor level; or
 - ii. The component weighs 20 lb. (89 N) or less or, in the case of a distributed system, 5 lb./ft. (73 N/m) or less; or
 - iii. The component weighs 200 lb. (890N) or less and is suspended from roof/floor or mounted on wall.

16.04.440 Section 1705.3 Concrete construction.

Section 1705.3 of Chapter 17 of the California Building Code is amended to read:

1705.3 Concrete construction. The special inspections and tests of concrete construction shall be as required by this section and Table 1705.3.

Exceptions: Special inspections and tests shall not be required for:

1. Isolated spread concrete footings of buildings three stories or less above grade plane that are fully supported on earth or rock, where the structural design of the footing is based on a specified compressive strength, f'_c , no greater than 2,500 pound per square inch (psi) (17.2 Mpa).
2. Continuous concrete footings supporting walls of buildings three stories or less above grade plane that are fully supported on earth or rock where:
 - 2.1. The footings support walls of light-frame construction;
 - 2.2. The footings are designed in accordance with Table 1809.7; or
 - 2.3. The structural design of the footing is based on a specified compressive strength, f'_c , no greater than 2,500 pounds per square inch (psi) (17.2 MPa), regardless of the compressive strength specified in the construction documents or used in the footing construction.
3. Nonstructural concrete slabs supported directly on the ground, including pre-stressed slabs on grade, where the effective pre-stress in the concrete is less than 150 psi (1.03 MPa).
4. Concrete foundation walls constructed in accordance with Table 1807.1.6.2.
5. Concrete patios, driveways and sidewalks, on grade.

16.04.450 Section 1803.2 Investigations required.

Section 1803.2 of Chapter 18 of the California Building Code is amended as to read:

1803.2 Investigations required. Geotechnical investigations shall be conducted in accordance with Sections 1803.3 through 1803.5

Exceptions:

1. The building official or designee shall be permitted to waive the requirement for a geotechnical investigation where satisfactory data from adjacent areas is available that demonstrates an investigation is not necessary for any of the conditions in Sections 1803.5.1 through 1803.5.6 and Sections 1803.5.10 and 1803.5.11.
2. Light-frame construction building utilizing the prescriptive continuous footings per Table 1809.7 amended in section 16.04.300. For addition, the engineer of record shall certify in writing that the existing foundation system matches the proposed foundation system.
3. Accessories and minor additions may be exempted by the Building Official or designee.

16.04.460 Section 1803.5.11 Seismic design categories C through F.

Section 1803.5.11 of Chapter 18 of the California Building Code is amended to read:

Section 1803.5.11 Seismic design categories C through F. For structures assigned to Seismic Design Category C, D, E or F, a geotechnical investigation shall be conducted, and shall include an evaluation of all of the following potential geologic and seismic hazards:

1. Slope instability.
2. Liquefaction.
3. Total and differential settlement.
4. Surface displacement due to faulting or seismically induced lateral spreading or lateral flow.

Exception: Refer to section 1803.2 exception.

16.04.470 Section 1809.7 Prescriptive footings for light-frame construction.

Section 1809.7 of Chapter 18 of the California Building Code is amended to read:

1809.7 Prescriptive footings for light-frame construction. Where a specific design is not provided, concrete or masonry-unit footings supporting walls of light-frame construction shall be permitted to be designed in accordance with Table 1809.7.

TABLE 1809.7
Prescriptive Footings Supporting Walls of Light-Frame Construction^{abcd}

Number of Floors Supported by the Footing^e	Thickness of Foundation Wall (inches)	Width of Footing (inches)	Thickness of Footing (inches)	Depth of Foundation Below Natural Surface of Ground or Finish Grade (inches)
1 & 2	8	15	8	20
3	8	18	8	30
Group U Occupancies	8	12	8	12
ADU Conversions ^f	8	12	8	12

- a. Ground under the floor shall be permitted to be excavated to elevation of footing.
- b. Interior stud-bearing walls shall be permitted to be supported by isolated footings. Footing width and length shall be twice the width shown in this table, and footings shall be spaced not more than 6 feet on center.
- c. See Section 1905 for additional requirements for concrete footings of structures assigned to Seismic Design Category C, D, E or F.
- d. All foundations as required in the above Table shall be continuous and have a minimum of three #4 bars of reinforcing steel, except for one story, detached accessory buildings of Group U occupancy where two bars are required.
- e. Footings shall be permitted to support a roof in addition to the stipulated number of floors. Footings supporting roof only shall be as required for supporting one floor.
- f. If existing detached accessory building is being converted to an Accessory Dwelling Unit (ADU) and the existing foundation is being utilized, then a designer, architect or engineer shall provide a letter that the existing foundation complies with the conditions above and is deemed structurally sound.

16.04.480 Section 1809.8 Plain concrete footings.

Section 1809.8 of Chapter 18 of the California Building Code is deleted.

