

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CUPERTINO AMENDING CITY CODE CHAPTERS 16.02, 16.04, 16.06, 16.16, 16.20, 16.24, 16.28, 16.32, 16.40, 16.42, 16.54, 16.58, 16.62, 16.64 AND 16.68, OF TITLE 16 OF THE CUPERTINO MUNICIPAL CODE ADOPTING THE CALIFORNIA BUILDING, RESIDENTIAL, ELECTRICAL, MECHANICAL, PLUMBING, ENERGY, HISTORICAL BUILDING CODE, FIRE, EXISTING BUILDING CODE, GREEN BUILDING STANDARDS CODE, REFERENCED STANDARDS CODE, UNIFORM HOUSING CODE, AND PROPERTY MAINTENANCE CODE, WITH CERTAIN EXCEPTIONS, DELETIONS, MODIFICATIONS, ADDITIONS AND AMENDMENTS.

WHEREAS, pursuant to Sections 17922, 17958, 17958.5, 17958.7, 17958.11, and 18941.5 of the California Health and Safety Code, the City of Cupertino may adopt the provisions of the 2022 California Administrative Code (Part 1 of Title 24), 2022 California Building Code (Part 2 of Title 24, based on the 2021 International Building Code), the 2022 California Residential Code (Part 2.5 of Title 24 based on the 2021 International Residential Code), the 2022 California Electrical Code (Part 3 of Title 24 based on the 2020 National Electrical Code), The 2022 California Mechanical Code (Part 4 of Title 24 based on the 2021 Uniform Mechanical Code), the 2022 California Plumbing Code (Part 5 of Title 24 based on the 2021 Uniform Plumbing Code), the 2022 California Energy Code (Part 6 of Title 24), the 2022 California Historical Building Code (Part 8 of Title 24), the 2022 California Fire Code (Part 9 of Title 24), the 2022 California Existing Building Code (Part 10 of Title 24 based on the 2021 International Existing Building Code), the 2022 California Green Building Standards Code (Part 11 of Title 24), the 2022 California Referenced Standards Code (Part 12 of Title 24) with certain amendments to those provisions which are reasonably necessary to protect the health, welfare and safety of the citizens of Cupertino because of the local climatic, geological, and topographical conditions; and

WHEREAS, over the years, the City Council made factual findings set forth in respective sections of Chapter 16 of the Cupertino Municipal Code relating to the amendments to the California codes; and

WHEREAS, the factual findings made then continue to be valid and relate to the amendments made to the California codes in this adoption, and such findings are incorporated by reference; and

WHEREAS, in addition to those findings set forth in the provisions of the Cupertino Municipal Code, the City Council adopted a resolution making factual findings with

respect to the local geological, topographical, and climate conditions including, but not limited to, the following:

- 1) The Bay Area region is a densely populated area with buildings constructed over and near a vast array of fault systems capable of producing major earthquakes, including, but not limited to the recent 1989 Loma Prieta Earthquake;
- 2) Cupertino is situated adjacent to active earthquake faults capable of producing substantial seismic events. The San Andreas and Sargent-Berocal faults run through the lower foothills and the Monta Vista Fault is closer to the valley floor area. The Hayward fault is North East of the City which would also presents a risk to Cupertino in the event of an earthquake;
- 3) Vehicular traffic through Cupertino is significant, and continues to increase as Cupertino is an employment center as well as the location of residential projects;
- 4) Cupertino is divided by major freeways and expressways, the occurrence of a major earthquake could impact the ability of fire crews to respond to emergencies should one or more of the freeways or expressways collapse, be substantially damaged, or become gridlocked;
- 5) Fire suppression capabilities would be severely limited should the water system be damaged during an earthquake;
- 6) Cupertino experiences low humidity, high winds and warm temperatures during the summer months creating conditions which are particularly conducive to the ignition and spread of grass, brush and structural fires;
- 7) Cupertino's topography contains remote, steep hillsides which further limits the ability of emergency responders to extinguish or control wildland or structural fires; and
- 8) The local geographic, topographic and climatic conditions require amendments to the California Codes to establish more restrictive conditions to improve structural integrity of the buildings in the event of a seismic incident and provide other protections to protect against the increased risk of fire.

WHEREAS, a copy of all of the Codes to be incorporated by reference into this Ordinance were made available prior to the adoption of this Ordinance as required by law;

WHEREAS, this Ordinance was found to be categorically exempt from environmental review per the provisions of the California Environmental Quality Act of 1970, as amended, 14 California Code of Regulations, Section 15061(b)(3); and

WHEREAS, the City Council of the City of Cupertino is the decision-making body for this Ordinance; and

WHEREAS, this Council has reviewed and considered the Statement of Exemption determination under CEQA prior to taking any approval actions on this Ordinance;

NOW, THEREFORE, THE CITY COUNCIL OF THE OF CITY OF CUPERTINO DOES ORDAIN AS FOLLOWS:

SECTION 1: Adoption.

The Cupertino Municipal Code is hereby amended as set forth in Attachment A.

SECTION 2: Severability and Continuity.

The City Council declares that each section, sub-section, paragraph, sub-paragraph, sentence, clause and phrase of this ordinance is severable and independent of every other section, sub-section, paragraph, sub-paragraph, sentence, clause and phrase of this ordinance. If any section, sub-section, paragraph, sub-paragraph, sentence, clause or phrase of this ordinance is held invalid, or its application to any person or circumstance, be determined by a court of competent jurisdiction to be unlawful, unenforceable or otherwise void, the City Council declares that it would have adopted the remaining provisions of this ordinance irrespective of such portion, and further declares its express intent that the remaining portions of this ordinance should remain in effect after the invalid portion has been eliminated. To the extent the provisions of this Ordinance are substantially the same as previous provisions of the Cupertino Municipal Code, these provisions shall be construed as continuations of those provisions and not as an amendment to or readoption of the earlier provisions.

SECTION 3: California Environmental Quality Act.

This Ordinance is not a project under the requirements of the California Environmental Quality Act, together with related State CEQA Guidelines (collectively, "CEQA") because it has no potential for resulting in physical change in the environment. In the event that this Ordinance is found to be a project under CEQA, it is subject to the CEQA exemption contained in CEQA Guidelines section 15061(b)(3) because it can be seen with certainty to have no possibility that the action approved may have a significant effect on the environment. CEQA applies only to actions which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA. In this circumstance, the proposed action would have no or only a de minimis effect on the environment. The Ordinance is also exempt from CEQA under CEQA Guidelines section 15308, because it is a regulatory action for the protection of the environment. The foregoing determination is made by the City Council in its independent judgment.

SECTION 4: Effective Date.

This Ordinance shall take effect thirty days after adoption as provided by Government Code Section 36937.

SECTION 5: Publication.

The City Clerk shall give notice of adoption of this Ordinance as required by law. Pursuant to Government Code Section 36933, a summary of this Ordinance may be prepared by the City Clerk and published in lieu of publication of the entire text. The City Clerk shall post in the office of the City Clerk a certified copy of the full text of the Ordinance listing the names of the City Council members voting for and against the ordinance.

INTRODUCED at a regular meeting of the Cupertino City Council this 18th day of October, 2022; and

ENACTED at a regular meeting of the Cupertino City Council this 1st day of November, 2022, by the following vote:

Members of the City Council

AYES:

NOES:

ABSENT:

ABSTAIN:

<p>SIGNED:</p> <p>_____</p> <p>_____</p> <p>Darcy Paul, Mayor City of Cupertino</p>	<p>_____</p> <p>Date</p>
<p>ATTEST:</p> <p>_____</p> <p>_____</p> <p>Kirsten Squarcia, City Clerk</p>	<p>_____</p> <p>Date</p>
<p>APPROVED AS TO FORM:</p> <p>_____</p> <p>_____</p> <p>Christopher D. Jensen, City Attorney</p>	<p>_____</p> <p>Date</p>

Chapter 16.02 of the Cupertino Municipal Code is hereby repealed in its entirety and replaced with the following Chapter 16.02 to be entitled, numbered, and to read as follows:

CHAPTER 16.02: ADMINISTRATIVE CODE

- A. The provisions of the 2022 California Administrative Code and each and all of the regulations, provisions, conditions and terms of the code is referred to as if fully set forth in this chapter, and is by such reference adopted.
- B. One (1) copy of the code therefore is on file in the office of the Building Official pursuant to Health and Safety Code Section 18942 and are made available for public inspection.

CHAPTER 16.04: BUILDING CODE

Section

- 16.04.010 Adoption of the 2022 California Building Code, Volumes 1 and 2, based on the 2021 International Building Code, Volumes 1 and 2.
- 16.04.015 Adoption of Appendix Chapters.
- 16.04.040 Section 104 - Duties and Powers of Building Official.
- 16.04.050 Section 105 – Permits.
- 16.04.060 Section 107 - Submittal Documents.
- 16.04.070 Responsibility of permittee.
- 16.04.080 Section 109 - Fees.
- 16.04.090 Section 110 - Inspections.
- 16.04.100 Section 111 - Certificate of occupancy.
- 16.04.110 Section 113 - Means of Appeals.
- 16.04.120 Section 114 - Violations.
- 16.04.130 Section 115 - Stop work order.

- 16.04.220 Chapter 5 – General Building Heights and Areas.
- 16.04.240 Chapter 7A – Materials and Construction Methods for Exterior Wildfire Exposure.
- 16.04.260 Chapter 9 – Fire Protection and Life Safety Systems.
- 16.04.300 Chapter 15 - Roof Assemblies and Rooftop Structures
- 16.04.320 Chapter 17 - Special Inspection and Tests.
- 16.04.340 Chapter 19 - Concrete.
- 16.04.360 Chapter 23 – Wood.
- 16.04.380 Section 3109 - Swimming Pool Enclosures and Safety Devices.

16.04.010 Adoption of the 2022 California Building Code, Volumes 1 and 2, based on the 2021 International Building Code, Volumes 1 and 2.

A. Except as otherwise provided in this chapter, the provisions of the 2022 California Building Code, Volumes 1 and 2 inclusive, and specified Appendices and each and all of the regulations, provisions, conditions and terms of the code is referred to as if fully set forth in this chapter, except such portions as are hereinafter deleted, modified or amended by this ordinance, and is by such adopted by reference.

B. One (1) copy of each volume of the code therefore is on file in the office of the Building Official pursuant to Health and Safety Code Section 18942 and are made available for public inspection.

16.04.015 Adoption of Appendix Chapters.

The following Appendix Chapters from the 2022 California Building Code are hereby adopted.

Appendix C: Group U – Agricultural Buildings;
Appendix F: Rodentproofing;
Appendix G: Flood-Resistant Construction;
Appendix I: Patio Covers;
California Code Part 8: 2022 California Historical Building Code;
California Code Part 10: 2022 California Existing Building Code;
California Code Part 12: 2022 California Referenced Standards Code

16.04.040 Section 104 – Duties and Powers of Building Official.

Amend and Adopt Section [A] 104 of the 2022 California Building Code as follows:

[A] 104.1 General. The Building Official is hereby authorized and directed to enforce the provisions of this title. The Building Official shall have the authority to render interpretations of the codes identified in this title and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose for each code. Such

policies and procedures shall not have the effect of waiving requirements specifically provided for in the code.

[A] 104.2 Applications and permits. The Building Official shall receive applications, review construction documents and issue permits for the erection, and alteration, demolition and moving of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

[A] 104.2.1 Determination of substantially improved or substantially damaged existing building and structures in flood hazard areas. For application for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the building official shall determine the proposed work constitutes substantial improvement or repair of substantial damage. Where the building official determines that the proposed work constitutes substantial improvement or repair of substantial damage, and where required by this code, the building official shall require the building to meet the requirements of Section 1612 or Section R322 of the California Residential Code, as applicable.

[A] 104.3 Notices and orders. The Building Official shall issue all necessary notices or orders to ensure compliance with this code.

[A] 104.4 Inspections. The Building Official shall make all of the required inspections, or the Building Official shall have the authority to accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The Building Official is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise, subject to the approval of the appointing authority.

[A] 104.5 Identification. The Building Official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

[A] 104.6 Right of entry. Where it is necessary to make an inspection to enforce the provisions of this code, or where the Building Official has reasonable cause to believe that there exists in a structure or upon a premises a condition which is contrary to or in violation of this code which makes the structure or premises unsafe, dangerous or hazardous, the Building Official is authorized to enter the structure or premises at reasonable times to inspect or to perform the duties imposed by this code, provided that if such structure or premises be occupied that credentials be presented to the occupant and entry requested. If such structure or premises is unoccupied, the Building Official

shall first make a reasonable effort to locate the owner or other person having charge or control of the structure or premises and request entry. If entry is refused, the Building Official shall have recourse to the remedies provided by law to secure entry.

[A] 104.7 Department records. The Building Official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records for the period required for retention of public records.

[A] 104.8 Liability. The Building Official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be civilly or criminally rendered liable personally and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties.

[A] 104.8.1 Legal defense. Any suit or criminal complaint instituted against an officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by legal representative of the jurisdiction until the final termination of the proceedings. The Building Official or any subordinate shall not be liable for cost in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

[A] 104.9 Approved materials and equipment. Materials, equipment and devices approved by the Building Official shall be constructed and installed in accordance with such approval.

[A] 104.9.1 Used materials and equipment. The use of used materials which meet the requirements of this code for new materials is permitted. Used equipment and devices shall not be reused unless approved by the Building Official.

[A] 104.10 Modifications. Wherever there are practical difficulties involved in carrying out the provisions of this code, the Building Official shall have the authority to grant modifications for individual cases, upon application of the owner or owner's representative, provided the Building Official shall first find that special individual reason makes the strict letter of this code impractical and the modification is in compliance with the intent and purpose of this code and that such modification does not lessen health, accessibility, life and fire safety, or structural requirements. The details of action granting modifications shall be recorded and entered in the files of the department.

[A] 104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the Building Official finds that the proposed alternative meets all of the following:

1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code,
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code as it pertains to the following:
 - 2.1. Quality.
 - 2.2. Strength.
 - 2.3. Effectiveness.
 - 2.4. Fire resistance.
 - 2.5. Durability.
 - 2.6. Safety.

Where the alternative material, design or method of construction is not approved, the Building Official shall respond in writing, stating the reasons why the alternative was not approved.

[A] 104.11.1 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from approved sources.

[A] 104.11.2 Tests. Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the building official shall have the authority to require tests as evidence of compliance to be made without expense to the jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the building official shall approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the building official for at least the period required for retention of public records.

Adopt Section [A] 105 of the 2022 California Building Code as follows:

[A] 105.1 Required. Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be performed, shall first make application to the Building Official and obtain the required permit.

[A] 105.2 Work exempt from permit. Exemptions from permit requirement 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 the floor area is not greater than 120 square feet (11 m²). It is permissible that these structures still be regulated by Section 710A, despite exemption from permit.
2. Fences not over 7 feet (2134 mm) high.
3. Oil derricks.
4. 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.
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.
7. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
8. Temporary motion picture, television and theater stage sets and scenery.
9. Prefabricated swimming pools accessory to a group R-3 occupancy that are less than 24 inches (610 mm) deep, are not greater than 5,000 gallons (18,925 L) and are installed entirely about ground.
10. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
11. Swing and other playground equipment accessory to detached one- and two-family dwellings.

12. Window awnings in Group R-3 and U occupancies, supported by an exterior wall that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support.
13. Nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.

Electrical:

Repairs and maintenance: Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

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 installation of towers and antennas.

Temporary testing systems: A permit shall not be required for the installations of any temporary system required for the testing or servicing of electrical equipment or apparatus.

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 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 such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.

[A] 105.2.1 Emergency repairs. Where equipment replacements and repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day to the building official.

[A] 105.3 Application for permit. To obtain a permit, the applicant shall first file an application therefor in writing on a form furnished by the City for that purpose. Such application shall:

1. Identify and describe the work to be covered by the permit for which application is made.
2. Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.
3. Indicate the use and occupancy for which the proposed work is intended.
4. Be accompanied by construction documents and other information as required in Section 107.
5. State the valuation of the proposed work.
6. Be signed by the applicant, or the applicant's authorized agent.
7. Give such other data and information as required by the building official.

[A] 105.3.1 Action on application. The building official shall examine or cause to be examined applications for permits and amendments thereto within a reasonable time after filing. If the application or the construction documents do not conform to the requirements of pertinent laws, the building official shall reject such application in writing, stating the reasons therefor. If the building official is satisfied that the proposed work conforms to the requirements of this code and laws and ordinances applicable thereto, the building official shall issue a permit therefor as soon as practicable.

[A] 105.3.2 Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned 180 days 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 of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated.

[A] 105.4 Validity of permit. The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the Building Official from requiring the correction of errors in the construction documents and other data. The Building Official is also authorized to prevent occupancy or use of a structure where in violation of this code or of any other ordinances of this jurisdiction.

[A] 105.5 Expiration. On or after January 1, 2019, every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 12 months after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 12 months after the time the work is commenced. The Building Official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

[A] 105.6 Suspension or revocation. The Building Official is authorized to suspend or revoke a permit issued under the provisions of this code wherever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation or any of the provisions of this code.

[A] 105.7 Placement of permit. The Job Card or copy shall be posted at a location visible from the street frontage on site of the building or structure being permitted and is not to be removed until building final.