16.04.490 Section 1901.2 Plain and reinforced concrete.

Section 1901.2 of Chapter 19 of the California Building Code is amended to read:

1901.2 Plain and reinforced concrete. Structural concrete shall be designed and constructed in accordance with the requirements of this chapter and ACI 318 as amended in section 1905 of this code and PAMC 16.14.240. Except for the provisions of Sections 1904 and 1907, the design and construction of slabs on grade shall not be governed by this chapter unless they transmit vertical loads or lateral forces from other parts of the

structure to the soil.

16.04.500 Section 1905.1.7 ACI 318, Section 14.1.4.

Section 1905.1.7 of Chapter 19 of the California Building Code is amended to read:

1905.1.7 ACI 318, Section 14.1.4. Delete ACI 318, Section 14.1.4, and replace with the following:

14.1.4 - Plain concrete in structures assigned to Seismic Design Category C, D, E or F.

14.1.4.1- Structures assigned to Seismic Design Category C, D, E or F shall not have elements of structural plain concrete, except as follows:

- (a) Left intentionally blank.
- (b) Isolated footings of plain concrete supporting pedestals or columns are permitted, provided the projection of the footing beyond the face of the supported member does not exceed the footing thickness.
- (c) Plain concrete footings supporting walls are permitted, provided the footings have at least three continuous longitudinal reinforcing bars not smaller than No. 4, with a total area of not less than 0.002 times the gross cross-sectional area of the footing except for one story, detached accessory buildings of Group U occupancy where two bars are required. A minimum of one bar shall be provided at the top and bottom of the footing. Continuity of reinforcement shall be provided at corners and intersections.

16.04.510 SECTION 1906 FOOTINGS FOR LIGHT-FRAME CONSTRUCTION

Section 1906 of Chapter 19 of the California Building Code is deleted.

16.04.520 Section 1906.1 Plain concrete footings.

Section 1906.1 of Chapter 19 of the California Building Code is deleted.

16.04.530 Section 1907.1 General.

Section 1907.1 of Chapter 19 of the California Building Code is amended to read:

1907.1 General. The thickness of concrete floor slabs supported directly on the ground shall be not less than 3 ½ inches (89mm). A 6-mil (0.006 inches; 0.15mm) polyethylene vapor retarder with joints lapped not less than 6 inches (152 mm) shall be placed between the base course or subgrade and the concrete floor slab, or other approved equivalent methods or materials shall be used to retard vapor transmission through the floor slab. Slabs shall have 6x6-10/10 wire mesh or equate a mid-height.

Exceptions: A vapor retarder is not required:

1. For detached [. .]

16.04.540 Section 2305.4 Hold-down connections.

Section 2305.4 of Chapter 23 of the California Building Code is added to read:

2305.4 Hold-down connectors. In Seismic Design Category D, E or F, hold-down connectors shall be designed to resist shear wall overturning moments using approved cyclic load values or 75 percent of the allowable seismic load values that do not consider cyclic loading of the product. Connector bolts into wood framing shall require steel plate washers on the post on the opposite side of the anchorage device. Plate size shall be a minimum of 0.229 inch by 3 inches by 3 inches (5.82 mm by 76 mm by 76 mm) in size. Hold-down connectors shall be tightened to finger tight plus one half (1/2) wrench turn just prior to covering the wall framing.

16.04.550 Section 2307.2 Wood-framed shear walls.

Section 2307.2 of Chapter 23 of the California Building Code is added to read:

Section 2307.2 Wood-frame shear walls. Wood-frame shear walls shall be designed and constructed in accordance with Section 2306.3 as applicable.

16.04.560 Section 2308.6.4 Braced wall panel construction.

Section 2308.6.4 of Chapter 23 of the California Building Code is amended to read:

2308.6.4 Braced wall panel construction. For Methods DWB, WSP, SFB, PBS, PCP and HPS, each panel must be not less than 48 inches (1219 mm) in length, covering three stud spaces where studs are spaced 16 inches (406 mm) on center and covering two stud spaces where studs are spaced 24 inches (610 mm) on center. Braced wall panels less than 48 inches (1219 mm) in length shall not contribute toward the amount of required bracing. Braced wall panels that are longer than the required length shall be credited for their actual length.

Vertical joints of panel sheathing shall occur over studs and adjacent panel joints shall be nailed to common framing members. Horizontal joints shall occur over blocking or other framing equal in size to the studding except where waived by the installation requirements for the specific sheathing materials. Sole plates shall be nailed to the floor framing in accordance with Section 2308.7 and top plates shall be connected to the framing above in accordance with Section 2308.6.7.2. Where joists are perpendicular to braced wall lines above, blocking shall be provided under and in line with the braced wall panels.

16.04.570 Section 2308.6.5 Alternative bracing.

Section 2308.6.5 of Chapter 23 of the California Building Code is amended to read:

2308.6.5 Alternative bracing. An alternate braced wall (ABW) or a portal frame with hold-downs (PFH) described in this section is permitted to substitute for a 48-inch (1219 mm)

braced wall panel of Method DWB, WSP, SFB, PCP or HPS.

16.04.580 TABLE 2308.6.1 WALL BRACING REQUIREMENTS.

Footnote “b” of TABLE 2308.6.1 of Chapter 23 of the California Building Code is amended to read:

b. See section 2306.3 for full description of bracing methods. Method GB is prohibited in Seismic Design Categories D & E.