16.04.160 Section 107 - Construction Documents.

Adopt Section [A] 107 of the 2022 California Building Code as follows:

[A] 107.1 General. Submittal documents consisting of construction documents, statement of special inspections, geotechnical report and other data shall be submitted in digital format with each permit application. The construction document shall be prepared by a registered design professional where required by the building official. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.

Exception: The building official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design

professional if it is found that the nature of the work applied for is such that the review of construction documents is not necessary to obtain compliance with this code.

[A] 107.2 Construction documents. Construction documents shall be in accordance with Sections 107.2.1 through 107.2.8.

[A] 107.2.1 Information on Construction Documents. Construction documents shall be dimensioned and drawn on suitable material. Electronic media documents are permitted to be submitted where approved by the building official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations, as determined by the building official.

[A] 107.2.2 Fire Protection System Shop Drawings. Shop drawings for the fire protection system(s) shall be submitted to indicate conformance to this code and the construction documents and shall be approved prior to the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9.

[A] 107.2.3 Means of Egress. The construction documents shall show in sufficient detail the location, construction, size and character of all portions of the means of egress including the path of the exit discharge to the public way in compliance with the provisions of this code. In other than occupancies in Groups R-2, R-3, and I-1, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.

[A] 107.2.4 Exterior Wall Envelope. Construction documents for all buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with this code. The construction documents shall provide details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves or parapets, means of drainage, water-resistive membrane and details around openings.

The construction documents shall include manufacturer's installation instructions that provide supporting documentation that the proposed penetration and opening details described in the construction documents maintain the weather resistance of the exterior wall envelope. The supporting documentation shall fully describe the exterior wall system that was tested, where applicable, as well as the test procedure used.

[A] 107.2.5 Exterior Balconies and Elevated Walking Surfaces. Where balconies or other elevated walking surfaces are exposed to water from direct or blowing rain, snow, or irrigation, and the structural framing is protected by an impervious moisture barrier, the construction documents shall include details for all elements of the impervious moisture barrier system. The construction documents shall include manufacturer's installation instructions.

[A] 107.2.6 Site Plan. The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades and the proposed finished grades and, as applicable, flood hazard areas, floodways, and design flood elevations; and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The building official is authorized to waive or modify the requirement for a site plan where the application for permit is for alteration or repair or where otherwise warranted.

[A] 107.2.6.1 Design Flood Elevations. Where design flood elevations are not specified, they shall be established in accordance with Section 1612.3.1.

[A] 107.2.7 Structural Information. The construction documents shall provide the information specified in Section 1603.

[A] 107.2.8 Relocatable Buildings. Construction documents for relocatable buildings shall comply with Section 3112.

[A] 107.3 Examination of documents. The building official shall examine or cause to be examined the accompanying submittal documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this code and other pertinent laws or ordinances.

[A] 107.3.1 Approval of construction documents. When the building official issues a permit, the construction documents shall be approved, in writing or by stamp, as "Reviewed for Code Compliance". It shall be the responsibility of the owner or owner's representative to obtain a hard-copy of the approved plans and documents which shall be kept at the site of work and shall be open to inspection by the building official or a duly authorized representative.

[A] 107.3.2 Previous approvals. This code shall not require changes in the construction documents, construction or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within 180 days after the effective date of this code and has not been abandoned.

[A] 107.3.3 Phased approval. The building official is authorized to issue a permit for the construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of this code. The holder of such permit for the foundation or other parts of a building or structure shall proceed at the holder's own risk with the building operation and without assurance that a permit for the entire structure will be granted.

[A] 107.3.4 Design professional in responsible charge. Where it is required that documents be prepared by a registered design professional, the building official shall be authorized to require the owner or the owner's authorized agent to engage and designate on the building permit application a registered design professional who shall act as the registered design professional in responsible charge. If the circumstances require, the owner or the owner's authorized agent shall designate a substitute registered design professional in responsible charge who shall perform the duties required of the original registered design professional in responsible charge. The building official shall be notified in writing by the owner or the owner's authorized agent if the registered design professional in responsible charge is changed or is unable to continue to perform the duties.

The registered design professional in responsible charge shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building.

[A] 107.3.4.1 Deferred submittals. Deferral of any submittal items shall have the prior approval of the building official. The registered design professional in responsible charge shall list the deferred submittals on the construction documents for review by the building official.

Documents for deferred submittal items shall be submitted to the registered design professional in responsible charge who shall review them and forward them to the building official with a notation indicating that the deferred submittal

documents have been reviewed and found to be in general conformance to the design of the building. The deferred submittal items shall not be installed until the deferred submittal document have been approved by the building official.

[A] 107.4 Amended construction documents. Work shall be installed in accordance with the approved construction documents, and any changes made during construction that are not in compliance with the approved construction shall be submitted for approval as an amended set of construction documents.

[A] 107.5 Retention of construction documents. One set of approved construction documents shall be retained by the building official for a period of not less than required by the approved City's document retention plan.

16.04.070 Responsibility of permittee.

Responsibility of permittee. Building permits shall be presumed to incorporate the provision that the applicant, the applicant's agent, employees or contractors shall carry out the proposed work in accordance with the approved plans and with all requirements of this code and any other laws or regulations applicable thereto, whether specified or not. No approval shall relieve or exonerate any person from the responsibility of complying with the provisions and intent of this code.

16.04.080 Section 109 - Fees.

Fees shall be paid to the city as set forth in the latest resolution adopted by the city.

16.04.090 Section 110 - Inspections.

Amend and Adopt Section [A] 110 of the 2022 California Building Code as follows:

[A] 110.1 General. Construction or work for which a permit is required shall be subject to inspection by the Building Official and such construction or work shall remain accessible and exposed for inspection purposes until approved. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of any of the codes or amendments specified in this title. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the Building Official nor the City of Cupertino shall be liable for expense entailed in the removal or replacement of any material required to allow inspections.

[A] 110.2 Preliminary inspection. Before issuing a permit, the Building Official is authorized to examine or cause to be examined buildings, structures and sites for which an application has been filed.

[A] 110.3 Required inspections. The Building Official, upon notification, shall make the inspections set forth in Section 110.3.1 through 110.3.11.

[A] 110.3.1 Footing and Foundation Inspection. Footing and foundation inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to inspection. Materials for the foundation shall be on the job, except where concrete is ready mixed in accordance with ASTM C94, the concrete need not be on the job.

[A] 110.3.2 Concrete Slab and Under-Floor Inspection. Concrete slab and under-floor inspections shall be made after in-slab or under-floor reinforcing steel and building service equipment, conduit, piping accessories and other ancillary equipment items are in place, but before any concrete is placed or floor sheathing installed, including the subfloor.

[A] 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 required in Section 1612.4 shall be submitted to the building official.

[A] 110.3.4 Frame Inspection. Framing inspections shall be made after the roof deck or sheathing, all framing, fire-blocking and bracing are in place and pipes, chimneys and vents to be concealed are complete and the rough electrical, plumbing, heating wires, pipes and ducts are approved.

[A] 110.3.4.1 Moisture Content Verification. Moisture content of framing members shall be verified in accordance with the California Green Building Standards Code (CALGreen), Chapter 4, Division 4.5.

[A] 110.3.5 Lath, Gypsum Board and Gypsum Panel Product Inspection. Lath, gypsum board and gypsum panel product inspections shall be made after lathing, gypsum board and gypsum panel products, interior and exterior, are in place, but before any plastering is applied or gypsum board and gypsum panel product joints and fasteners are taped and finished.

Exception: Gypsum board and gypsum panel products that are not part of a fire-resistance-rated assembly or a shear assembly.

[A] 110.3.6 Weather-Exposed Balcony and Walking Surface Waterproofing. Where balconies or other elevated walking surfaces are exposed to water from direct or blowing rain, snow or irrigation, and the structural framing is protected by an impervious moisture barrier, all elements of the impervious moisture barrier system shall not be concealed until inspected and approved.

Exception: Where special inspections are provided in accordance with Section 1705.1.1, Item 3.

[A] 110.3.7 Fire- and smoke-resistant penetrations. Protection of joints and penetrations in fire-resistance-rated assemblies, smoke barriers and smoke partitions shall not be concealed from view until inspected and approved.

[A] 110.3.8 Energy efficiency inspections. Inspections shall be made to determine compliance with Chapter 13 and shall include, but not be limited to, inspection for: envelope insulation R- and U-values, fenestration U-value, duct system R-value, and HVAC and water-heating equipment efficiency.

[A] 110.4 Inspection agencies. The building official is authorized to accept reports of approved inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability.

[A] 110.5 Inspection requests. It shall be the duty of the holder of the building permit or their duly authorized agent to notify the building official when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspection of such work that are required by this code.

[A] 110.6 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the building official. The building official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the building official

16.04.100 Section 111 - Certificate of Occupancy.

Adopt Section [A] 111 of the 2022 California Building Code as follows:

[A] 111.1 Use and occupancy. A building or structure shall not be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made, until the 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 any provision of this code or any ordinance of the City of Cupertino. Certificates presuming to give authority to violate or cancel the provisions of this code or other ordinances of the City of Cupertino shall not be valid.

[A] 111.2 Certificate issued. After the Building Official inspects the building or structure and finds no violations of the provisions of this code or other laws that are enforced by the Building Department, the Building Official may issue a certificate of occupancy that contains the following:

1. The building permit number.
2. The address of the building or structure.
3. The name and address of the owner.
4. A description of that portion of the structure for which the certificate is issued.
5. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.
6. The name of the Building Official.
7. The edition of the code under which the permit was issued.
8. The use and occupancy, in accordance with the provision of Chapter 3 of the California Building Code.
9. The type of construction as defined in Chapter 6 of the California Building Code.
10. The design occupant load.
11. Where an automatic sprinkler system is provided, whether the sprinkler system is required.
12. Any special stipulations and conditions of the building permit.

[A] 111.3 Temporary occupancy. The Building Official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion of portions shall be occupied safely. The Building Official shall set a time period during which the temporary certificate of occupancy is valid.

[A] 111.4 Revocation. The Building Official is authorized to suspend or revoke a certificate of occupancy or completion issued under the provisions of this code, in writing, wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portion thereof is in violation of the provisions of this code or other ordinance of the City of Cupertino.

16.04.110 Section 113 - Means of Appeals.

Amend and Adopt Section [A] 113 of the 2022 California Building Code and amend to read as follows:

[A] 113.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and finding in writing to the appellant with a duplicate copy to the Building Official. In the event where no such board of appeals has been established, the City Council shall serve as said appeals board.

[A] 113.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The board shall not have authority to waive requirements of this code.

[A] 113.3 Qualifications for Board of Appeals. The Board shall consist of members who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the City of Cupertino.

[A] 113.4 Qualifications for Board of Appeals relative to Accessibility matters. Two members of the board of appeals shall be physically handicapped persons, two members shall be persons experienced in construction, and one member shall be a public member for matters relative to application and interpretation of accessibility matters of the code.

[A] 113.5 Administration. The building official shall take immediate action in accordance with the decision of the board.

16.04.120 Section 114 - Violations.

Amend and Adopt Section [A] 114 of the 2022 California Building Code as follows:

[A] 114.1 Unlawful acts. It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish or occupancy any building, structure or equipment regulated by the codes identified in this title, or cause same to be done, in conflict with or in violation of any of the provisions of any code identified in this title.

[A] 114.2 Notice of violation. The building official is authorized to serve a notice of violation or order on the person responsible for the erection, construction, alteration, extension, repair, moving, removal, demolition or occupancy of a building or structure in violation of any provisions of any code identified in this title, or in violation of a permit or certificate issued under the provisions of any code identified in this title. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.

16.04.130 Section 115 - Stop Work Order.

Amend and Adopt Section [A] 115 of the 2022 California Building Code as follows:

[A] 115.1 Authority. Whenever the Building Official finds any work regulated by this code being performed in a manner either contrary to the provisions of any code identified in this title or dangerous or unsafe, the Building Official is authorized to issue a stop work order.

[A] 115.2 Issuance. The stop work order shall be in writing and shall be given 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, and the conditions under which the cited work will be permitted to resume.

[A] 115.3 Unlawful continuance. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform by the building official to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

16.04.220 Chapter 5 – General Building Heights and Areas.

Amend and Adopt Section 501.2 of the 2022 California Building Code and amend to read as follows:

502.1 Address Identification. New and existing buildings shall be provided with approved address numbers or letters. Each character shall be not less than 4 inches in height and not less than 0.5 inch in width. They shall be installed on a contrasting background and be plainly visible from the street or road fronting the property. When required by the fire code official, address numbers 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.

No Certificate of Occupancy or final building approval for new construction or alterations shall be granted until the building or residence has a street address number posted. Subdivisions and Planned Developments shall submit a numbering schedule for approval by the Building Department and the Fire Department. All commercial buildings having a single address assigned with multi-suite arrangements shall have the suite-numbering system approved or assigned by the Building Department with an approved copy to the Fire Department for emergency use.

16.04.240 Chapter 7A – Materials and Construction Methods for Exterior Wildfire Exposure.

Amend Section 707A.9 of the 2022 California Building Code to read as follows:

707A.9 Underside of appendages. The underside of overhanging appendages shall be enclosed to grade in accordance with the requirements of this chapter or the underside of the exposed underfloor shall consist of one of the following:

1. Noncombustible material.
2. Ignition-resistant material.
3. One layer of 5/8-inch Type X gypsum sheathing applied behind an exterior covering on the underside of the floor projection.
4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the floor including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual.
5. The underside of a floor assembly that meets the performance criteria in accordance with the test procedures set forth in the SFM Standard 12-7A-3 or ASTM E2957.

Exception: Structural columns and beams do not require protection when they are constructed with sawn lumber or glue-laminated wood with the smallest minimum nominal dimension of 4 inches (102 mm). Sawn or glue-laminated planks splined, tongue-and-groove, or set close together and well spiked.

Amend Section 710A.3 of the 2022 California Building Code to read as follows:

710A.3. Where required. Accessory structures shall comply with the requirements of this section.

Delete Section 710A.3.1 in its entirety.

Delete Section 710A.3.2 in its entirety.

Delete Section 710A.3.3 in its entirety.

16.04.260 Chapter 9 – Fire Protection and Life Safety Systems.

Amend Section 903.2 of the 2022 California Building Code to read as follows:

903.2 Where required. Approved automatic sprinkler systems in new and existing buildings and structures shall be provided in the locations described in this Section or in Sections 903.2.1 through 903.2.18 whichever is the more restrictive and Sections 903.2.14 through 903.2.21.

For the purposes of this section, firewalls and fire barriers used to separate building areas shall be constructed in accordance with the California Building Code and shall be without openings or penetrations.

1. An approved automatic sprinkler system shall be provided throughout all new buildings and structures, other than Group R occupancies, except as follows:

Exceptions:

- a. Buildings and structures not located in any Wildland-Urban Interface and not exceeding 1,200 square feet of fire area.
- b. Buildings and structures located in any Wildland-Urban Interface Fire Area and not exceeding 500 square feet of fire area.
- c. Group S-2 or U occupancies, including photovoltaic support structures, used exclusively for vehicle parking which meet all of the following conditions:

- i. Noncombustible construction.
 - ii. Maximum 5,000 square feet in building area.
 - iii. Structure is open on not less than three (3) sides or not less than 75% of structure perimeter.
 - iv. Minimum of 10 feet separation from existing buildings, or similar structures, unless area is separated by fire walls complying with CBC 706.
 - d. Canopies, constructed in accordance with CBC 406.7.2, used exclusively for weather protection of vehicle fueling pads per CBC 406.7.1 and not exceeding 5,000 square feet of fire area.
2. An automatic sprinkler system shall be installed throughout all new buildings with a Group R fire area. Exception: Detached Accessory Dwelling Unit, provided that all of the following are met:
 - a. The unit meets the definition of an Accessory Dwelling Unit as defined in the Government Code Section 65852.2.
 - b. The existing primary residence does not have automatic fire sprinklers.
 - c. The accessory detached dwelling unit does not exceed 1,200 square feet in size.
 - d. The unit is on the same lot as the primary residence.
 - e. The unit meets all apparatus access and water supply requirements of Chapter 5 and Appendix B of the 2022 California Fire Code.
3. An approved automatic fire sprinkler system shall be installed in new manufactured homes (as defined in California Health and Safety Code Sections 18007 and 18009) and multifamily manufactured homes with two dwelling units (as defined in California Health and Safety Code Section 18008.7) in accordance with Title 25 of the California Code of Regulations.
4. An automatic sprinkler system shall be installed throughout existing buildings with a Group R fire area when additions are made causing the fire area to exceed 3,600 square feet.

Exception: Additions where all of the following are met:

 - a. Building addition does not exceed 500 square feet.
 - b. The resultant structure meets all water supply requirements of Chapter 5 and Appendix B of the 2022 California Fire Code.
5. An automatic sprinkler system shall be provided throughout existing Group A, B, E, F, L, M, S and U buildings and structures, when additions are made that increase the fire area to more than 3,600 square feet or that create conditions described in Sections 903.2.1 through 903.2.18.

6. Any change in the character of occupancy or in use of any building with a building area equal to or greater than 3,600 square feet which, in the opinion of the fire code official or Building Official, would place the building into a more hazardous division of the same occupancy group or into a different group of occupancies and constitutes a greater degree of life safety¹ or increased fire risk², shall require the installation of an approved automatic fire sprinkler system.