16.04.590 TABLE 2308.6.3(1) BRACING METHODS.

TABLE 2308.6.3(1) Bracing Methods of Chapter 23 of the California Building Code is amended by adding footnote “b” and footnote “b” superscript to METHODS, MATERIAL column title as follows:

TABLE 2308.6.3(1) BRACING METHODS

METHODS, MATERIAL ^b	MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA ^a	
			Fasteners	Spacing

b. Method GB is prohibited in Seismic Design Categories D & E.

16.04.600 Section 2308.6.9 Attachment of sheathing.

Section 2308.6.9 of Chapter 23 of the California Building Code is amended to read:

2308.6.9 Attachment of sheathing. Fastening of braced wall panel sheathing shall not be less than that prescribed in Table 2308.6.1 or 2304.10.2. Wall sheathing shall not be attached to framing members by adhesives. Staple fasteners in Table 2304.10.1 shall not be used to resist or transfer seismic forces in structures assigned to Seismic Design Category D, E, or F unless the allowable shear values are substantiated by cyclic testing and approved by the Building Official or designee.

All braced wall panels shall extend to the roof sheathing and shall be attached to parallel roof rafters or blocking above with framing clips (18 gauge minimum) spaced at maximum 24 inches on center with four 8d nails per leg (total eight-8d nails per clip). Braced wall panels shall be laterally braced at each top corner and at maximum 24-inch intervals along the top plate of discontinuous vertical framing.

16.04.610 SECTION 2505 SHEAR WALL CONSTRUCTION.

Section 2505 Chapter 25 of the California Building Code is deleted in its entirety including its subsections.

16.04.620 Section 2508.6 Horizontal gypsum board or gypsum panel product diaphragm ceilings.

Section 2508.6 of the California Building Code is deleted in its entirety including its subsections.

16.04.630 Chapter 31B Public Pools.

Chapter 31B of the California Building Code has been adopted in its entirety.

16.04.640 Section 3304.1 Excavation and fill.

Section 3304.1 of Chapter 33 of the California Building Code is amended to read:

3304.1 Excavation and fill. Excavation and fill for buildings and structures shall be constructed or protected so as not to endanger life or property. Stumps and roots shall be removed from the soil to a depth of not less than 12 inches (305mm) below the surface of the ground in the area to be occupied by the building. Wood forms that have been used in placing concrete, if within the ground or between foundation sills and the ground, shall be removed before a building is occupied or used for any purpose. Wooden stakes shall not be embedded in concrete. Before completion, loose or casual wood shall be removed from direct contact with the ground under the building.

SECTION 2. Chapter 16.19, California Historical Building Code and Existing Building Code, of Title 16 (Building Regulations) of the Palo Alto Municipal Code is added to read as follows:

**CHAPTER 16.19
CALIFORNIA HISTORICAL BUILDING CODE,
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 8
and
CALIFORNIA EXISTING BUILDING CODE,
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 10**

Sections

- 16.04.010 2022 California Historical Building Code, Title 24, Part 8 adopted.**
- 16.19.020 2022 California Existing Building Code, Title 24, Part 10 adopted and amended.**
- 16.19.030 Cross - References to California Existing Building Code.**
- 16.19.040 Local Amendments.**
- 16.19.050 101.6 Appendices.**
- 16.19.060 Administration & Enforcement of 2022 California Existing Building Code**
- 16.19.070 Adoption of 2022 California Existing Building Code Chapter 1, Division II – Scope and Administration**
- 16.19.080 Section 101.1 Title.**
- 16.19.090 Section 324 Dwelling unit and congregate residence superficial floor area.**
- 16.19.100 Section 503.19 Suspended ceiling systems.**
- 16.19.110 Section 503.20 Mechanical and electrical equipment in seismic design categories**

D, E or F.

16.19.120 Section 405.2.3.1 Seismic evaluation and design procedures for repairs.

16.19.010 2022 California Historical Building Code, Title 24, Part 8 adopted.

The California Historical Building Code, 2022 Edition, Title 24, Part 8 (authorized by Health and Safety Code Sections 18950 through 18961), which provides alternative building regulations for the rehabilitation, preservation, restoration, or relocation of designated historic buildings, is adopted and hereby incorporated in this Chapter by reference and made a part hereof the same as if fully set forth herein.

One copy of the California Historical Building Code, 2022 Edition, has been filed for use and examination of the public in the Office of the Chief Building Official of the City of Palo Alto.

16.19.020 2022 California Existing Building Code, Title 24, Part 10 adopted and amended.

The California Existing Building Code, 2022 Edition, Title 24, Part 10 of the California Code of Regulations, which provides alternative building regulations for the rehabilitation, preservation restoration or relocation of existing buildings, together with those omissions, amendments, exceptions, and additions thereto, is adopted and hereby incorporated in this Chapter by reference and made a part hereof the same as if fully set forth herein.

One copy of the California Existing Building Code, 2022 Edition, has been filed for use and examination of the public in the Office of the Chief Building Official of the City of Palo Alto.

16.19.030 Cross - References to California Existing Building Code.

The provisions of this Chapter contain cross-references to the provisions of the California Existing Building Code, 2022 Edition, in order to facilitate reference and comparison to those provisions.

16.19.040 Local Amendments.

The provisions of this Chapter shall constitute local amendments to the cross-referenced provisions of the California Existing Building Code, 2022 Edition, and shall be deemed to replace the cross-referenced sections of said Code with the respective provisions set forth in this Chapter.

16.19.050 101.6 Appendices.

Section 101.6 of Chapter 1 of the California Existing Building Code is amended to read:

2022 California Existing Building Code and International Existing Building Code Appendix Chapters Adopted.

The following Appendix Chapters of the California Existing Building Code (CEBC), 2022 Edition, and International Existing Building Code (IEBC), 2021 Edition, are adopted and hereby incorporated in this Chapter by reference and made a part hereof the same as if fully set forth herein:

- A. CEBC Appendix A1 – Seismic Strengthening Provisions for Unreinforced Masonry Bearing Wall Buildings
- B. CEBC Appendix Chapter A2 – Earthquake Hazard Reduction in Existing Reinforced Concrete and Reinforced Masonry Wall Buildings with Flexible Diaphragms
- C. CEBC Appendix A3 – Prescriptive Provisions for Seismic Strengthening of Cripple Walls and Sill Plate Anchorage of Light, Wood-Frame Residential Buildings
- D. CEBC Appendix A4 – Earthquake Risk Reduction in Wood-Frame Residential Buildings with Soft, Weak or Open Front Walls
- E. CEBC Appendix A5 – Referenced Standards

16.19.060 Administration & Enforcement of 2022 California Existing Building Code

Administration and enforcement of this code shall be governed by Chapter 1, Division II of the 2022 California Building Code as amended by Palo Alto Municipal Code Chapter 16.04.

16.19.070 Adoption of 2022 California Existing Building Code Chapter 1, Division II – Scope and Administration

Chapter 1, Division II, Parts 1 and 2 of the 2022 California Existing Building Code is adopted by the City of Palo Alto to supplement, to the extent it does not conflict with, Chapter 1, Division II of the 2022 California Building Code, as amended.

16.19.080 Section 101.1 Title.

Section 101.1 of Chapter 1 of the California Existing Building Code is amended to read:

101.1 Title. These regulations shall be known as the Existing *Building Code of City of Palo Alto*, hereinafter referred to as “this code.”

16.19.090 Section 324 Dwelling unit and congregate residence superficial floor area.

Section 324 of Chapter 3 of the California Existing Building Code is added to read:

324 Dwelling unit and congregate residence superficial floor area. Every dwelling unit and congregate residence shall have at least one room which shall have not less than 120 square feet of superficial floor area. Every room which is used for both cooking and living or both living and sleeping purposes shall have not less than 144 square feet of superficial floor area. Every room used for sleeping purposes shall have not less than 70 square feet of superficial floor area. When more than two persons occupy a room used for sleeping purposes the required superficial floor area shall be increased at the rate of 50 square feet for each occupant in excess of two. Guest rooms with cooking shall contain the combined required superficial areas of a sleeping and a kitchen, but not less than 144 square feet. Other habitable rooms shall be not less than 70 square feet.

Notwithstanding any provision of this Section, children under the age of six shall not be counted for purposes of determining whether a family with minor children complies with the provisions of this Code.

For the purposes of this section, "superficial floor area" means the net floor area within the enclosing walls of the room in which the ceiling height is not less than seven feet six inches, excluding built-in equipment such as wardrobes, cabinets, kitchen units, or fixtures which are not readily removable.

16.19.100 Section 503.19 Suspended ceiling systems.

Section 503.19 of Chapter 5 the California Existing Building Code is added to read:

503.19 Suspended ceiling systems. In existing buildings or structures, when a permit is issued for alterations or repairs, the existing suspended ceiling system within the area of the alterations or repairs shall comply with ASCE 7-16 Section 13.5.6.

16.19.110 Section 503.20 Mechanical and electrical equipment in seismic design categories D, E or F.

Section 503.20 of Chapter 5 of the California Existing Building Code is added to read:

503.20 Mechanical and electrical equipment in seismic design categories D, E or F. In existing buildings or structures, when a permit is issued for alteration or repairs, the existing mechanical and electrical equipment on the area of the roof shall comply with ASCE 7-16 Section 13.4 Nonstructural Component Anchorage.

16.19.120 Section 405.2.3.1 Seismic evaluation and design procedures for repairs.

Section 405.2.3.1 of Chapter 5 of the California Existing Building Code is amended to read:

405.2.3.1 Evaluation and design procedures. The building shall be evaluated by a registered design professional, and the evaluation findings shall be submitted to the code official. The evaluation shall establish whether the damaged building, if repaired to its pre-damage state, would comply with the provisions of the California Building Code for load combinations that include wind or earthquake effects, except that the seismic forces shall be reduced seismic forces. Evaluation for earthquake loads shall be required if the substantial structural damage was caused by or related to earthquake effects or if the building is in Seismic Design Category C, D, E or F. The seismic evaluation and design shall be based on the procedures specified in the building code, ASCE 41 Seismic Evaluation and Upgrade of Existing Buildings. The procedures contained in Appendix A of the International Existing Building Code (IEBC) shall be permitted to be used as specified in Section 405.2.3.1.