¹ Life Safety – Shall include, but not limited to: Increased occupant load, public assembly areas, public meeting areas, churches, indoor amusement attractions, buildings with complex exiting systems due to increased occupant loads, large schools/day-care facilities, large residential care facilities with non-ambulatory;

² Fire Risks – Shall include, but not limited to: High-piled combustible storage, woodworking operations, hazardous operations using hazardous materials, increased fuel loads (storage of moderate to highly combustible materials), increased sources of ignition (welding, automotive repair with the use of flammable liquids and open flames).

Add Section 903.2.11.7 to read:

903.2.11.7 Chemical Fume Hood Fire Protection. Approved automatic fire extinguishing systems shall be provided in chemical fume hoods in the following cases:

1. Existing hoods having interiors with a flame spread index greater than 25 in which flammable liquids are handled
2. If a hazard assessment determines that an automatic extinguishing system is required for the chemical fume hood, then the applicable automatic fire protection system standard shall be followed.

Amend Section 907.8 to read:

907.8 Inspection, testing and maintenance. The maintenance and testing schedules and procedures for fire alarm and fire detection systems shall be in accordance with Sections 907.8.1 through 907.8.4 and NFPA 72. Records of inspection, testing and maintenance shall be documented using NFPA 72 record of inspection and testing forms.

Amend Section 909.22.1 of the 2022 California Building Code to read as follows:

909.22.1 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 operational testing must occur at least annually.

16.04.300 Chapter 15 - Roof Assemblies and Rooftop Structures.

Amend Section 1505.1.3 of the 2022 California Building Code to read as follows:

1505.1.3 Roof coverings in all other areas. The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is Class A.

Amend Section 1505.1.4 of the 2022 California Building Code to read as follows:

1505.1.4 Roofing requirements in a Wildland-Urban Interface Fire Area. The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is Class A.

Roofing requirement for structures located in a Wildland-Urban Interface Fire Area shall also comply with Section 705A.

16.04.320 Chapter 17 – Special Inspection and Tests.

Amend Section 1705.3 Exception #1 of the 2022 California Building Code to read as follows:

1705.3 Concrete Construction. The special inspections and verifications for concrete construction shall be as required by this section and Table 1705.3.

Exception:

Special inspections 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).

16.04.340 Chapter 19 – Concrete.

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

1905.1.7 ACI 318, Section 14.1.4.

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) 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.

Exception:

In detached one and two-family dwelling three stories or less in height, the projection of the footing beyond the face of the supported member is permitted to exceed the footing thickness.

- (b) Plain concrete footing supporting walls are permitted, provided the footings have at least two continuous longitudinal reinforcing bars. Bars shall not be smaller than No. 4 and shall have a total area of not less than 0.002 times the gross cross-sectional area of the footing. 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.

Exception:

In detached one and two-family dwellings three stores or less in height and constructed with stud bearing walls, plain concrete footings with at least two continuous longitudinal reinforcing bars not smaller than No. 4 are permitted to have a total area of less than 0.002 times the gross cross-sectional area of the footing.

16.04.360 Chapter 23 – Wood.

Amend Table 2308.6.3(1) of the 2022 California Building Code, to add a new footnote "b" to the end of California Building Code Table 2308.6.3(1) to read as follows:

- b. In Seismic Design Categories D₀, D₁, and D₂, Methods GB, SFB, HPS and PBS is not permitted and the use of Method PCP is limited to one-story buildings and structures.

Add Section 2308.6.3.1 to the 2022 California Building Code to read as follows:

2308.6.3.1 Limits on methods GB, SFB, HPS, PBS and PCP. In Seismic Design Categories D, E, and F, Methods GB, SFB, HPS, and PBS are not permitted for use as intermittent braced wall panels, but gypsum board is permitted to be installed when required by this Section to be placed on the opposite side of the studs from other types of braced wall panel sheathing. In Seismic Design Categories D, E, and F the use of Method PCP is limited to one-story building and structures.

16.04.380 Section 3109 - Swimming Pool Enclosures and Safety Devices.

Adopt Section 3109 of the 2022 California Building Code.

Add Section 3109.3 to the 2022 California Building Code to read as follows:

3109.3 Inspections for Swimming Pools.

- A. All Work to Be Inspected. All pool installations or alterations thereto including equipment, piping and appliances related thereto shall be inspected by the Building Department to insure compliance with the requirements of the California Building Code.
- B. Called Inspections. It shall be the duty of the person doing the work authorized by the building permit to notify the Building Department that said work is ready for inspection. Such notification shall be given not less than twenty-four hours before the work is to be inspected.
 - 1. Pregunite inspection is required when all steel is in place, piping from the pool area is in with pressure test, all steel and related attachments are properly bonded and underwater light housing is installed;
 - 2. An inspection is required for all conduit and gas piping under slabs before decks are poured;
 - 3. Final inspection is required after all equipment is in place and operating, the pool is filled with water and all fences and gates are installed;

4. A reinspection fee per the adopted fee schedule per inspection will be charged for each inspection over two where the work is not ready or corrections have not been completed;
5. The owner shall arrange with the Building Department for inspectors to enter the property to make necessary inspections in connection with the pool.

CHAPTER 16.06 RESIDENTIAL CODE

Section

- 16.06.010 Adoption of the 2022 California Residential Code based on the 2021 International Residential Code.
- 16.06.015 Adoption of Appendix Chapters.
- 16.06.020 Section R310 – Emergency Escape and Rescue Openings.
- 16.06.040 Section R313 - Automatic Fire Sprinkler Systems.
- 16.06.050 Section R328 – Energy Storage Systems
- 16.06.060 Section R337 – Materials and Construction Methods for Exterior Wildfire Exposure.
- 16.06.080 Chapter 4 – Foundations.
- 16.06.100 Chapter 6 – Wall Construction.
- 16.06.120 Chapter 9 – Roof Assemblies.
- 16.06.140 Chapter 10 – Chimneys and Fireplaces – Spark Arrestors.
- 16.06.160 Appendix AX – Swimming Pool Safety Act

16.06.010 Adoption of the 2022 California Residential Code based on the 2018 International Residential Code.

A. Except as otherwise provide in this chapter, the provisions of the 2022 California Residential Code and specified Appendices and each and all of the regulations, provisions, conditions and terms of the code is referred to as if fully set forth in this chapter, except such portions as are hereinafter deleted, modified or amended by this ordinance, and is by such adopted by reference.

B. One (1) copy of each volume of the code therefore is on file in the office of the Building Official pursuant to Health and Safety Code Section 18942 and are made available for public inspection.

16.06.015 Adoption of Appendix Chapters.

The following Appendix Chapters from the 2022 California Residential Code are hereby adopted:

Appendix AH: Patio Covers;
Appendix AJ: Existing Building and Structures;
Appendix AK: Sound Transmission;
Appendix AX: Swimming Pool Safety Act.

16.06.020 Section R310 – Emergency Escape and Rescue Openings.

Amend Section R310.1 of the 2022 California Residential Code to delete Exception #2.

16.06.040 Section R313 - Automatic Fire Sprinkler Systems.

Amend Section R313.1 of the 2022 California Residential Code to read as follows:

R313.1 Townhouse automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed in all new townhouses and in existing townhouses when additions are made that increase the building area to more than 3,600 square feet.

Exception:

One or more additions made to a building after January 1, 2011 that does not total more than 1,000 square feet of building area.

Amend Section R313.2 of the 2022 California Residential Code to read as follows:

R313.2 One- and two-family dwellings automatic sprinkler systems. An automatic sprinkler system shall be installed in all new one- and two-family dwellings and existing one- and two-family dwellings when additions are made that increase the fire area to more than 3,600 square feet.

Exceptions:

1. Detached Accessory Dwelling Unit, provided that all of the following are met:

1.1. The unit meets the definition of an Accessory Dwelling Unit as defined in the Government Code Section 65852.2.

- 1.2. The existing primary residence does not have automatic fire sprinklers.
 - 1.3. The accessory detached dwelling unit does not exceed 1,200 square feet in size.
 - 1.4. The unit is on the same lot as the primary residence.
 - 1.5. The unit meets all apparatus access and water supply requirements of Chapter 5 and Appendix B of the 2022 California Fire Code.
2. When additions are made to existing structures, causing the fire area to exceed 3,600 square feet, and all of the following are met:
 - 2.1. Building addition does not exceed 500 square feet.
 - 2.2. The resultant structure meets all water supply requirements of Chapter 5 and Appendix B of the 2022 California Fire Code.

16.06.050 Section R328 – Energy Storage Systems.

Amend Section R328.7 of the 2022 California Residential Code to read as follows:

R328.7 Fire detection. Rooms and areas within dwelling units, basements and attached garages in which ESS are installed shall be protected by smoke alarms in accordance with Section R314. A heat detector, listed and interconnected to the smoke alarms, shall be installed in locations within dwelling units and attached garages where smoke alarms cannot be installed based on their listing.

[SFM] ESS installed in Group R-3 and townhomes shall comply with the following:

1. Rooms and areas within dwellings units, sleeping units, basements and attached garages in which ESS are installed shall be protected by smoke alarms in accordance with Section R314.
2. A listed heat alarm interconnected to the smoke alarms shall be installed in locations within dwelling units, sleeping units and attached garages where smoke alarms cannot be installed based on their listing.

Exceptions:

1. A listed heat detector may be used in place of a heat alarm, so long as it is interconnected with devices that provide an audible alarm at all sleeping areas.
2. A fire sprinkler associated with an approved automatic sprinkler system that triggers an audible alarm upon activation of the waterflow switch, may be used in place of a heat alarm.

16.06.060 Section R337 - Materials and Construction Methods for Exterior Wildfire Exposure.

Amend Section R337.7.9 of the 2022 California Residential Code to read as follows:

R337.7.10 Underside of appendages. The underside of overhanging appendages shall be enclosed to grade in accordance with the requirements of this chapter or the underside of the exposed underfloor shall consist of one of the following:

1. Noncombustible material.
2. Ignition-resistant material.
3. One layer of 5/8-inch Type X gypsum sheathing applied behind an exterior covering on the underside of the floor projection.
4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the floor including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual.
- 5.
6. The underside of an appendage assembly that meets the performance criteria in Section R337.7.11 when tested in accordance with the test procedures set forth in ASTM E2957.
7. The underside of an appendage assembly that meets the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3.

Exception:

Structural columns and beams do not require protection when they are constructed with sawn lumber or glue-laminated wood with the smallest minimum nominal dimension of 4 inches (102 mm). Sawn or glue-laminated planks splined, tongue-and-grove, or set close together and well spiked.

Amend Section R337.10.3 of the 2022 California Residential Code to read as follows:

R337.10.3. Where required. Accessory structures shall comply with the requirements of this section.

Delete Section R337.10.3.1 in its entirety.

Delete Section R337.10.3.2 in its entirety.

Delete Section R337.10.3.3 in its entirety.

Delete Section R337.10.3.4 in its entirety.

16.06.080 Chapter 4 – Foundations.

Amend Section R403.1 of the 2022 California Residential Code to read as follows:

R403.1 General. All exterior walls shall be supported on continuous solid or fully grouted masonry or concrete footings, or other approved structural systems which shall be of sufficient design to accommodate all loads according to Section R301 and to transmit the resulting loads to the soil within the limitations as determined from the character of the soil. Footings shall be supported on undisturbed natural soils or engineered fill. Concrete footings shall be designed and constructed in accordance with the provisions of Section R403 or in accordance with ACI 332.

Amend Section R403.1.1 of the 2022 California Residential Code to read as follows:

R403.1.1 Minimum size. Minimum sizes for concrete and masonry footings shall be as set forth in Table R403.1(1) to Table R403.1(3) and Figure R403.1.3. The footing width, *W*, shall be based on the load-bearing value of the soil in accordance with Table R401.4.1. Spread footings shall be at least 6 inches (152 mm) in thickness, *T*. Footing projection, *P*, shall be at least 2 inches (51 mm) and shall not exceed the thickness of the footing. The size of footings supporting piers and columns shall be based on the tributary load and allowable soil pressure in accordance with Table R401.4.1.

Delete Figure R403.1(2) and Figure R403.1(3).

Delete Section R403.2 in its entirety.

16.06.100 Chapter 6 – Wall Construction.

Amend Section R602.10.4 of the 2022 California Residential Code, to add a new footnote "f" to the end of CRC Table R602.10.4 to read as follows:

- f. In Seismic Design Categories D₀, D₁, and D₂, Methods GB, SFB, HPS, PBS, and CS-SFB are not permitted and the use of Method PCP is limited to one-story single family dwellings and accessory structures.

Add the "f" footnote notation for Methods GB, SFB, HPS, PBS, CS-SFB, and PCP of Table R602.10.4.

Add a new subsection R602.10.4.5 of the 2022 California Residential Code, to read as follows:

R602.10.4.5 Limits on methods GB, SFB, HPS, PBS, CS-SFB and PCP. In Seismic Design Categories D₀, D₁, and D₂, Methods GB, SFB, HPS, PBS, and CS-SFB are not permitted for use as intermittent braced wall panels, but gypsum board is permitted to be installed when required by this Section to be placed on the opposite side of the studs from other types of braced wall panel sheathing. In Seismic Design Categories D₀, D₁, and D₂, the use of Method PCP is limited to one-story single family dwellings and accessory structures.

Amend and Adopt Section R902.1 of the 2022 California Residential Code to read as follows:

16.06.120 Chapter 9 – Roof Assemblies.

R902.1. 2 Roof Coverings in All Other Areas. The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is Class A.

R902.1.3 Roofing Requirements within a Wildland-Urban Interface Fire Area. The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is Class A.

Roofing requirement for structures located in a Wildland-Urban Interface Fire Area shall also comply with Section R337.5.

16.06.140 Chapter 10 – Chimneys and Fireplaces - Spark Arrestors.

In new construction or when alterations, repairs or additions requiring a permit and having a valuation in excess of one thousand dollars occur, all new and existing fireplace chimneys shall terminate in a substantially constructed spark arrestor complying with the requirements of the 2022 California Residential Code Section R1003.9.2.

Amend and Adopt Appendix AX100 115922 (a) of the 2022 California Residential Code to read as follows:

16.06.160 Appendix AX – Swimming Pool Safety Act

Except as provided in Section 1115925, when a building permit is issued for the construction of a new swimming or spa or the remodeling of an existing swimming pool or spa at a private single-family home, the respective property shall be equipped with an enclosure from the public right-of-way that meets the requirements of Section 115923 and additionally the respective swimming pool or spa shall be equipped with two of the following six drowning prevention safety features:

1. Removable mesh fencing that meets American Society for Testing and Materials (ASTM) Specifications F2286 standards in conjunction with a gate that is self-closing and self-latching and can accommodate a key lockable device.
2. An approved safety pool cover as defined in subdivision (d) of Section 115921.
3. Exit alarms on the private single-family home's doors that provide direct access to the swimming pool or spa. The exit alarm may cause either an alarm noise or a verbal warning, such as a repeating notification that "the door to the pool is open."
4. A self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor on the private single-family home's doors providing direct access to the swimming pool or spa.
5. An alarm that, when placed in a swimming pool or spa, will sound upon detection of accidental or unauthorized entrance into the water. The alarm shall meet and be independently certified to the ASTM Standard F2208 "Standard Safety Specification for Residential Pool Alarms," which includes surface motion, pressure, sonar laser and infrared type alarms. A swimming protection alarm feature designed for individual use, including an alarm attached to a child that sounds when the child exceeds a certain distance or becomes submerged in water, is not a qualifying drowning prevention safety feature.
6. Other means of protection, if the degree of protection afforded is equal to or greater than that afforded by any of the feature set forth above and has been independently verified by an approved testing laboratory as meeting standards for those features established by the ASTM or the American Society of Mechanical Engineers (ASME).

[Title 16 – Chapter 16.08 – No Change]

[Title 16 – Chapter 16.12 – No Change]

CHAPTER 16.16: ELECTRICAL CODE

Section

- 16.16.010 Adoption of the 2022 California Electrical Code based on the 2017 National Electrical Code.
- 16.16.015 Adoption of Appendix Chapters.
- 16.16.020 Article 100 – Definitions.
- 16.16.030 Electrical Work.
- 16.16.040 Electrical Fee Schedule.
- 16.16.050 Interpretation.
- 16.16.060 Electrical Maintenance Program.

16.16.010 Adoption of the 2022 California Electrical Code based on the 2020 National Electrical Code.

A. Except as otherwise provided in this chapter, the provisions of the 2022 California Electrical Code and each and all of the regulations, provisions, conditions and terms of the code is referred to as if fully set forth in this chapter, except such portions as are hereinafter deleted, modified or amended by this ordinance, and is by such adopted by reference.

B. One (1) copy of each volume of the code therefore is on file in the office of the Building Official pursuant to Health and Safety Code Section 18942 and are made available for public inspection.

16.16.015 Adoption of Appendix Chapters.

No Appendix Chapters from the 2022 California Electrical Code have been adopted.

16.16.020 Article 100 – Definitions.

Amend Article 100 of the 2022 California Electrical Code with the following definitions added:

Electrical Contractors. For the purpose of this article, an Electrical Contractor shall be a person holding a valid electrical contractor's license issued by the State of California.