Wind loads for this evaluation shall be those prescribed in Section 1609.

405.2.3.1.1 CEBC level seismic forces. When seismic forces are required to meet the building code level, they shall be one of the following:

1. One hundred percent of the values in the building code. The R factor used for analysis in accordance with Chapter 16 of the building code shall be the R factor specified for structural systems classified as "Ordinary" unless it can be demonstrated that the structural system satisfies the proportioning and detailing requirements for systems classified as "intermediate" or "special".
2. Forces corresponding to BSE-1 and BSE-2 Earthquake Hazard Levels defined in ASCE 41. Where ASCE 41 is used, the corresponding performance levels shall be those shown in Table 405.2.3.1.
3. Forces corresponding to BSE-1 and BSE-2 Earthquake Hazard Levels defined in ASCE 41. Where ASCE 41 is used, the corresponding performance levels shall be those shown in Table 405.2.3.1.

TABLE 405.2.3.1 ASCE 41 PERFORMANCE LEVELS		
RISK CATEGORY (BASED ON CBC TABLE 1604.5)	PERFORMANCE LEVEL FOR USE WITH ASCE 41 BSE-1 EARTHQUAKE HAZARD LEVEL	PERFORMANCE LEVEL FOR USE WITH ASCE 41 BSE-2 EARTHQUAKE HAZARD LEVEL *
I	Life Safety (LS)	Collapse Prevention (CP)
II	Life Safety (LS)	Collapse Prevention (CP)
III	Damage Control	Limited Safety
IV	Immediate Occupancy (IO)	Life Safety (LS)
* Only applicable when Tier 3 procedure is used.		

405.2.3.1.2 Reduced CEBC level seismic forces. When seismic forces are permitted to meet reduced building code levels, they shall be one of the following:

1. Seventy-five percent of the forces prescribed in the building code. The R factor used for analysis in accordance with Chapter 16 of the building code shall be the R factor as specified in Section 405.2.3.1.1.
2. In accordance with the California Existing Building Code and applicable chapters in Appendix A of the International Existing Building Code, as specified in Items (a.) through (e.) below. Structures or portions of structures that comply with the requirements of the applicable chapter in Appendix A shall be deemed to comply with the requirements for reduced building code force levels.
 - a. The seismic evaluation and design of unreinforced masonry bearing wall buildings in Risk Category I or II are permitted to be based on the

procedures specified in CEBC Appendix Chapter A1.

- b. Seismic evaluation and design of the wall anchorage system in reinforced concrete and reinforced masonry wall buildings with flexible diaphragms in Risk Category I or II are permitted to be based on the procedures specified in IEBC Appendix Chapter A2.
- c. Seismic evaluation and design of cripple walls and sill plate anchorage in residential buildings of light-frame wood construction in Risk Category I or II are permitted to be based on the procedures specified in CEBC Appendix Chapter A3
- d. Seismic evaluation and design of soft, weak, or open-front wall conditions in multi-unit residential buildings of wood construction in Risk Category I or II are permitted to be based on the procedures specified in CEBC Appendix Chapter A4.
- e. Seismic evaluation and design of concrete buildings and concrete with masonry infill buildings in all risk categories are permitted to be based on the procedures specified in IEBC Appendix Chapter A5.

Those associated with the BSE-1 Earthquake Hazard Level defined in ASCE 41 and the performance level as shown in Table 405.2.3.1. Where ASCE 41 is used, the design spectral response acceleration parameters SXS and SX1 shall not be taken less than seventy-five percent of the respective design spectral response acceleration parameters SDS and SD1 defined by the California Building Code and its reference standards.

SECTION 3. The Council adopts the findings for local amendments to the California Building Code, 2022 Edition, attached hereto as Exhibit “A” and incorporated herein by reference.

SECTION 4. The Council adopts the findings for local amendments to the California Existing Building Code, 2022 Edition, attached hereto as Exhibit “B” and incorporated herein by reference.

SECTION 5. The Council finds that this ordinance is exempt from the provisions of the California Environmental Quality Act (“CEQA”), pursuant to Section 15061 of the CEQA Guidelines, because it can be seen with certainty that there is no possibility that the amendments herein adopted will have a significant effect on the environment.

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SECTION 6. This Ordinance shall be effective on the thirty-first day after the date of its adoption.

INTRODUCED:

PASSED:

AYES:

NOES:

ABSENT:

ABSTENTIONS:

ATTEST:

DocuSigned by:
Lesley Milton
E56497CF3DB34FA...

City Clerk

DocuSigned by:
Patrick Burt
E08E3FB09E04FF...

Mayor

APPROVED AS TO FORM:

DocuSigned by:
Albert Yang
1580C45220134DC...

Assistant City Attorney

APPROVED:

DocuSigned by:
Ed Shikada
F20CA19CCC8D4F9...

City Manager

DocuSigned by:
[Signature]
293CF322E1294F6...

Director of Planning and
Development Services

DocuSigned by:
Kelly S. Nove
0513042E39B4409...

Director of Administrative Services

Exhibit A**FINDINGS FOR LOCAL AMENDMENTS TO CALIFORNIA BUILDING CODE,
TITLE 24, PART 2, VOLUMES 1 AND 2**

Section 17958 of the California Health and Safety Code provides that the City may make changes to the provisions of the California Building Standards Code. Sections 17958.5 and 17958.7 of the Health and Safety Code require that for each proposed local change to those provisions of the California Building Standards Code which regulate buildings used for human habitation, the City Council must make findings supporting its determination that each such local change is reasonably necessary because of local climatic, geological, or topographical conditions.

Local building regulations having the effect of amending the uniform codes, which were adopted by the City prior to November 23, 1970, were unaffected by the regulations of Sections 17958, 17958.5 and 17958.7 of the Health and Safety Code. Therefore, amendments to the uniform codes which were adopted by the City Council prior to November 23, 1970 and have been carried through from year to year without significant change, need no required findings. Also, amendments to provisions not regulating buildings used for human habitation do not require findings.

Code: California Building Code, Title 24, Part 2, Volumes 1 and 2					
Chapter(s), Section(s), Table(s), Appendices	Title	Added	Amended	Deleted	Justification (See below for keys)
Ch. 1, Div. II	SCOPE OF ADMINISTRATION	✓			A
Part 1	Scope of Application	✓	✓		A
Part 2	Administration and Enforcement	✓	✓		A
101.1	Title		✓		A
101.2.1	Appendices		✓		A
101.4	Referenced codes		✓		A
101.4.8	Historical Buildings	✓			A
101.4.9	Electrical	✓			A
101.4.10	Residential Buildings	✓			A
101.4.11	Green Building Standards	✓			A
101.4.12	International Swimming and Spa Code	✓			A
103.1	Creation of enforcement agency		✓		A
103.2	Appointment		✓		A
103.3	Deputies		✓		A
104.2.1	Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard zones		✓		C, T
104.10.1	Flood hazard area		✓		C, G, T

105.2	Work exempt from work		✓		A
105.3.2	Time limitation of applications		✓		A
105.5	Expiration		✓		A
105.5.1	Term limits for permits		✓		A
106.1	Live load posted		✓		G, T
109.6	Refunds		✓		A
109.7	Re-Inspection fees	✓			A
110.2.1	Preliminary accessibility compliance inspection	✓			A
110.3.3	Lowest floor elevation		✓		A
111.1	Use and occupancy		✓		A
111.1.1	Change of occupancy or tenancy	✓			A
111.3	Temporary occupancy		✓		A
111.5	Posting	✓			A
113.1	Means of Appeals		✓		A
114.1	Unlawful acts		✓		A
114.2	Criminal enforcement authority		✓		A
115.1	Authority		✓		A
115.2	Issuance		✓		A
115.3	Unlawful continuance		✓		A
115.4	Removal of posted stop work order		✓		A
115.5	Response required	✓			A
115.6	Permit application required	✓			A
115.7	Stop work order penalty	✓			A
502.1	Address identification		✓		T
502.1.1	Address illumination	✓			T
502.1.2	Address identification size	✓			T
702A	WILDLAND-URBAN INTERFACE FIRE AREA - Definitions	✓			C, T
903.2	Automatic sprinkler system, where required		✓		
903.3.1.1	NFPA 13 sprinkler systems		✓		G, T
903.3.1.2	NFPA 13R sprinkler systems		✓		G, T
903.3.1.3	NFPA 13D sprinkler systems		✓		G, T
903.3.1.3.1	Increase in fire sprinkler design criteria	✓			G, T
903.4.3	Floor control valves		✓		G, T

905.3.1	Height		✓		G, T
907.2.11.10	Replacement	✓			G, T
909.20.7	Smoke control systems	✓			G, T
1031.2	Where required	✓			G, T
1008.3.3	Rooms and spaces		✓		G, T
1205.3.4	Roof guards at courts	✓			G
1208.5	Dwelling unit and congregate residence superficial floor area	✓			A, G
1503.2.1	Locations		✓		C
1612.1.1	Palo Alto Flood Hazard Regulations	✓			C, T
1613.5	Suspended ceilings	✓			G
1613.5.1	Scope	✓			G
1613.5.2	General	✓			G
1613.5.3	Sprinkler heads	✓			G
1613.5.4	Special requirements for means of egress	✓			G
1613.5.4.1	General	✓			G
1613.5.4.2	Assembly device	✓			G
1613.5.4.3	Emergency systems	✓			G
1613.5.4.4	Supports for appendage	✓			G
1613.5	ASCE 7, Section 13.1.4 Seismic design requirements for nonstructural components		✓		G
1705.3	Concrete construction		✓		G
1803.2	Investigations required		✓		G
1803.5.11	Seismic design categories C through F		✓		G, T
1809.7	Prescriptive footings for light-frame construction	✓			G, T
Tbl. 1809.7	Prescriptive footings for light-frame construction	✓			G, T
1809.8	Plain concrete footings			✓	G, T
1901.2	Plain and reinforced concrete		✓		G, T
1905.1.7	ACI 318, Section 14.1.4		✓		G, T
1906	FOOTINGS FOR LIGHT-FRAME CONSTRUCTION			✓	G, T
1906.1	Plain concrete footings			✓	G, T
1907.1	General		✓		G, T
2305.4	Hold-down connections	✓			G, T