Journeyman Electrician. A journeyman electrician is an electrician qualified by training and experience to do electrical work in conjunction with new construction and/or rework of existing systems.

Maintenance Electrician. A maintenance electrician is an electrician qualified by training and experience to do the recurring work required to keep a facility in such condition that it may be utilized at its designated capacity and efficiency, to do repair work or replacement or overhaul of constituent parts or materials to keep or restore a facility to a condition substantially equivalent to its original or design capacity or efficiency.

16.16.030 Electrical Work.

Electrical work shall be done only by:

- a. Electrical contractors who are in compliance with the state licensing laws and whose employees are under the direct supervision of a qualified journeyman electrician;
- b. A general building contractor if scope of work involves at least two unrelated trades or crafts other than framing or carpentry, or if the general building contractor holds the appropriate license classification;
- c. Maintenance electrician.

16.16.040 Electrical Fee Schedule.

Electrical fees shall be paid to the city as set forth in the latest resolution adopted by the city.

16.16.050 Interpretation.

- A. The language used in this code, and the California Electrical Code, which is made a part of this code by reference, is intended to convey the common and accepted meaning familiar to the electrical industry.

B. The Building Official or his assistants is authorized to determine the intent and meaning of any provisions of this code. Such determination shall be made in writing and a record kept, which record shall be open to the public.

16.16.060 Electrical Maintenance Program.

Any person regularly employing one or more full-time qualified electricians for the purpose of installation, alteration, maintenance or repair on any property which such person owns or occupies, may designate a qualified electrician as a maintenance electrician. Upon being approved by the Chief Building Official, the maintenance electrician shall make monthly or quarterly reports to the city covering all installations, additions, or alterations. All such work shall be installed and done in accordance with the provisions of the Electrical Code, and shall be subject to the payment of fees, and to inspection by the electrical inspector to the same extent as similar work performed by other persons and for which such inspection is provided.

CHAPTER 16.20: PLUMBING CODE

Section

- 16.20.010 Adoption of the 2022 California Plumbing Code based on the 2018 Uniform Plumbing Code.
- 16.20.015 Adoption of Appendix Chapters.
- 16.20.020 Name Insertion.

16.20.010 Adoption of the 2022 California Plumbing Code based on the 2021 Uniform Plumbing Code.

A. Except as otherwise provided in this chapter, the provisions of the 2022 California Plumbing Code and each and all of the regulations, provisions, conditions and terms of the code is referred to as if fully set forth in this chapter, except such portions as are hereinafter deleted, modified or amended by this ordinance, and is by such adopted by reference.

B. One (1) copy of each volume of the code therefore is on file in the office of the Building Official pursuant to Health and Safety Code Section 18942 and are made available for public inspection.

16.20.015 Adoption of Appendix Chapters.

The following Appendix Chapters from the 2022 California Plumbing Code are hereby adopted:

- Appendix A: Recommended Rules for Sizing the Water Supply System;
- Appendix B: Explanatory Notes on Combination Waste and Vent Systems;
- Appendix C: Alternate Plumbing Systems;
- Appendix D: Sizing Storm Water Drainage Systems;
- Appendix H: Private Sewage Disposal Systems;
- Appendix I: Installation Standards for PEX Tubing Systems for Hot- and Cold-Water Distribution;
- Appendix J: Combination of Indoor and Outdoor Combustion and Ventilation Opening Design.

16.20.020 Name Insertion.

The names "Cupertino" and/or "California" shall be inserted in the appropriate places provided therefor in each and every section of such California Plumbing Code wherein either the name of the city or state is left blank.

CHAPTER 16.24: MECHANICAL CODE

Section

- 16.24.010 Adoption of the 2022 California Mechanical Code based on the 2021 Uniform Mechanical Code.
- 16.24.015 Adoption of Appendix Chapters.
- 16.24.020 Name Insertion.

16.24.010 Adoption of the 2022 California Mechanical Code based on the 2021 Uniform Mechanical Code.

A. Except as otherwise provided in this chapter, the provisions of the 2022 California Mechanical Code and each and all of the regulations, provisions, conditions and terms of the code is referred to as if fully set forth in this chapter, except such portions as are hereinafter deleted, modified or amended by this ordinance, and is by such adopted by reference.

B. One (1) copy of each volume of the code therefore is on file in the office of the Building Official pursuant to Health and Safety Code Section 18942 and are made available for public inspection.

16.24.015 Adoption of Appendix Chapters.

The following Appendix Chapters from the 2022 California Mechanical Code have been adopted.

Appendix F: Sizing of Venting Systems and Outdoor Combustion and Ventilation Opening Design.

16.24.020 Name Insertion.

The names “Cupertino” and/or “California” shall be inserted in the appropriate places provided therefor in each and every section of such California Mechanical Code wherein either the name of the city or state is left blank.

CHAPTER 16.28 EXPEDITED PERMIT PROCESS FOR SMALL ROOFTOP SOLAR SYSTEMS AND ELECTRIC VEHICLE CHARGING SYSTEMS

Section

- 16.28.010 Purpose and intent.
- 16.28.020 Definitions.
- 16.28.030 Applicability.
- 16.28.040 Requirements.
- 16.28.050 Application and documents.
- 16.28.060 Permit review and inspection requirements.

16.28.010 Purpose and Intent.

The purpose of this Chapter is:

- 1) To adopt an expedited, streamlined solar permitting process that complies with the Solar Rights Act and AB 2188 (Chapter 521, Statutes 2014) to achieve timely and cost-effective

installations of small residential rooftop solar energy systems. The Ordinance expands AB2188 to provide for timely and cost-effective installations of solar panels on small multi-family and commercial buildings. The Ordinance encourages the use of solar systems by removing unreasonable barriers, minimizing costs to property owners and the City, and expanding the ability of property owners to install solar energy systems. The Ordinance allows the City to achieve these goals while protecting the public health and safety. (Ord. 15-2133, part, 2015)

2) To promote and encourage the use of electric vehicles by creating an expedited, streamlined permitting process for electric vehicle charging stations while promoting public health and safety and preventing specific adverse impacts in the installation and use of such charging stations.

16.28.020 Definitions.

For the purposes of this Chapter, the following words and phrases shall have the meanings as defined in this section.

- A. A “Solar Energy System” means either of the following:
 - 1. Any solar collector or other solar energy device whose primary purpose is to provide for the collection, storage, and distribution of solar energy for space heating, space cooling, electric generation, or water heating.
 - 2. Any structural design feature of a building, whose primary purpose is to provide for the collection, storage, and distribution of solar energy for electricity generation, space heating or cooling, or for water heating.

- B. A “small residential rooftop solar energy system” means all of the following:
 - 1. A solar energy system that is a simple photovoltaic system no larger than 10 kilowatts or a solar thermal system no larger than 30 kilowatts thermal.
 - 2. A solar energy system that conforms to all applicable state fire, structural, electrical, and other building codes as adopted or amended by the City and all state and local health and safety standards.
 - 3. A solar energy system that is installed on a single or duplex family dwelling. 4. A solar panel or module array that does not exceed the maximum legal building height as defined by the city.

- C. A “small multi-family or commercial rooftop solar energy system” means all of the following:
 - 1. A solar energy system that is a simple photovoltaic system no larger than 10 kilowatts or 30 a solar thermal system no larger than kilowatts thermal.

2. A solar energy system that conforms to all applicable state fire, structural, electrical, and other building codes as adopted or amended by the City and all state and local health and safety standards.
 3. A solar energy system that is installed on a triplex, four-plex family dwelling or on a commercial building no more than 10,000 square feet in size.
 4. A solar panel or module array that does not exceed the maximum legal building height as defined by the City.
- D. A “small rooftop solar energy system” either a “small residential rooftop solar energy system” or a “small multi-family or commercial rooftop solar energy system”.
- E. “Electronic submittal” means the utilization of one or more of the following:
1. Email;
 2. The Internet;
 3. Facsimile.
- F. An “association” means a nonprofit corporation or unincorporated association created for the purpose of managing a common interest development.
- G. A “common interest development” means any of the following:
1. A community apartment project.
 2. A condominium project.
 3. A planned development.
 4. A stock cooperative.
- H. “Specific, adverse impact” means a significant, quantifiable, direct, and unavoidable impact, based on objective, identified, and written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete.
- I. “Reasonable restrictions” on a solar energy system are those restrictions that do not significantly increase the cost of the system or significantly decrease its efficiency or specified performance, or that allow for an alternative system of comparable cost, efficiency, and energy conservation benefits.
- J. “Restrictions that do not significantly increase the cost of the system or decrease its efficiency or specified performance” means:
1. For Water Heater Systems or Solar Swimming Pool Heating Systems: an amount exceeding 10 percent of the cost of the system, but in no case more than one thousand dollars (\$1,000), or decreasing the efficiency of the solar energy system by an amount exceeding 10 percent, as originally specified and proposed.

2. For Photovoltaic Systems: an amount not to exceed one thousand dollars (\$1,000) over the system cost as originally specified and proposed, or a decrease in system efficiency of an amount exceeding 10 percent as originally specified and proposed. (Ord. 15-2133, part, 2015)
- K. ELECTRIC VEHICLE CHARGING STATION OR EVCS. Any level of electric vehicle supply equipment station that is designed and built-in compliance with article 625 of the California Electrical Code and delivers electricity from a source outside an electric vehicle into a plug-in vehicle.
- L. "A feasible method to satisfactorily mitigate or avoid the specific, adverse impact" includes, but is not limited to, any cost-effective method, condition, or mitigation imposed by the City on another similarly situated application in a prior successful application for a permit. The City shall use its best efforts to ensure that the selected method, condition, or mitigation meets the conditions of subparagraphs (A) and (B) of paragraph (1) of subdivision (d) of Section 714 of the Civil Code defining restrictions that do not significantly increase the cost of the system or decrease its efficiency or specified performance.

16.28.030 Applicability.

- A. This Chapter applies to the permitting of all Small Rooftop Solar Energy Systems and Electric Vehicle Charging Systems in the City.
- B. Small Rooftop Solar Energy Systems and Electric Vehicle Charging Systems legally established or permitted prior to the effective date of this Ordinance are not subject to the requirements of this Ordinance unless physical modifications or alterations are undertaken that materially change the size, type, or components of a small rooftop energy system in such a way as to require new permitting. Routine operation and maintenance or like-kind replacements shall not require a permit.

16.28.040 Requirements.

- A. All solar energy systems and Electric Vehicle Charging Stations shall meet applicable health and safety standards and requirements imposed by the State, the City, and Santa Clara County Fire Department.
- B. Solar energy systems for heating water in single-family residences and for heating water in commercial or swimming pool applications shall be certified by an accredited listing agency as defined by the California Plumbing and Mechanical Code.
- C. Solar energy systems for producing electricity shall meet all applicable safety and performance standards established by the California Electrical Code, the Institute of

Electrical and Electronics Engineers, and accredited testing laboratories such as Underwriters Laboratories and, where applicable, rules of the Public Utilities Commission regarding safety and reliability. (Ord. 15-2133, part, 2015)

- D. Electric Vehicle Charging Stations shall meet all applicable safety and performance standards established by the California Electric Code, the Society of Automotive Engineers, the National Electrical Manufacturers Association, and the accredited testing laboratories such as Underwriters Laboratories and, where applicable, rules of the Public Utilities Commission regarding safety and reliability.

16.28.050 Application and Documents.

- A. All documents required for the submission of an expedited solar energy system application and for an EVCS permit application shall be made available on the City's website.
- B. Electronic submittal of the required permit application and documents shall be made available to all small rooftop solar energy system permit applicants.
- C. An applicant's electronic signature shall be accepted on all forms, applications, and other documents in lieu of a wet signature.
- D. The Building Official shall adopt a standard plan and checklist of all requirements with which small rooftop solar energy systems shall comply to be eligible for expedited review.
- E. The Building Official shall provide a permit checklist for EVCS permit applications.
- F. The small residential rooftop solar system permit process, standard plan(s), and checklist(s) shall substantially conform to recommendations for expedited permitting, including the checklist and standard plans contained in the most current version of the California Solar Permitting Guidebook adopted by the Governor's Office of Planning and Research.
- G. The small multi-family or commercial rooftop solar energy system permit process, standard plan(s), and checklist(s) shall be developed by the Building Official.
- H. All fees prescribed for the permitting of small rooftop solar energy system must comply with Government Code Section 65850.55, Government Code Section 66015, Government Code Section 66016, and State Health and Safety Code Section 17951. (Ord. 15-2133, part, 2015)

16.28.060 Permit Review and Inspection Requirements.

- A. The City shall adopt an administrative, nondiscretionary review process to expedite approval of small rooftop solar energy systems and EVCS application of one to 25 stations at a single site. Upon receipt of a complete application which meets the requirements of the approved checklist and standard plan, the City shall issue a building permit or other nondiscretionary permit five business days for electronic

applications. For complete EVCS applications including 26 or more EVCS stations at a single site, a permit shall be issued after ten business days for electronic applications.

- B. Review of the application shall be limited to the building official's review of whether the application meets local, state, and federal health and safety requirements.
- C. The Building Official may deny an application for a permit for a small rooftop solar energy system or EVCS if the Official makes written findings based upon substantive evidence in the record that:
 - 1. The proposed installation would have a specific, adverse impact upon public health or safety; and
 - 2. There is no feasible method to satisfactorily mitigate or avoid, as defined, the adverse impact. Such findings shall include the basis for the rejection of the potential feasible alternative for preventing the adverse impact.
- D. Any condition imposed on an application shall be designed to mitigate the specific, adverse impact upon health and safety at the lowest possible cost.
- E. The City shall require only one inspection for small residential rooftop solar energy systems eligible for expedited review. The City may require two inspections for small multi-family or commercial rooftop solar energy systems if deemed necessary. A separate fire inspection may be performed if the City does not have an agreement with County of Santa Clara Fire Department to perform safety inspections on behalf of the County of Santa Clara Fire Department.
- F. The inspection(s) shall be done in a timely manner and should include consolidated inspections. An inspection will be scheduled within two (2) business days of a request and provide a two-hour inspection window on the day of the inspection.
- G. If a small rooftop solar energy system fails inspection a subsequent inspection is authorized but need not conform to the requirements of this Ordinance. (Ord. 15-2133, part, 2015)

16.28.070 Appeals.

Any final decision of the Building Official made pursuant to this Chapter may be appealed by filing a request for appeal, in writing, with a description of the grounds for appeal. The request for appeal must be made within ten (10) business days of the serving or mailing of

the building official's determination. A hearing shall be scheduled within thirty (30) days before the Planning Commission. If the appeal is not filed within the time specified above, the applicant shall be deemed to waive the right to appeal.

Chapter 16.32 of the Cupertino Municipal Code is hereby repealed in its entirety and replaced with the following Chapter 16.32 to be entitled, numbered, and to read as follows:

Chapter 16.32: Local Sustainability Requirements for Newly Constructed Buildings

Section

- 16.32.010 Applicability
- 16.32.020 Definitions
- 16.32.030 All-Electric Provisions for Newly Constructed Buildings

16.32.010 Applicability

- A. The requirements of this Chapter shall apply to the building permits for all newly constructed buildings proposed to be located in whole or in part within the City. Nonresidential tenant improvements are not subject to the all-electric building requirement for new construction in Section 16.32.030
- B. The all-electric building provisions shall apply to permit applications on or after the effective date of this Chapter, and in perpetuity.
- C. The requirements of this Chapter shall not apply to the use of portable propane appliances for outdoor cooking or heating.
- D. This chapter shall in no way be construed as amending California Energy Code requirements under California Code of Regulations, Title 24, Part 6, nor as requiring the use or installation of any specific appliance or system as a condition of approval.
- E. The requirements of this Chapter shall be incorporated into conditions of approval for building permits under Municipal Code Chapter 16.

16.32.020 Definitions

- A. **ALL-ELECTRIC BUILDING:** is a building that has no natural gas or propane plumbing installed within the building, and that uses electricity as the sole source of energy for its space heating, water heating (including indoor and outdoor pools and spas), cooking appliances, outdoor kitchens, outdoor fireplaces, and clothes drying appliances. All-Electric Buildings may include solar thermal pool heating.

16.32.030 All-Electric Provisions for Newly Constructed Buildings

A. Newly constructed buildings shall be all-electric as defined in Section 16.32.020. For the purposes of All-Electric Building requirements, newly constructed buildings shall not include newly constructed additions and tenant improvements in existing buildings.

Exception 1: Nonresidential F, H, and L Occupancies, or other similar research & development uses as determined by the building official, are exempt from the all-electric building provisions of this section. If this Exception applies, the applicant shall comply with the pre-wiring provision of Note 1 below.

Exception 2: "Essential Facilities," as defined by the California Building Code are exempt from the all-electric building provisions of this section. If this Exception applies, the applicant shall comply with the pre-wiring provision of Note 1 below.

Exception 3: Non-residential buildings containing a for-profit restaurant open to the public or an employee kitchen may apply to the Building Official for a modification to install gas-fueled cooking appliances. This request must be based on a business-related reason to cook with a flame that cannot be reasonably achieved with an electric fuel source. The Building Official may grant this modification if he or she finds the following:

1. There is a business-related reason to cook with a flame and;
2. This need cannot be reasonably achieved with an electric fuel source; and
3. The applicant has employed reasonable methods to mitigate the greenhouse gas impacts of the gas-fueled appliance.