2307.2	Wood-framed shear walls	✓			G, T
2308.6.4	Braced wall panel construction		✓		G, T
2308.6.5	Alternative bracing		✓		G, T
Tbl. 2308.6.1	Wall Bracing Requirements. Footnote "b"		✓		G, T
Tbl. 2308.6.3(1)	Bracing Methods Footnote "b"		✓		G, T
2308.6.9	Attachment of sheathing		✓		G, T
2505	SHEAR WALL CONSTRUCTION			✓	G, T
2508.6	Horizontal gypsum board or gypsum panel product diaphragm ceilings			✓	G, T
Ch. 31B	Public Pools	✓			G, T
3304.1	Excavation and fill		✓		G, T
Appx. I	Patio Covers	✓			A, G
Appx. J	Grading (Section J109.4 Drainage across property lines)	✓			G, T
Appx. P	Emergency Housing	✓			A, C, G, T

Exhibit B**FINDINGS FOR LOCAL AMENDMENTS TO CALIFORNIA EXISTING BUILDING CODE,
Title 24, Part 10**

Section 17958 of the California Health and Safety Code provides that the City may make changes to the provisions of the California Building Standards Code. Sections 17958.5 and 17958.7 of the Health and Safety Code require that for each proposed local change to those provisions of the California Building Standards Code which regulate buildings used for human habitation, the City Council must make findings supporting its determination that each such local change is reasonably necessary because of local climatic, geological, or topographical conditions.

Local building regulations having the effect of amending the uniform codes, which were adopted by the City prior to November 23, 1970, were unaffected by the regulations of Sections 17958, 17958.5 and 17958.7 of the Health and Safety Code. Therefore, amendments to the uniform codes which were adopted by the City Council prior to November 23, 1970 and have been carried through from year to year without significant change, need no required findings. Also, amendments to provisions not regulating buildings used for human habitation do not require findings.

Code: California Existing Building Code, Title, 24, Part 10					
Chapter(s), Section(s), Table(s), Appendices	Title	Added	Amended	Replaced	Justification (See below for keys)
101.6	Appendices				A
Ch. 1, Div. II	Scope and Administration	✓			A
101.1	Title		✓		A
324	Dwelling unit and congregate residence superficial floor area.	✓			A, G
503.19	Suspended ceiling system	✓			G
503.20	Mechanical and electrical equipment in seismic design categories D, E or F	✓			G
405.2.3.1	405.2.3.1 Seismic evaluation and design procedures for repairs		✓		G
405.2.3.1.1	CEBC level seismic forces		✓		G
Tbl. 405.2.3.1	ASCE 41 PERFORMANCE LEVELS		✓		G
405.2.3.1.2	Reduced CEBC level seismic forces		✓		G
Appx. A1	Seismic Strengthening Provisions for Unreinforced Masonry Bearing Wall Buildings	✓			G, T

Appx. A2	Earthquake Hazard Reduction in Existing Reinforced Concrete and Reinforced Masonry Wall Buildings with Flexible Diaphragms	✓			G, T
Appx. A3	Prescriptive Provisions for Seismic Strengthening of Cripple Walls and Sill Plate Anchorage of Light, Wood-Frame Residential Buildings	✓			G, T
Appx. A4	Earthquake Risk Reduction in Wood-Frame Residential Buildings with Soft, Weak or Open Front Walls	✓			G, T
Appx. A5	Referenced Standards	✓			G, T

Key to Justification for Amendments to Title 24 of the California Code of Regulations

A This is an **administrative** amendment to clarify and establish civil and administrative procedures, regulations, or rules to enforce and administer the activities by the Palo Alto Building Inspection Department. These administrative amendments do not need to meet HSC 18941.5/17958/13869 per HSC 18909(c).

C This amendment is justified based on a local **climatic** condition. The seasonal climatic conditions during the late summer and fall create severe fire hazards to the public health and welfare in the City. The hot, dry weather frequently results in wild land fires on the brush covered slopes west of Interstate 280. The aforementioned conditions combined with the geological characteristics of the hills within the City create hazardous conditions for which departure from California Building Standards Code is required.

G This amendment is justified based on a local **geological** condition. The City of Palo Alto is subject to earthquake hazard caused by its proximity to San Andreas fault. This fault runs from Hollister, through the Santa Cruz Mountains, epicenter of the 1989 Loma Prieta earthquake, then on up the San Francisco Peninsula, then offshore at Daly City near Mussel Rock. This is the approximate location of the epicenter of the 1906 San Francisco earthquake. The other fault is Hayward Fault. This fault is about 74 mi long, situated mainly along the western base of the hills on the east side of San Francisco Bay. Both faults are considered major Northern California earthquake faults which may experience rupture at any time. Thus, because the City is within a seismic area which includes these earthquake faults, the modifications and changes cited herein are designed to better limit property damage as a result of seismic activity and to establish criteria for repair of damaged properties following a local emergency.

T The City of Palo Alto **topography** includes hillsides with narrow and winding access, which makes timely response by fire suppression and emergency response vehicles difficult. Palo Alto is contiguous with the San Francisco Bay, resulting in a natural receptor for storm and wastewater run-off. Also, the City of Palo Alto is located in an area that is potentially susceptible to liquefaction during a major earthquake. The surface condition consists mostly of stiff to dense sandy clay, which is highly plastic and expansive in nature. The aforementioned conditions within the City create hazardous conditions for which departure from California Building Standards Code is warranted.

Certificate Of Completion

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Certificate Pages: 3	Initials: 0
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Envelopeld Stamping: Enabled	Vinhloc Nguyen
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	Palo Alto , CA 94301
	Vinhloc.Nguyen@CityofPaloAlto.org
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Signer Events	Signature	Timestamp
Albert Yang Albert.Yang@CityofPaloAlto.org Assistant City Attorney City of Palo Alto Security Level: Email, Account Authentication (None)	 <p>DocuSigned by: Albert Yang 15B6C45220134DC...</p> <p>Signature Adoption: Pre-selected Style Using IP Address: 97.126.59.62</p>	<p>Sent: 11/21/2022 11:11:03 AM Viewed: 11/21/2022 2:49:57 PM Signed: 11/21/2022 2:51:09 PM</p>


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Geoffrey Blackshire Geoffrey.Blackshire@CityofPaloAlto.org Fire Chief Fire Services Security Level: Email, Account Authentication (None)	 <p>DocuSigned by: Geoffrey Blackshire 0FF7BFD93914C6...</p> <p>Signature Adoption: Pre-selected Style Using IP Address: 199.33.32.254</p>	<p>Sent: 11/21/2022 2:51:19 PM Resent: 11/29/2022 3:43:47 PM Viewed: 11/29/2022 3:54:58 PM Signed: 11/29/2022 3:56:24 PM</p>
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Brad Eggleston Brad.Eggleston@CityofPaloAlto.org Director of Public Works City of Palo Alto Security Level: Email, Account Authentication (None)	 <p>DocuSigned by: Brad Eggleston DF8505A6373A4DF...</p> <p>Signature Adoption: Pre-selected Style Using IP Address: 199.33.32.254</p>	<p>Sent: 11/29/2022 3:56:35 PM Viewed: 11/29/2022 5:45:39 PM Signed: 11/29/2022 5:46:20 PM</p>
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Kiely Nose Kiely.Nose@CityofPaloAlto.org Director, Administrative Services/CFO City of Palo Alto Security Level: Email, Account Authentication (None)	 <p>DocuSigned by: Kiely S. Nose 0513042E38B4409...</p> <p>Signature Adoption: Uploaded Signature Image Using IP Address: 73.162.77.140</p>	<p>Sent: 11/29/2022 5:46:29 PM Viewed: 12/1/2022 7:25:34 AM Signed: 12/1/2022 7:26:13 AM</p>
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Signer Events	Signature	Timestamp
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 Mr
 Security Level: Email, Account Authentication (None)
Electronic Record and Signature Disclosure:
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Lesley Milton
 Lesley.Milton@CityofPaloAlto.org
 City Clerk
 City Clerk
 Security Level: Email, Account Authentication (None)
Electronic Record and Signature Disclosure:
 Not Offered via DocuSign

DocuSigned by:

 E56491CF3DB34FA...
 Signature Adoption: Pre-selected Style
 Using IP Address: 199.33.32.254

Sent: 12/2/2022 11:50:10 AM
 Viewed: 12/2/2022 11:55:06 AM
 Signed: 12/2/2022 11:55:38 AM

In Person Signer Events	Signature	Timestamp
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Editor Delivery Events	Status	Timestamp
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Agent Delivery Events	Status	Timestamp
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Intermediary Delivery Events	Status	Timestamp
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Certified Delivery Events	Status	Timestamp
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Carbon Copy Events	Status	Timestamp
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Witness Events	Signature	Timestamp
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Notary Events	Signature	Timestamp
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Envelope Summary Events	Status	Timestamps
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Envelope Sent	Hashed/Encrypted	11/21/2022 11:11:03 AM
Certified Delivered	Security Checked	12/2/2022 11:55:06 AM

Envelope Summary Events	Status	Timestamps
Signing Complete	Security Checked	12/2/2022 11:55:38 AM
Completed	Security Checked	12/2/2022 11:55:38 AM

Payment Events	Status	Timestamps
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