If the Building Official grants a modification, the applicant shall comply with the pre-wiring provision of Note 1 below.

Exception 4: If the applicant establishes that there is not an all-electric prescriptive compliance pathway for the building under the Energy Code, and that the building is not able to achieve the performance compliance standard applicable to the building under the Energy Code using commercially available technology and an approved calculation method, then the Building Official may grant a modification. If the Building Official grants a modification pursuant to this Exception, the applicant shall comply with the pre-wiring provision of Note 1 below.

Exception 5: Hotels and motels with eighty or more guestrooms may utilize fuel gas in on-site commercial clothes drying equipment. The applicant shall comply with the pre-wiring provision of Note 1 below.

Note 1: If natural gas appliances are used under Exception 1, 2, 3, 4, and/or 5, each natural gas appliance location in such building must be electrically pre-wired for future electric appliance installation. Each such natural gas appliance location shall include the following:

- i. A dedicated circuit, phased appropriately, for each appliance. Each such circuit shall have a minimum amperage requirement for a comparable electric appliance (based on the manufacturer’s recommendations), an electrical receptacle or junction box that is connected to the electric panel, conductors of adequate capacity within 3 feet of the appliance. Each such circuit shall be accessible with no obstructions;
- ii. Both ends of the unused conductor or conduit shall be labeled with the words “For Future Electric Appliance” and be electrically isolated;
- iii. A reserved circuit breaker space shall be installed in the electrical panel adjacent to the circuit breaker for the branch circuit and labeled for each circuit, an example is as follows: “For Future Electric Range”; and
- iv. All electrical components, including conductors, receptacles, junction boxes, or blank covers, related to this section shall be installed in accordance with the California Electrical Code.

Note 2: If a building is entitled to apply Exception 1, 2, 3, 4 and/or 5, the Building Official is authorized to approve alternative materials, design, and methods of construction or equipment per California Building Code Section 104.

[Title 16 – Chapter 16.36 – No Change]

CHAPTER 16.40: FIRE CODE

Section

- 16.40.010 Adoption of the 2022 California Fire Code and 2021 International Fire Code.
- 16.40.015 Adoption of Appendix Chapters.
- 16.40.020 Chapter 1 - Administration.
- 16.40.040 Chapter 2 - Definitions.

- 16.40.080 Chapter 5 - Fire Service Features.
- 16.40.100 Chapter 6 – Building Services and Systems.
- 16.40.110 Chapter 7 – Fire and Smoke Protection Features.
- 16.40.120 Chapter 8 – Interior Finish, Decorative Materials and Furnishings.
- 16.40.140 Chapter 9 – Fire Protection and Life Safety Systems.
- 16.40.160 Chapter 12 – Energy Systems.
- 16.40.180 Chapter 33 – Fire Safety During Construction and Demolition.
- 16.40.200 Chapter 49 – Requirements for Wildland- Urban Interface Fire Areas.
- 16.40.220 Chapter 50 – Hazardous Materials – General Provisions.
- 16.40.230 Chapter 54 – Corrosive Materials.
- 16.40.240 Chapter 56 – General – Explosives and Fireworks.
- 16.40.260 Chapter 57 – Flammable and Combustible Liquids.
- 16.40.280 Chapter 58 – Flammable Gases and Flammable Cryogenic Fluids.
- 16.40.300 Chapter 60 – Highly Toxic and Toxic Materials.
- 16.40.320 Chapter 61 – Liquefied Petroleum Gases.
- 16.40.340 Chapter 64 – Pyrophoric Materials.
- 16.40.360 Chapter 80 – Referenced Standards
- 16.40.380 Appendix B – Fire-Flow Requirements for Buildings
- 16.40.400 Appendix C – Fire Hydrant Locations and Distribution
- 16.40.360 Appendix D – Fire Apparatus Access Roads

16.40.010 Adoption of the 2022 California Fire Code and 2021 International Fire Code.

- A. Except as otherwise provided in this chapter, the provisions of the 2022 California Fire Code and also the 2021 International Fire Code, and specified Appendices and each and all of the regulations, provisions, conditions and terms of the code is referred to as if fully set forth in this chapter, except such portions as are hereinafter deleted, modified, added or amended by this ordinance, and is by such adopted by reference.
- B. One (1) copy of each volume of the code therefore is on file in the office of the Building Official and the Fire Code Official pursuant to Health and Safety Code Section 18942 and are made available for public inspection.

16.40.015 Adoption of Appendix Chapters.

The following Appendix Chapters from the 2022 California Fire Code are hereby adopted.

Appendix B: Fire-Flow Requirement for Buildings.

Appendix C: Fire Hydrant Locations and Distribution.

Appendix D: Fire Apparatus Access Roads

Appendix O: Temporary Haunted Houses, Ghost Walks and Similar Amusement Uses.

16.40.020 Chapter 1 - Administration.

Add Section 101.3.1 of the 2022 California Fire Code to read as follows:

101.3.1 Administration. The City Manager, through the powers vested by the City Council, shall have the authority to delegate any and all responsibility for the maintenance and enforcement of the provisions of this Code to whichever legal entity he feels best serves the interests of the City.

Wherever the words "Chief," "Fire Marshal," "fire code official," "Fire Department," "Fire Prevention Bureau," "Fire Chief," and other such similar words are used, they shall mean and refer to such legal entity designated by the City Manager of Cupertino under the authority of the City Council of Cupertino.

Wherever the words "municipality," "jurisdiction," or "city" are used, they shall mean the City of Cupertino.

Wherever the words "Executive Body" are used, they shall mean the City Council of Cupertino.

Wherever the words "Administrator" or "Executive" are used, they shall mean the City Manager of Cupertino.

Wherever the words "District Attorney" or "Corporation Counsel" are used, they shall mean the City Attorney of Cupertino.

Wherever the words "Board of Appeal" are used, they shall mean the City Council of Cupertino or the body appointed by the Council to pass on matters pertaining to fire safety.

Add Section 106.2.1 of the 2022 California Fire Code to read as follows:

106.2.1 Construction permit fees. Construction permit fees and plan review fees for fire hydrant systems, fire extinguishing systems and fire alarm systems shall be paid to the Santa Clara County Fire Department in accordance with the following table based on valuation. The valuation shall be limited to the value of the system for which the permit is being issued. Plan review fees are 65% of the Permit Fee amount. For the purposes of determining the total fee amount for each permit, the plan review fee

shall be added to the Permit Fee.

TOTAL VALUATIONS	PERMIT FEE
\$1.00 TO \$500.00	\$23.50
\$501.00 TO \$2,000.00	\$23.50 for the first \$500.00 plus \$3.05 for each additional \$100.00, or fraction thereof, to and including \$2,000.00
\$2001.00 TO \$25,000.00	\$69.25 for the first \$2,000.00 plus \$14.00 for each additional \$1,000.00 or fraction thereof, to and including \$25,000.00
\$25,001.00 TO \$50,000.00	\$391.25 for the first \$25,000.00 plus \$10.10 for each additional \$1,000.00, or fraction thereof, to and including \$50,000.00
\$50,001.00 TO \$100,000.00	\$643.75 for the first \$50,000.00 plus \$7.00 for each additional \$1,000.00, or fraction thereof, to and including \$100,000.00
\$100,001.00 to \$500,000.00	\$993.75 for the first \$100,000.00 plus \$5.60 for each additional \$1,000.00, or fraction thereof, to and including \$500,000.00
\$500,001 to \$1,000,000.00	\$3,233.75 for the first \$500,000.00 plus \$4.75 for each additional \$1,000.00, or fraction thereof, to and including \$1,000,000.00
\$1,000,001 and up	\$5,608.75 for the first \$1,000,000.00 plus \$3.15 for each additional \$1,000.00, or fraction thereof
Additional re-inspections, in connection with the permits above, are to be paid at \$120.00 for each occurrence at the discretion of the fire code official.	
Cancelled inspections without advance notice are to be paid at \$120.00 for each occurrence.	

Add Section 106.2.2 the 2022 California Fire Code to read as follows:

106.2.2 Operational permit fees. Operational permit fees shall be paid to the Santa Clara County Fire Department as follows:

FACILITY TYPE		PERMIT FEE
1.	Institutional	
	A. More than 6 persons	\$75.00 - Annually
	B. Over 50 persons	\$100.00 - Annually
2.	Day Care Facilities	
	More than 6 clients	\$35.00 - Annually

3.	Places of Assembly	
	A. 50-300 persons	\$50.00 - Annually
	B. Over 300 persons	\$85.00 - Annually
4.	Temporary Membrane Structures, Tents and Canopies (Only those requiring permits in accordance with Section 105.6. 47).	\$85.00 – Each occurrence

Add Section 107.5 to the 2022 California Fire Code to read as follows:

107.5 Final Inspection. No final inspection as to all or any portion of a development shall be deemed completed until the installation of the required fire protection facilities and access ways have been completed and approved. No final certificate of occupancy may be granted until the Fire Department issues notice of final clearance of such fire protection facilities and access ways to the Building Department.

16.40.040 Chapter 2 - Definitions.

Add the following definitions:

CORROSIVE LIQUID. Corrosive liquid is:

1. any liquid which, when in contact with living tissue, will cause destruction or irreversible alteration of such tissue by chemical action;
2. any liquid having a pH of 2 or less or 12.5 or more;
3. any liquid classified as corrosive by the U.S. Department of Transportation; and
4. any material exhibiting the characteristics of corrosivity in accordance with Title 22, California Code of Regulations §66261.22.

HEALTH HAZARD - OTHER. is a hazardous material which affects target organs of the body, including but not limited to, those materials which produce liver damage, kidney damage, damage to the nervous system, act on the blood to decrease hemoglobin function, deprive the body tissue of oxygen or affect reproductive capabilities, including mutations (chromosomal damage) sensitizers or teratogens (effect on fetuses).

LARGE-SCALE FIRE TESTING. Testing a representative energy storage system that induces a significant fire into the device under test and evaluates whether the fire will spread to adjacent energy storage system units, surrounding equipment, or through an adjacent fire-resistance-rated barrier.

MODERATELY TOXIC GAS. A chemical or substance that has a median lethal concentration (LC50) in air more than 2000 parts per million but not more than 5000 parts per million by volume of gas or vapor, when administered by continuous inhalation for an hour, or less if death occurs within one hour, to albino rats weighing between 200 and 300 grams each.

SECONDARY CONTAINMENT. Secondary containment is that level of containment that is external to and separate from primary containment and is capable of safely and securely containing the material, without discharge, for a period of time reasonably to ensure detection and remedy of the primary containment failure.

SPILL CONTROL. That level of containment that is external to and separate from the primary containment and is capable of safely and securely containing the contents of the largest container and prevents the materials from spreading to other parts of the room.

Amend the following definitions:

SECONDARY CONTAINMENT. Secondary containment is that level of containment that is external to and separate from primary containment and is capable of safely and securely containing the material, without discharge, for a period of time reasonably to ensure detection and remedy of the primary containment failure.

WORKSTATION. A defined space or an independent principal piece of equipment using hazardous materials with a hazard rating of 3 or 4 in accordance with NFPA 704 where a specific function, laboratory procedure or research activity occurs. Approved or listed hazardous materials storage cabinets, flammable liquid storage cabinets or gas cabinets serving a workstation are included as part of the workstation. A workstation is allowed to contain ventilation equipment, fire protection devices, detection devices, electrical devices, and other processing and scientific equipment.

16.40.080 Chapter 5 - Fire Service Features.

Amend Section 503.1 of the 2022 California Fire Code to read as follows:

503.1 Where required. Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3 and in accordance with the Fire Department access Standards.

Amend Section 503.1.1 as follows:

503.1.1 Buildings and facilities. Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements for this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

Exceptions:

1. In other than R-3 or U occupancies, when the building is equipped throughout with an approved automatic sprinkler system, installed in accordance with Sections 903.3.1.1 or 903.3.1.2, the dimension may be increased to a maximum of 300 feet when approved by the fire code official.
2. When there are not more than two Group R-3 or accessory Group U occupancies, the dimension may be increased to a maximum of 200 feet.
3. When apparatus roads cannot be installed because of topography, waterways, nonnegotiable grades or other similar conditions, an approved alternative means of fire protection shall be provided.

Amend Section 503.2.1 of the 2022 California Fire Code to read as follows:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm) for engines and 26 feet (7925mm) for aerial fire apparatus, exclusive of shoulders, except for approved gates or barricades in accordance with Sections 503.5.1 and 503.6. The unobstructed vertical clearance shall be a minimum of 13 feet 6 inches (4115 mm) or as determined by the fire code official.

Exception:

When there are not more than two residential parcels, having only Group R, Division 3, or Group U occupancy structures, the access road width may be modified by the fire code official.

Amend Section 503.2.4 of the 2022 California Fire Code as follows:

503.2.4 Turning radius. The required turning radius of a fire apparatus access road shall be a minimum of 30 feet inside, and a minimum of 50 feet outside.

Amend Section 503.2.7 of the 2022 California Fire Code as follows:

503.2.7 Grade. The maximum grade of a fire department apparatus access road shall not exceed 15-percent, unless approved by the fire code official.

Amend Section 503.5 of the 2022 California Fire Code as follows:

503.5 Required gates or barricades. The fire code official is authorized to require the installation and maintenance of gates or other approved barricades across fire apparatus access roads, trails, or other accessways, not including the public streets, alleys, or highways. The minimum width for commercial applications is 20 feet (6096 mm), and 12 feet (4268 mm) for single-family dwellings. Electric gate operators, where provided shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed, and installed to comply with the requirements of ASTM F2200.

Amend Section 503.6 of the 2022 California Fire Code as follows:

503.6 Security gates. The installation of security gates across a fire apparatus access road shall be approved by the fire code official. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. Electric gate operators, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200. The minimum width for commercial applications is 20 feet (6096 mm), and 12 feet (4268 mm) for single-family dwellings.

Add Section 504.5 to the 2022 California Fire Code to read as follows:

504.5 Access Control Devices. When access control devices including bars, grates, gates, electric or magnetic locks or similar devices, which would inhibit rapid fire department emergency access to or within the building are installed, such devices shall be approved by the fire code official. All electrically powered access control devices shall be provided with an approved means for deactivation or unlocking from a single location or otherwise approved by the fire code official. Access control devices shall also comply with Chapter 10.

Amend Section 505.1 as follows:

505.1 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 not less than 6 inches (153 mm) high with a minimum stroke width of 1/2 inch (12.7 mm). Where 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 cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address identification shall be maintained.

The following is a guideline for adequate address number dimensions:

- The number posted up to 49 feet from the public street shall be of one solid color which is contrasting to the background and be at least six (6) inches high with a half (1/2) inch stroke.
- The number posted from 50 to 100 feet from the public street shall be of one solid color which is contrasting to the background and be at least six (6) inches high with a one (1) inch stroke.
- The number posted over 100 to 199 feet from the public street shall be of one solid color which is contrasting to the background and be at least ten (10) inches high with a one and a half (1 1/2) inch stroke.
- The number posted over 200 to 299 feet from the public street shall be of one solid color which is contrasting to the background and be at least ten (18) inches high with a one and a half (2) inch stroke.
- The number posted over 300 to 400 feet from the public street shall be of one solid color which is contrasting to the background and be at least ten (24) inches high with a one and a half (2 1/2) inch stroke.

Amend Section 510.1 of the 2022 California Fire Code to read as follows:

510.1 Emergency responder radio coverage in new buildings. Approved radio coverage for emergency responders shall be provided within all buildings meeting any one of the following conditions:

1. There are more than 3 stories above grade plane (as defined by the Building Code Section 202);
2. The total building area is 30,000 square feet or more;
3. The total basement area is 5,000 square feet or more;

4. Where required by the fire code official and radio coverage signal strength levels are not consistent with the minimum levels set forth in Section 510.4.1

Exceptions:

1. Where approved by the fire code official, a wired communication system in accordance with Section 907.2.13.2 shall be permitted to be installed or maintained in lieu of an approved radio coverage system.
2. Where it is determined by the fire code official that the radio coverage system is not needed.
3. In facilities where emergency responder radio coverage is required and such systems, components or equipment required could have a negative impact on the normal operations of that facility, the fire code official shall have the authority to accept an automatically activated emergency responder radio coverage system.
4. Buildings and areas of buildings that have minimum radio coverage signal strength levels of the Silicon Valley Regional Interoperability Authority (SVRIA) P25 Phase 2 700 MHz Digital Trunked Radio System within the building in accordance with Section 510.4.1 without the use of an indoor radio coverage system.

The radio coverage system shall be installed and maintained in accordance with Sections 510.4 through 510.6.4 of this code and with the applicable provisions of NFPA 1221, Standard for the Installation, Maintenance and Use of Emergency Services Communications Systems.

The coverage shall be based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building. This section shall not require improvement of the existing public safety communication systems.

Add Section 510.1.1 of the 2022 California Fire Code to read as follows:

510.1.1 Obstruction by new buildings. No obstruction of the public safety system backhaul shall be allowed without an approved mitigating plan.

Amend Section 510.3 of the 2022 California Fire Code to read as follows:

510.3 Permit required. A construction permit, for the installation of, or modification of, emergency responder radio coverage systems and related equipment is required as specified in Section 105.7.6. Maintenance performed in accordance with this code is not considered a modification and does not require a permit. A frequency change made to

an existing system is considered to be new construction and will require a construction permit

Amend Section 510.4 of the 2022 California Fire Code to read as follows:

510.4 Technical requirements. Systems, components and equipment required to provide the emergency responder radio coverage system shall comply with the current Emergency Responders Radio Coverage Systems Standard Details & Specification enforced by the Santa Clara County Fire Department.

Amend Section 510.4.1.1 of the 2022 California Fire Code to read as follows:

510.4.1.1 Minimum signal strength into the building. The minimum inbound signal strength shall be sufficient to provide usable voice communications throughout the coverage area as specified by the fire code official. The inbound signal level shall be sufficient to provide not less than a Delivered Audio Quality (DAQ) of 3.0 for analog communications and DAQ of 3.4 for digital communications systems or an equivalent Signal-to-Interference-Plus-Noise Ratio (SINR) applicable to the technology.

Amend Section 510.4.1.2 of the 2022 California Fire Code to read as follows:

510.4.1.2 Minimum signal strength out of the building. The minimum outbound signal strength shall be sufficient to provide usable voice communications throughout the coverage area as specified by the fire code official. The outbound signal level shall be sufficient to provide not less than a DAQ of 3.0 for analog communications and DAQ of 3.4 for digital communications systems or an equivalent SINR applicable to the technology.

Amend Section 510.5 of the 2022 California Fire Code to read as follows:

510.5 Installation requirement. The installation of the emergency responder radio coverage system shall be in accordance with NFPA 1221 and the current Emergency Responder Radio Coverage Systems Standard Details & Specification enforced by the Santa Clara County Fire Department.

Amend Section 510.5.2 of the 2022 California Fire Code to read as follows:

510.5.2 Approval prior to installation. Amplification systems capable of operating on frequencies licensed to any public safety agency by the FCC or other

radio licensing authority shall not be installed without prior coordination and approval of the fire code official and the agency FCC license holder or systems administrator.

Amend the First Paragraph of Section 510.5.4 of the 2022 California Fire Code to read as follows:

510.5.4 Acceptance test procedure. Where an emergency responder radio coverage system is required, and upon completion of installation, the building owner shall have the radio system tested to verify that two-way coverage on each floor of the building is not less than 95 percent. Final system acceptance will require ERRCS power level and DAQ testing with agency FCC license holder, systems administrators, or designee.

16.40.100 Chapter 6 – Building Services and Systems.

SECTION 603 ELECTRICAL EQUIPMENT, WIRING, AND HAZARDS.

Amend Section 603.11 to the 2022 California Fire Code to read as follows:

603.11 Immersion Heaters. All electrical immersion heaters used in dip tanks, sinks, vats and similar operations shall be provided with approved over-temperature controls and low liquid level electrical disconnects. Manual reset of required protection devices shall be provided.

SECTION 605 FUEL-FIRED APPLIANCES.

Amend Section 605.5 as follows:

605.5 Portable unvented heaters. Portable unvented fuel-fired heating equipment shall be prohibited in occupancies in Groups A, B, E, I, R-1, R-2, R2.1, R2.2, R-3, R3.1 and R-4 and ambulatory care facilities.

Exceptions:

1. Portable unvented fuel-fired heaters listed in accordance with UL 647 are permitted to be used in one and two-family dwellings, where operated and maintained in accordance with the manufacturer's instructions.

2. Portable outdoor gas-fired heating appliances in accordance with Section 605.5.2.

Amend Section 605.5.2.1.1 to the 2022 California Fire Code to read as follows:

605.5.2.1.1 Prohibited locations. The storage or use of portable outdoor gas-fired heating appliances is prohibited in any of the following locations:

1. Inside of any occupancy where connected to the fuel gas container.
2. Inside of tents, canopies and membrane structures.
3. On exterior balconies, and rooftops.

16.40.110 Chapter 7 – Fire and Smoke Protection Features.

Add Section 703.3 to read:

703.3 Fire-resistant penetrations and joints. In high-rise buildings, in buildings assigned to Risk Category III or IV, or in fire areas containing Group R occupancies with an occupant load greater than 100, and other occupancies as determined necessary special inspections for through-penetrations, membrane penetration firestops, fire resistant joint systems and perimeter fire containment systems that are tested and listed in accordance with CBC Sections 714.4.1.2, 714.5.1.2, 715.3.1 and 715.4 shall be in accordance with Section 1705.18.1 or 1705.18.2.

16.40.120 Chapter 8 - Decorative Vegetation in New and Existing Buildings.

Amend Section 806.1.1 of the 2022 California Fire Code to read as follows:

806.1.1 Restricted occupancies. The display of natural cut trees and other decorative vegetation shall be in accordance with the California Code of Regulations, Title 19, Division 1, §3.08 and Sections 806.1 through 806.4.

16.40.140 Chapter 9 – Fire Protection and Life Safety Systems.

Amend Section 901.6.2 of the 2022 California Fire Code to read as follows:

901.6.2 Integrated testing. Where two or more fire protection or life safety systems are interconnected, the intended response of subordinate fire protection and life safety systems shall be verified when required testing of the initiating system is conducted. In addition, integrated testing shall be performed in accordance with Sections 901.6.2.1 and 901.6.2.2.

901.6.2.1 High-rise buildings. For high-rise buildings, integrated testing shall comply with NFPA 4, with an integrated test performed prior to issuance of the certificate of occupancy and at intervals not exceeding 10 years, unless otherwise specified by an integrated system test plan prepared in accordance with NFPA 4. If an equipment failure is detected during integrated testing, a repeat of the integrated test shall not be required, except as necessary to verify operation of fire protection or life safety functions that are initiated by equipment that was repaired or replaced. For existing buildings, the testing timeframe shall be specified by the integrated systems test plan prepared in accordance with NFPA 4 as approved by the fire code official.

901.6.2.2 Smoke control systems. Where a fire alarm system is integrated with a smoke control system as outlined in Section 909, integrated testing shall comply with NFPA 4, with an integrated test performed prior to issuance of the certificate of occupancy and at intervals not exceeding 10 years, unless otherwise specified by an integrated system test plan prepared in accordance with NFPA 4. If an equipment failure is detected during integrated testing, a repeat of the integrated test shall not be required, except as necessary to verify operation of fire protection or life safety functions that are initiated by equipment that was repaired or replaced. For existing buildings, the testing timeframe shall be specified by the integrated systems test plan prepared in accordance with NFPA 4 as approved by the fire code official.

Amend Section 901.6.3 of the 2022 California Fire Code to read as follows:

901.6.3 Records. Records of all system inspections, tests and maintenance required by the referenced standard shall be maintained on the premises for a minimum of five years. See 907.7 & 907.8 for fire alarm system inspection, testing and maintenance documentation requirements.

Amend Section 903.2 of the 2022 California Fire Code to read as follows:

903.2 Where required. Approved automatic sprinkler systems in new and existing buildings and structures shall be provided in the locations described in this Section or in

Sections 903.2.1 through 903.2.18 whichever is the more restrictive and Sections 903.2.14 through 903.2.21.

For the purposes of this section, firewalls and fire barriers used to separate building areas shall be constructed in accordance with the California Building Code and shall be without openings or penetrations.

1. An approved automatic sprinkler system shall be provided throughout all new buildings and structures, other than Group R occupancies, except as follows:

Exceptions:

- a. Buildings and structures not located in any Wildland-Urban Interface and not exceeding 1,200 square feet of fire area.
 - b. Buildings and structures located in any Wildland-Urban Interface Fire Area and not exceeding 500 square feet of fire area.
 - c. Group S-2 or U occupancies, including photovoltaic support structures, used exclusively for vehicle parking which meet all of the following conditions:
 - i. Noncombustible construction.
 - ii. Maximum 5,000 square feet in building area.
 - iii. Structure is open on not less than three (3) sides or not less than 75% of structure perimeter.
 - iv. Minimum of 10 feet separation from existing buildings, or similar structures, unless area is separated by fire walls complying with CBC 706.
 - d. Canopies, constructed in accordance with CBC 406.7.2, used exclusively for weather protection of vehicle fueling pads per CBC 406.7.1 and not exceeding 5,000 square feet of fire area.
 - e. Temporary Construction Trailers less than 2,500 square feet permitted for a period of not more than year.
2. An automatic sprinkler system shall be installed throughout all new buildings with a Group R fire area. Exception: Detached Accessory Dwelling Unit, provided that all of the following are met:
 - f. The unit meets the definition of an Accessory Dwelling Unit as defined in the Government Code Section 65852.2.
 - g. The existing primary residence does not have automatic fire sprinklers.
 - h. The accessory detached dwelling unit does not exceed 1,200 square feet in size.
 - i. The unit is on the same lot as the primary residence.

- j. The unit meets all apparatus access and water supply requirements of Chapter 5 and Appendix B of the 2022 California Fire Code.
6. An approved automatic fire sprinkler system shall be installed in new manufactured homes (as defined in California Health and Safety Code Sections 18007 and 18009) and multifamily manufactured homes with two dwelling units (as defined in California Health and Safety Code Section 18008.7) in accordance with Title 25 of the California Code of Regulations.
 7. An automatic sprinkler system shall be installed throughout existing buildings with a Group R fire area when additions are made causing the fire area to exceed 3,600 square feet.

Exception: Additions where all of the following are met:

- c. Building addition does not exceed 500 square feet.
 - d. The resultant structure meets all water supply requirements of Chapter 5 and Appendix B of the 2022 California Fire Code.
8. An automatic sprinkler system shall be provided throughout existing Group A, B, E, F, L, M, S and U buildings and structures, when additions are made that increase the fire area to more than 3,600 square feet or that create conditions described in Sections 903.2.1 through 903.2.18.
 7. Any change in the character of occupancy or in use of any building with a building area equal to or greater than 3,600 square feet which, in the opinion of the fire code official or Building Official, would place the building into a more hazardous division of the same occupancy group or into a different group of occupancies and constitutes a greater degree of life safety¹ or increased fire risk², shall require the installation of an approved automatic fire sprinkler system.

¹ Life Safety – Shall include, but not limited to: Increased occupant load, public assembly areas, public meeting areas, churches, indoor amusement attractions, buildings with complex exiting systems due to increased occupant loads, large schools/day-care facilities, large residential care facilities with non-ambulatory;

² Fire Risks – Shall include, but not limited to: High-piled combustible storage, woodworking operations, hazardous operations using hazardous materials, increased fuel loads (storage of moderate to highly combustible materials), increased sources of ignition (welding, automotive repair with the use of flammable liquids and open flames).

903.2.11.7 Chemical Fume Hood Fire Protection.

Add Section 903.2.11.7 to read:

903.2.11.7 Chemical Fume Hood Fire Protection. Approved automatic fire extinguishing systems shall be provided in chemical fume hoods in the following cases:

1. Existing hoods having interiors with a flame spread index greater than 25 in which flammable liquids are handled
2. If a hazard assessment determines that an automatic extinguishing system is required for the chemical fume hood, then the applicable automatic fire protection system standard shall be followed.

Amend Section 907.8 to read:

907.8 Inspection, testing and maintenance. The maintenance and testing schedules and procedures for fire alarm and fire detection systems shall be in accordance with Sections 907.8.1 through 907.8.4 and NFPA 72. Records of inspection, testing and maintenance shall be documented using NFPA 72 record of inspection and testing forms.

Amend Section 909.22.1 of the 2022 California Fire Code to read as follows:

909.22.1 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 operational testing must occur at least annually.

16.40.160 Chapter 12 – Energy Systems.

SECTION 1202 DEFINITIONS

Amend Section 1202.1 to read:

1202.1 Definitions. The following terms are defined in Chapter 2:

BATTERY SYSTEM, STATIONARY STORAGE.

BATTERY TYPES.

CAPACITOR ENERGY STORAGE SYSTEM.

CRITICAL CIRCUIT.

EMERGENCY POWER SYSTEM.

ENERGY STORAGE MANAGEMENT SYSTEMS.

ENERGY STORAGE SYSTEM (ESS).
ENERGY STORAGE SYSTEM, ELECTROCHEMICAL.
ENERGY STORAGE SYSTEM, MOBILE.
ENERGY STORAGE SYSTEM, WALK-IN UNIT.
ENERGY STORAGE SYSTEM CABINET.
ENERGY STORAGE SYSTEM COMMISSIONING.
ENERGY STORAGE SYSTEM DECOMMISSIONING.
FUEL CELL POWER SYSTEM, STATIONARY.
LARGE-SCALE FIRE TESTING.
PORTABLE GENERATOR.
STANDBY POWER SYSTEM.

Amend Section 1207.1.5 to read:

1207.1.5 Large-scale fire test. Where required elsewhere in Section 1207, large-scale fire testing shall be conducted in accordance with NFPA 855, and UL 9540A. The testing shall be conducted or witnessed and reported by an approved testing laboratory and show that a fire involving one ESS will not propagate to an adjacent ESS, and where installed within buildings, enclosed areas and walk-in units will be contained within the room, enclosed area or walk-in unit for a duration equal to the fire-resistance rating of the room separation specified in Section 1207.7.4. The test report shall be provided to the fire code official for review and approval in accordance with Section 104.8.2.

Amend Section 1207.2.2.1 to read:

1207.2.2.1 Ongoing inspection and testing. Systems that monitor and protect the ESS installation shall be inspected and tested in accordance with the manufacturer's instructions and the operation and maintenance manual. Inspection and testing records shall be maintained in the operation and maintenance manual and made available to the fire code official upon request.

Amend Section 1207.5.2 to read:

1207.5.2 Maximum allowable quantities. Fire areas within rooms, areas and walk-in units containing electrochemical ESS shall not exceed the maximum allowable quantities in Table 1207.5. The allowable number of fire areas, maximum allowable quantity, and fire-resistance rating of fire-barriers shall comply with Table 1207.5.1.

Exceptions:

Where approved by the fire code official, rooms, areas and walk-in units containing electrochemical ESS that exceed the amounts in Table 1207.5 shall be permitted based on a hazardous mitigation analysis in accordance with Section 1207.1.4 and large-scale fire testing complying with Section 1207.1.5.

1. Lead-acid and nickel-cadmium battery systems installed in facilities under the exclusive control of communications utilities and operating at less than 50 VAC and 60 VDC in accordance with NFPA 76.
2. Dedicated-use buildings in compliance with Section 1207.7.1.

TABLE 1207.5.1				
DESIGN AND NUMBER OF ESS FIRE AREAS				
STORY		PERCENTAGE OF MAXIMUM ALLOWABLE QUANTITY PER FIRE AREA	NUMBER OF FIRE AREAS PER STORY	FIRE- RESISTANCE RATING FOR FIRE BARRIERS IN HOURS
<i>Above grade plan</i>	<i>Higher than 9</i>	25	1	3
	7-9	50	2	2
	6	50	2	2
	5	50	2	2
	4	75	4	2
	3	100	6	2
	2	100	6	2
	1	100	6	2
<i>Below grade plan</i>	1	100	4	3
	2	50	2	3
	<i>Lower than 2</i>	<i>Not Allowed</i>	<i>Not Allowed</i>	<i>Not Allowed</i>

Amend Section 1207.5.5 to read:

1207.5.5 Fire suppression systems. Rooms and areas within buildings and walk-in units containing electrochemical ESS shall be protected by an automatic fire suppression system designed and installed in accordance with one of the following:

1. An automatic sprinkler system designed and installed in accordance with Section 903.3.1.1 with a minimum density of 0.3 gpm/ft² (1.14 L/min) based on the fire area or 2,500 square-foot (232 m²) design area, whichever is larger.
2. Where approved, an automatic sprinkler system designed and installed in accordance with Section 903.3.1.1 with a sprinkler hazard classification based on large-scale fire testing complying with Section 1207.1.5.
3. The following alternative automatic fire-extinguishing systems designed and installed in accordance with Section 904, provided that the installation is approved by the fire code official based on large-scale fire testing complying with Section 1207.1.5:

3.1. NFPA 12, Standard on Carbon Dioxide Extinguishing Systems.

3.2. NFPA 15, Standard for Water Spray Fixed Systems for Fire Protection.

3.3. NFPA 750, Standard on Water Mist Fire Protection Systems.

3.4. NFPA 2001, Standard on Clean Agent Fire-Extinguishing Systems.

3.5. NFPA 2010, Standard for Fixed Aerosol Fire-Extinguishing Systems.

Exception: Fire suppression systems for lead-acid and nickel-cadmium battery systems at facilities under the exclusive control of communications utilities that operate at less than 50 VAC and 60 VDC shall be provided where required by NFPA 76.

Amend Section 1207.11.3 to read:

1207.11.3 Location. ESS shall be installed only in the following locations:

1. Detached garages and detached accessory structures.
2. Attached garages separated from the dwelling unit living space and sleeping units in accordance with Section R302.6.
3. Outdoors or on the exterior side of the exterior walls not less than 3 feet (914 mm) from doors and windows directly entering the dwelling unit and not below or above any emergency escape and rescue openings.

4. Enclosed utility closets, basements, storage or utility spaces within dwelling units with finished or noncombustible walls and ceilings. Walls and ceilings of unfinished wood-framed construction shall be provided with not less than 5/8-inch (15.9 mm) Type X gypsum wallboard.
5. ESS shall not be installed in sleeping rooms, closets, spaces opening directly into sleeping rooms or in habitable spaces of dwelling units.

Amend Section 1207.11.6 to read:

1207.11.6 Fire detection. ESS installed in Group R-3 and R-4 occupancies shall comply with the following:

1. Rooms and areas within dwellings units, sleeping units, basements and attached garages in which ESS are installed shall be protected by smoke alarms in accordance with Section 907.2.11.
2. A listed heat alarm interconnected to the smoke alarms shall be installed in locations within dwelling units, sleeping units and attached garages where smoke alarms cannot be installed based on their listing.

Exceptions:

1. A listed heat detector may be used in place of a heat alarm, so long as it is interconnected with devices that provide an audible alarm at all sleeping areas.
2. A fire sprinkler associated with an approved automatic sprinkler system that triggers an audible alarm upon activation of the waterflow switch, may be used in place of a heat alarm.

16.40.180 Chapter 33 – Fire Safety During Construction and Demolition.

Amend Section 3305.5 as follows:

3305.5 Fire watch. Where required by the fire code official or the site safety plan established in accordance with Section 3303.1, a fire watch shall be provided for building demolition and for building construction. Fire watch is not intended to facilitate occupancy during ongoing construction in a new building.

Add Section 3305.10 to read:

3305.10 Fire Walls. When firewalls are required in combustible construction, the wall construction shall be completed (with all openings protected) immediately after the building is sufficiently weather-protected at the location of the wall(s).

Add Section 3311.1.1 of the 2022 California Fire Code to read as follows:

3311.1.1 Fire Department Access Roadways: All construction sites shall be accessible by fire department apparatus by means of roadways having an all-weather driving service of not less than 20ft. of unobstructed width. The roads shall have the ability to withstand the live loads of fire apparatus, and have a minimum 13ft. 6 in. of vertical clearance. Dead end fire access roads in excess of 150 ft. in length shall be provided with approved turnarounds.

When approved by the Fire Code Official, temporary access roadways may be utilized until such time that the permanent roadways are installed. As a minimum, the roadway shall consist of a compacted sub base and six (6) inches of road base material (Class 2 aggregate base rock) both compacted to a minimum 95% and sealed. The perimeter edges of the roadway shall be contained and delineated by curb and gutter or other approved method. The use of geotextile reinforcing fabric underlayment or soils lime-treatment may be required if so determined by the project civil engineer. Provisions for surface drainage shall also be provided where necessary. The integrity of the roadway shall be maintained at all times.

Amend Section 3312.1 as follows:

3312.1 Stairways Required. Each level above the first story in multi-story buildings that require two exit stairways shall be provided with at least two usable exit stairways after the floor decking is installed. The stairways shall be continuous and discharge to grade level. Stairways serving more than two floor levels shall be enclosed (with openings adequately protected) after exterior walls/windows are in place. Exit stairs in new and in existing, occupied buildings shall be lighted and maintained clear of debris and construction materials at all times.

Exception: For multi-story buildings, one of the required exit stairs may be obstructed on not more than two contiguous floor levels for the purposes of stairway construction (i.e., installation of gypsum board, painting, flooring, etc.).

Add Section 3312.4 to read:

Section 3312.4 Required Means of Egress. All buildings under construction shall have at least one unobstructed means of egress. All means of egress shall be identified in the written fire safety plan as required by Section 3303.1.

Amend Section 3315.1 to read:

3315.1 Completion before occupancy. In buildings where an automatic sprinkler system is required by this code or the California Building Code, it shall be unlawful to occupy any portion of a building or structure until the automatic sprinkler system installation has been tested and approved.

In new buildings of combustible construction where, automatic fire sprinkler systems are required to be installed, the system shall be placed in service as soon as possible. Immediately upon the completion of sprinkler pipe installation on each floor level, the piping shall be hydrostatically tested and inspected. After inspection approval from the Fire department, each floor level of sprinkler piping shall be connected to the system supply riser and placed into service with all sprinkler heads uncovered. Protective caps may be installed on the active sprinklers during the installation of drywall, texturing and painting, but shall be removed immediately after this work is completed. For system activation notification, an exterior audible waterflow alarm shall ~~be~~ ~~can~~ be installed and connected to the sprinkler waterflow device prior to installation of the monitoring system.

For buildings equipped with fire sprinkler systems that are undergoing alterations, the sprinkler system(s) shall remain in service at all times except when system modifications are necessary. Fire sprinkler systems undergoing modifications shall be returned to service at the end of each workday unless otherwise approved by the fire department. The General contractor or his/her designee shall check the sprinkler control valve(s) at the end of each workday to confirm that the system has been restored to service.

16.40.200 Chapter 49 - Requirements for Wildland-Urban Interface Fire Areas.

Add Section 4901.3 to read:

4901.3 Where applicable. These requirements shall apply to all areas within the City of Cupertino as set forth and delineated on the map entitled "Wildland-Urban Interface Fire Area" which map and all notations, references, data and other information shown thereon are hereby adopted and made a part of this Chapter. The

map properly attested, shall be on file in the Office of the City Clerk of the City of Cupertino.

Add Section 4901.4 to read:

4901.4 Exemptions. These requirements shall not apply to any land or water area acquired or managed for one or more of the following purposes or uses:

1. Habitat for endangered or threatened species, or any species that is a candidate for listing as an endangered or threatened species by the state or federal government.
2. Lands kept in a predominantly natural state as habitat for wildlife, plant, or animal communities.
3. Open space lands that are environmentally sensitive parklands.
4. Other lands having scenic values, as declared by the local agency, or by state or federal law.

Add Section 4906.1.1 to read:

4906.1.1 Hazardous vegetation and fuels shall be managed to reduce the severity of potential exterior wildfire exposure to buildings, to reduce the risk of fire spreading to buildings, and provide for safe access for emergency wildland fire equipment and civilian evacuation concurrently, as required by applicable laws and standards.

Add Section 4906.1.2 to read:

4906.1.2 Maintenance required. Maintenance is required to ensure conformance with these standards and measures, and to assure continued availability, access, and utilization, of the defensible space during a wildfire.

Add Section 4906.1.3 to read:

4906.1.3 Additional measures. No person subject to these regulations shall permit any fire hazard, as defined in this chapter, to exist on premises under their control, or fail to take immediate action to abate a fire hazard when requested to do so by the enforcing agency.

Add Section 4906.1.4 to read:

4906.1.4 Exemption. For the purposes of this chapter, vegetation removal or management, undertaken in whole or in part, for fire prevention or suppression purposes shall not be deemed to alter the natural condition of public property.

Amend Section 4907.3 to read:

4907.3 Requirements. Hazardous vegetation and fuels around all buildings, roads, driveways, and structures shall be maintained in accordance with the following laws and regulations:

1. Public Resources Code, Sections 4291 through 4296.
2. California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 3, Article 3, Section 1299.03.
3. California Government Code, Sections 51175 – 51189.
4. California Code of Regulations, Title 19, Division 1, Chapter 7, Subchapter 1, Section 3.07.
5. Any local ordinance of the City of Cupertino.

16.40.220 Chapter 50 - Hazardous Materials – General Provisions.

Amend Section 5001.2.2.2 of the 2022 California Fire Code to read as follows:

5001.2.2.2 Health Hazards The material categories listed in this section are classified as health hazards. A material with a primary classification as a health hazard can also pose a physical hazard.

1. Highly toxic and toxic materials.
2. Corrosive materials.
3. Moderately toxic gas.
4. Other health hazards.

Add Section 5001.5.3 to the 2022 California Fire Code to read as follows:

5001.5.3 Hazardous materials business plan (HMBP). Where required by the fire code official, facilities shall submit a Hazardous Materials Business Plan (HMBP) as required by California Health & Safety Code (HSC), Chapter 6.95, Sections 25500

through 25545, and Title 19, Division 2, Chapter 4. The HMBP shall be electronically submitted in accordance with the fire code official's requested timeframe and no less frequently than is required by the HSC.

Amend Section 5002.1 to read:

5002.1 Definitions. The following terms are defined in Chapter 2:

BOILING POINT.

CEILING LIMIT.

CHEMICAL.

CHEMICAL NAME.

CLOSED CONTAINER.

CONTAINER.

CONTROL AREA.

CYLINDER.

DAY BOX.

DEFLAGRATION.

DESIGN PRESSURE.

DETACHED BUILDING.

DISPENSING.

EXCESS FLOW CONTROL.

EXHAUSTED ENCLOSURE.

EXPLOSION.

FLAMMABLE VAPORS OR FUMES.

GAS CABINET.

GAS ROOM.

HANDLING.

HAZARDOUS MATERIALS.

HEALTH HAZARD.

HEALTH HAZARD – OTHER.

IMMEDIATELY DANGEROUS TO LIFE AND HEALTH (IDLH).

INCOMPATIBLE MATERIALS.

LIQUID.

LOWER EXPLOSIVE LIMIT (LEL).

LOWER FLAMMABLE LIMIT (LFL).

MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA.

MODERATELY TOXIC GAS.

NORMAL TEMPERATURE AND PRESSURE (NTP).

OUTDOOR CONTROL AREA.

PERMISSIBLE EXPOSURE LIMIT (PEL).

PESTICIDE.
PHYSICAL HAZARD.
PRESSURE VESSEL.
SAFETY CAN.
SAFETY DATA SHEET (SDS).
SECONDARY CONTAINMENT.
SEGREGATED.
SOLID.
SPILL CONTROL.
STORAGE, HAZARDOUS MATERIALS.
SYSTEM.
TANK, ATMOSPHERIC.
TANK, PORTABLE.
TANK, STATIONARY.
TANK VEHICLE.
UNAUTHORIZED DISCHARGE.
USE (MATERIAL).
VAPOR PRESSURE.

Add Section 5003.1.3.1 to the 2022 California Fire Code to read as follows:

5003.1.3.1 Highly Toxic, Toxic, Moderately Toxic Gases and Similarly Used or Handled Materials. The storage, use and handling of highly toxic, toxic and moderately toxic gases in amounts exceeding Table 6004.2.1.4 shall be in accordance with this chapter and Chapter 60. Any toxic, highly toxic or moderately toxic material that is used or handled as a gas or vapor shall be in accordance with the requirements for toxic, highly toxic or moderately toxic gases.

Add Section 5003.1.5 to the 2022 California Fire Code to read as follows:

5003.1.5 Other Health Hazards. The storage, use and handling of materials classified as other health hazards including carcinogens, irritants and sensitizers in amounts exceeding 810 cubic feet for gases, 55 gallons for liquids and 5,000 pounds for solids shall be in accordance with this Section 5003.

Add Section 5003.1.6 to the 2022 California Fire Code to read as follows:

5003.1.6 Additional Spill Control and Secondary Containment Requirements. In addition to the requirements set forth in Section 5004.2, an approved containment system is required for any quantity of hazardous materials, that are liquids or solids at normal temperature, and pressure (NTP) where a spill is determined to be a plausible event and

where such an event would endanger people, property or the environment. The approved containment system may be required to include a combination of spill control and secondary containment meeting the design and construction requirements set forth in Section 5004.2.

Amend Section 5003.2.2.1 of the 2022 California Fire Code to read as follows:

5003.2.2.1 Design and Construction. Piping, tubing, valves, fittings and related components used for hazardous materials shall be in accordance with the following:

1. Piping, tubing, valves, fittings and related components shall be designed and fabricated from materials that are compatible with the material to be contained and shall be of adequate strength and durability to withstand the pressure, structural and seismic stress, and exposure to which they are subject.
2. Piping and tubing shall be identified in accordance with ASME A13.1 and the Santa Clara County Fire Chiefs Marking Requirements and Guidelines for Hazardous Materials and Hazardous Waste to indicate the material conveyed.
3. Manual valves or automatic remotely activated fail-safe emergency shutoff valves shall be installed on supply piping and tubing and provided with ready access at the following locations:
 - 3.1. The point of use.
 - 3.2. The tank, cylinder or bulk source.
4. Manual emergency shutoff valves and controls for remotely activated emergency shutoff valves shall be identified and the location shall be clearly visible, accessible and indicated by means of a sign.
5. Backflow prevention or check valves shall be provided where the backflow of hazardous materials could create a hazardous condition or cause the unauthorized discharge of hazardous materials.
6. Where gases or liquids having a hazard ranking of:
 - Health hazard Class 3 or 4
 - Flammability Class 4
 - Reactivity Class 4

in accordance with NFPA 704 are carried in pressurized piping above 15 pounds per square inch gauge (psig) (103 Kpa), an approved means of leak detection and emergency shutoff or excess flow control shall be provided. Where the piping originates from within a hazardous material storage room or area, the excess flow control shall be located within the storage room or area. Where the piping originates from a bulk source, the excess flow control shall be located as close to the bulk source as practical.

Exceptions:

1. Piping for inlet connections designed to prevent backflow.
 2. Piping for pressure relief devices.
7. Secondary containment or equivalent protection from spills or leaks shall be provided for piping for liquid hazardous materials and for highly toxic and toxic corrosive gases above threshold quantities listed in Tables 6004.2.1.4. Secondary containment includes, but is not limited to double-walled piping.

Exceptions:

1. Secondary containment is not required for toxic corrosive gases if the piping is constructed of inert materials.
 2. Piping under sub-atmospheric conditions if the piping is equipped with an alarm and fail-safe-to-close valve activated by a loss of vacuum.
8. Expansion chambers shall be provided between valves whenever the regulated gas may be subjected to thermal expansion. Chambers shall be sized to provide protection for piping and instrumentation and to accommodate the expansion of regulated materials.

Amend Section 5003.2.2.2 of the 2022 California Fire Code to read as follows:

5003.2.2.2 Additional Regulation for Supply Piping for Health Hazard Materials.

Supply piping and tubing for gases and liquids having a health hazard ranking of 3 or 4 shall be in accordance with ASME B31.3 and the following:

1. Piping and tubing utilized for the transmission of toxic, highly toxic, or highly volatile corrosive liquids and gases shall have welded or brazed connections throughout except for connections within an exhausted enclosure if the material is a gas, or an approved method of drainage or containment is provided for connections if the material is a liquid.

2. Piping and tubing shall not be located within corridors, within any portion of a means of egress required to be enclosed in fire-resistance-rated construction or in concealed spaces in areas not classified as Group H Occupancies.

3. All primary piping for toxic, highly toxic and moderately toxic gases shall pass a helium leak test of 1×10^{-9} cubic centimeters/second where practical, or shall pass testing in accordance with an approved, nationally recognized standard. Tests shall be conducted by a qualified "third party" not involved with the construction of the piping and control systems.

Exception: Piping and tubing within the space defined by the walls of corridors and the floor or roof above or in concealed space above other occupancies when installed in accordance with Section 415.11 of the California Building Code for H-5 Occupancies.

Adopt Section 5003.5.2 of the 2022 California Fire Code to read as follows:

5003.5.2 Ventilation Ducting. Ducts venting hazardous materials operations shall be labeled with the hazard class of the material being vented and the direction of flow.

Adopt Section 5003.5.3 of the 2022 California Fire Code to read as follows:

5003.5.3 "H" Occupancies. In "H" occupancies, all piping and tubing may be required to be identified when there is any possibility of confusion with hazardous materials transport tubing or piping. Flow direction indicators are required.

Amend Section 5003.10.4 of the 2022 California Fire Code to read:

5003.10.4 Elevators utilized to transport hazardous materials.

5003.10.4.1 When transporting hazardous materials, elevators shall have no other passengers other than in the individual(s) handling the chemical transport cart.

5003.10.4.1.1 When transporting cryogenic or liquefied compressed gases, there shall be no occupants in the elevator.

5003.10.4.2 Hazardous materials liquid containers shall have a maximum capacity of 20 liters (5.28 gal).

5003.10.4.3 Highly toxic, toxic and moderately toxic gases shall be limited to a container of a maximum water capacity of 1 lb.

5003.10.4.4 Means shall be provided to prevent the elevator from being summoned to other floors.

Amend Section 5004.2.1 of the 2022 California Fire Code to read as follows:

5004.2.1 Spill control for hazardous material liquids. Rooms, buildings or areas used for storage of hazardous material liquids in individual vessels having a capacity of more than 55 gallons (208 L) or in which the aggregate capacity of multiple vessels exceeds 1,000 gallons (3785 L), shall be provided with spill control to prevent the flow of liquids to adjoining areas. Floors in indoor locations and similar surfaces in outdoor locations shall be constructed to contain a spill from the largest single vessel by one of the following methods:

1. Liquid-tight sloped or recessed floors in indoor locations or similar areas in outdoor locations.
2. Liquid-tight floors in indoor and outdoor locations or similar areas provided with liquid-tight raised or recessed sills or dikes.
3. Sumps and collection systems, including containment pallets in accordance with Section 5004.2.3.
4. Other approved engineered systems.

Except for surfacing, the floors, sills, dikes, sumps and collection systems shall be constructed of noncombustible material, and the liquid-tight seal shall be compatible with the material stored. When liquid-tight sills or dikes are provided, they are not required at perimeter openings having an open-grate trench across the opening that connects to an approved collection system.

Amend Section 5004.2.2.2 of the 2022 California Fire Code to read as follows:

5004.2.2.2 Incompatible Materials. Incompatible materials shall be separated from each other in independent secondary containment systems.

Amend Section 5004.2.3 of the 2022 California Fire Code as follows:

16.40.230 Chapter 54 – Corrosive Materials.

Amend Section 5402.1 of the 2022 California Fire Code to read as follows:

5402.1 Definitions. The following terms is defined in Chapter 2:

CORROSIVE.

CORROSIVE LIQUIDS.

16.40.240 Chapter 56 - General – Explosives and Fireworks.

Amend Section 5601.1.3 of the 2022 California Fire Code to read as follows:

5601.1.3 Fireworks. The possession, manufacture, storage, sale, handling, and use of fireworks, including those fireworks classified as Safe and Sane by the California State Fire Marshal, are prohibited.

Exception: The use of fireworks for fireworks displays pyrotechnics before a proximate audience and pyrotechnic special effects in motion pictures, television, theatrical or group entertainment productions as allowed in Title 19, Division 1, Chapter 6 Fireworks reprinted in Section 5608 and Health and Safety Code Division 11.

16.40.260 Chapter 57 – Flammable and Combustible Liquids.

Amend section 5704.2.7.5.8 of the 2022 California Fire Code to read as follows:

5704.2.7.5.8 Overfill Prevention. An approved means or method in accordance with Section 5704.2.9.7.5 shall be provided to prevent the overfill of all Class I, II and IIIA liquid storage tanks. Storage tanks in refineries, bulk plants or terminals regulated by Sections 5706.4 or 5706.7 shall have overfill protection in accordance with API 2350.

Exception: Outside aboveground tanks with a capacity of 1320 gallons (5000 L) or less need only comply with Section 5704.2.9.7.5 (Item 1, Sub-item 1.1).

An approved means or method in accordance with Section 5704.2.9.7.5 shall be provided to prevent the overfilling of Class IIIB liquid storage tanks connected to fuel-burning equipment inside buildings.

Exception: Outside aboveground tanks with a capacity of 1320 gallons (5000 L) or less need only comply with Section 5704.2.9.7.5 (Item 1, Sub-item 1.1).

Add Section 5704.2.7.5.9 of the 2022 California Fire Code to read as follows:

5704.2.7.5.9 Automatic Filling of Tanks. Systems that automatically fill flammable or combustible liquid tanks shall be equipped with overfill protection, approved by the fire code official, that sends an alarm signal to a constantly attended location and immediately stops the filling of the tank. The alarm signal and automatic shutoff shall be tested on an annual basis and records of such testing shall be maintained on-site for a period of five (5) years.

Amend Section 5704.2.9.6.1 of the 2022 California Fire Code as follows:

5704.2.9.6.1 Locations where above-ground tanks are prohibited. Storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited in all locations of the City of Cupertino which are residential or congested commercial areas as determined by the fire code official.

Amend Section 5706.2.4.4 of the 2022 California Fire Code as follows:

5706.2.4.4 Locations where above-ground tanks are prohibited. Storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited in all locations of the City of Cupertino which are residential or congested commercial areas as determined by the fire code official.

Amend section 5707.3.3 of the 2022 California Fire Code as follows:

5707.3.3 Site plan. A site plan shall be developed for each location or area at which mobile fueling occurs. The site plan shall be in sufficient detail to indicate the following:

1. All buildings and structures.
2. Lot lines or property lines.
3. Electric car chargers.
4. Solar photovoltaic parking lot canopies.
5. Appurtenances on-site and their use or function.
6. All uses adjacent to the lot lines of the site.
7. Fueling locations.
8. Locations of all storm drain openings and adjacent waterways or wetlands.
9. Information regarding slope, natural drainage, curbing and impounding.
10. How a spill will be kept on the site property.
11. Scale of the site plan.

16.40.280 Chapter 58 - Flammable Gases and Flammable Cryogenic Fluids.

Amend Section 5806.2 of the 2022 California Fire Code as follows:

5806.2 Limitations. Storage of flammable cryogenic fluids in stationary containers outside of buildings is prohibited in all locations of the City of Cupertino which are residential or congested commercial areas as determined by the fire code official.

Amend Section 5809.3.4 of the 2022 California Fire Code as follows:

5809.3.4 Site plan. For other than emergency roadside service, a site plan shall be developed for each location at which mobile gaseous hydrogen fueling occurs. The site plan shall be in sufficient detail to indicate; all buildings, structures, lot lines, property lines and appurtenances on site and their use and function, and the scale of the site plan.

16.40.300 Chapter 60 – Highly Toxic and Toxic Materials.

Amend Section 6001.1 of the 2022 California Fire Code to read as follows:

6001.1 Scope. The storage and use of highly toxic, toxic and moderately toxic materials shall comply with this chapter. Compressed gases shall also comply with Chapter 53.

Exceptions:

1. Display and storage in Group M and storage in Group S occupancies complying with Section 5003.1 1 .
2. Conditions involving pesticides or agricultural products as follows:
 - 2.1 Application and release of pesticide, agricultural products and materials intended for use in weed abatement, erosion control, soil amendment or similar applications when applied in accordance with the manufacturer' s instruction and label directions.
 - 2.2 Transportation of pesticides in compliance with the Federal Hazardous Materials Transportation Act and regulations thereunder.

2.3 Storage in dwellings or private garages of pesticides registered by the U.S. Environmental Protection Agency to be utilized in and around the home, garden, pool, spa and patio.

Amend Section 6004.1 of the 2022 California Fire Code to read as follows:

6004.1 General. The storage and use of highly toxic, toxic, and moderately toxic compressed gases shall comply with this section.

Amend Section 6004.1.1 of the 2022 California Fire Code to read as follows:

6004.1.1 Special limitations for indoor storage and use by occupancy. The indoor storage and use of highly toxic, toxic and moderately toxic compressed gases in certain occupancies shall be subject to the limitations contained in Sections 6004.1.1.1 through 6004.1.1.3.

6004.1.1.1 Group A, E, I or U occupancies. Highly toxic, toxic and moderately toxic compressed gases shall not be stored or used within Group A, E, I or U occupancies.

Exception: Cylinders not exceeding 20 cubic feet (0.556m³) at normal temperature and pressure (NTP) are allowed within gas cabinets or fume hoods.

6004.1.1.2 Group R occupancies. Highly toxic, toxic and moderately toxic compressed gases shall not be stored or used in Group R occupancies.

6004.1.1.3 Offices, retail sales and classrooms. Highly toxic, toxic and moderately toxic compressed gases shall not be stored or used in offices, retail sales or classroom portions of Group B, F, M or S occupancies.

Exception: In classrooms of Group B occupancies, cylinders with a capacity not exceeding 20 cubic feet (0.566 m³) at NTP are allowed in gas cabinets or fume hoods.

Amend Section 6004.2 of the 2022 California Fire Code to read as follows:

6004.2 Indoor Storage and Use. The indoor storage or use of highly toxic, toxic or moderately toxic compressed gases shall be in accordance with Sections 6004.2.1 through 6004.2.4.

Amend Section 6004.2.1 of the 2022 California Fire Code to read as follows:

6004.2.1 Applicability. The applicability of regulations governing the indoor storage and use of highly toxic, toxic, and moderately toxic compressed gases shall be as set forth in Sections 6004.2.1.1 through 6004.2.1.4.

Adopt Section 6004.2.1.4 of the 2022 California Fire Code to read as follows:

6004.2.1.4 Quantities exceeding the minimum threshold quantities, but not exceeding the maximum allowable per control area. The indoor storage or use of highly toxic, toxic and moderately toxic gases in amounts not exceeding the minimum threshold quantities per control area set forth in Table 6004.2.1.4 but not exceeding maximum allowable quantity per control area set forth in Table 5003.1.1(2) shall be in accordance with Sections 5001, 5003, 6001, and 6004.1 and 6004.4.

Add Table 6004.2.1.4 to the 2022 California Fire Code to read as follows:

Minimum Threshold Quantities for Highly Toxic, Toxic and Moderately Toxic Gases for Indoor Storage and Use	
Highly Toxic	20
Toxic	405 cubic feet
Moderately Toxic	405 cubic feet

Add Section 6004.4 to the 2022 California Fire Code to read as follows:

6004.4 General indoor requirements. The general requirements applicable to the indoor storage and use of highly toxic, toxic and moderately toxic compressed gases shall be in accordance with Sections 6004.4 through 6004.4.8.2.

Add Section 6004.4.1 to the 2022 California Fire Code to read as follows:

6004.4.1 Cylinder and tank location. Cylinders shall be located within gas cabinets, exhausted enclosures or gas rooms. Portable and stationary tanks shall be located within gas rooms or exhausted enclosures.

Exceptions:

1. Where a gas detection system is provided in accordance with 6004.4.8

Add Section 6004.4.2 to the 2022 California Fire Code to read as follows:

6004.4.2. Ventilated areas. The room or area in which gas cabinets or exhausted enclosures are located shall be provided with exhaust ventilation. Gas cabinets or exhausted enclosures shall not be used as the sole means of exhaust for any room or area.

Add Section 6004.4.3 to the 2022 California Fire Code to read as follows:

6004.4.3. Piping and controls. In addition to the requirements of Section 5003.2.2, piping and controls on stationary tanks, portable tanks, and cylinders shall comply with the following requirements:

1. Stationary tanks, portable tanks, and cylinders in use shall be provided with a means of excess flow control on all tank and cylinder inlet or outlet connections.

Exceptions:

1. Inlet connections designed to prevent backflow.
2. Pressure relief devices.

Add Section 6004.4.4 to the 2022 California Fire Code to read as follows:

6004.4.4 Gas rooms. Gas rooms shall comply with Section 5003.8.4 and both of the following requirements:

1. The exhaust ventilation from gas rooms shall be directed to an exhaust system.
2. Gas rooms shall be equipped with an approved automatic sprinkler system. Alternative fire- extinguishing systems shall not be used.

Add Section 6004.4.5 to the 2022 California Fire Code to read as follows:

6004.4.5 Treatment systems. The exhaust ventilation from gas cabinets, exhausted enclosures and gas rooms, required in Section 6004.4.1 shall be directed to a treatment system. The treatment system shall be utilized to handle the accidental release of gas and to process exhaust ventilation. The treatment system shall be designed in accordance with Sections 6004.2.2.7.1 through 6004.2.2.7.5 and Chapter 5 of the California Mechanical Code.

Exceptions:

1. Highly toxic, toxic, and moderately toxic gases—storage. A treatment system is not required for cylinders, containers and tanks in storage where all of the following controls are provided:
 - 1.1 Valve outlets are equipped with gas- tight outlet plugs or caps.
 - 1.2 Hand wheel-operated valves have handles secured to prevent movement.
 - 1.3 Approved containment vessels or containment systems are provided in accordance with Section 6004.2.2.3.

2. Highly toxic, toxic, and moderately toxic gases —use. Treatment systems are not required for highly toxic, toxic, and moderately toxic gases supplied by stationary tanks, portable tanks, or cylinders where a gas detection system complying with Section 6004.4.8 and listed or approved automatic-closing fail- safe valves are provided. The gas detection system shall have a sensing interval not exceeding 5 minutes. Automatic-closing fail- safe valves shall be located immediately adjacent to cylinder valves and shall close when gas is detected at the permissible exposure limit (PEL) by a gas sensor monitoring the exhaust system at the point of discharge from the gas cabinet, exhausted enclosure, ventilated enclosure or gas room.

Add Section 6004.4.5.1 to the 2022 California Fire Code to read as follows:

6004.4.5.1. Design. Treatment systems shall be capable of diluting, adsorbing, absorbing, containing, neutralizing, burning or otherwise processing the contents of the largest single vessel of compressed gas. Where a total containment system is used, the system shall be designed to handle the maximum anticipated pressure of release to the system when it reaches equilibrium.

Add Section 6004.4.5.2 to the 2022 California Fire Code to read as follows:

6004.4.5.2. Performance. Treatment systems shall be designed to reduce the maximum allowable discharge concentrations of the gas to one-half immediate by dangerous to life and health (IDLH) at the point of discharge to the atmosphere. Where more than one gas is emitted to the treatment system, the treatment system shall be designed to handle the worst-case release based on the release rate, the quantity and the IDLH for all compressed gases stored or used.

Add Section 6004.4.5.3 to the 2022 California Fire Code to read as follows:

6004.4.5.3. Sizing. Treatment systems shall be sized to process the maximum worst-case release of gas based on the maximum flow rate of release from the largest vessel utilized. The entire contents of the largest compressed gas vessel shall be considered.

Add Section 6004.4.5.4 to the 2022 California Fire Code to read as follows:

6004.4.5.4 Stationary tanks. Stationary tanks shall be labeled with the maximum rate of release for the compressed gas contained based on valves or fittings that are inserted directly into the tank. Where multiple valves or fittings are provided, the maximum flow rate of release for valves or fittings with the highest flow rate shall be indicated. Where liquefied compressed gases are in contact with valves or fittings, the liquid flow rate shall be utilized for computation purposes. Flow rates indicated on the label shall be converted to cubic feet per minute (cfm/min) (m³/s) of gas at normal temperature and pressure (NTP).

Add Section 6004.4.5.5 to the 2022 California Fire Code to read as follows:

6004.4.5.5 Portable tanks and cylinders. The maximum flow rate of release for portable tanks and cylinders shall be calculated based on the total release from the cylinder or tank within the time specified in Table 6004.2.2.7.5. Where portable tanks or cylinders are equipped with approved excess flow or reduced flow valves, the worst-case release shall be determined by the maximum achievable flow from the valve as determined by the valve manufacturer or compressed gas supplier. Reduced flow and excess flow valves shall be permanently marked by the valve manufacturer to indicate the maximum design flow rate. Such markings shall indicate the flow rate for air under normal temperature and pressure.

Add Section 6004.4.6 to the 2022 California Fire Code to read as follows:

6004.4.6. Emergency power. Emergency power shall be provided for the following systems in accordance with Section 604:

1. Exhaust ventilation system.
2. Treatment system.
3. Gas detection system.
4. Smoke detection system.

Add Section 6004.4.6.1 of the 2022 California Fire Code to read as follows:

6004.4.6.1. Fail-safe systems. Emergency power shall not be required for mechanical exhaust ventilation and treatment systems where approved fail-safe systems are installed and designed to stop gas flow.

Add Section 6004.4.7 of the 2022 California Fire Code to read as follows:

6004.4.7 Automatic fire detection system. An approved automatic fire detection system shall be installed in rooms or areas where highly toxic, toxic, and moderately toxic compressed gases are stored or used. Activation of the detection system shall sound a local alarm. The fire detection system shall comply with Section 907.

Add Section 6004.4.8 of the 2022 California Fire Code to read as follows:

6004.4.8. Gas detection system. A gas detection system complying with Section 916 shall be provided to detect the presence of gas at or below the PEL or ceiling limit of the gas for which detection is provided.

Exceptions:

1. A gas detection system is not required for toxic and moderately toxic gases when the physiological warning threshold level for the gas is at a level below the accepted PEL for the gas.
2. A gas detection system is not required for highly toxic, toxic, and moderately toxic gases where cylinders, portable tanks, and all non-continuously welded connects are within a gas cabinet or exhausted enclosures.

Add Section 6004.4.8.1 of the 2022 California Fire Code to read as follows:

6004.4.8.1. Alarms. The gas detection system shall initiate a local alarm and transmit a signal to an approved location.

Add Section 6004.4.8.2 of the 2022 California Fire Code to read as follows:

6004.4.8.2. Shut off of gas supply. The gas detection system shall automatically close the shut off valve at the source on gas supply piping and tubing related to the system being monitored for whichever gas is detected.

Exception: Automatic shutdown is not required for highly toxic, toxic, and moderately toxic compressed gas systems where all of the following controls are provided:

1. Constantly attended / supervised.
2. Provided with emergency shutoff valves that have ready access.

16.40.320 Chapter 61 – Liquefied Petroleum Gases.

Amend Section 6104.2 of the 2022 California Fire Code as follows:

6104.2 Maximum capacity within established limits. Within the limits established by law restricting the storage of liquefied petroleum gas for the protection of heavily populated or congested areas, the aggregate capacity of any one installation shall not exceed a water capacity of 2,000 gallons (7,570 L) in all locations of the City of Cupertino which are residential or congested commercial areas as determined by the fire code official.

Exception: LPG may be used for industrial operations or when natural gas would not provide a viable substitute for LPG. Portable containers for temporary heating and/or cooking uses may be permitted if stored and handled in accordance with this code. Facilities in commercial areas for refueling portable or mobile LPG containers may be approved by the fire code official on a case by case basis.

16.40.340 Chapter 64 – Pyrophoric Materials.

Add Section 6405.3.1 to the 2022 California Fire Code to read as follows:

6405.3.1 Silane distribution systems automatic shutdown. Silane distribution systems shall automatically shut down at the source upon activation of the gas detection system at levels above the alarm level and/or failure of the ventilation system for the silane distribution system

16.40.360 Chapter 80 – Referenced Standards.

Add the following Referenced Standard to Chapter 80 of the 2022 California Fire Code to read:

NFPA

855-20: Standard for the Installation of Stationary Energy Storage Systems

16.40.380 Appendix B – Fire-Flow Requirements for Buildings.

Amend Section B105.2 of Appendix B of the 2022 California Fire Code to read:

B105.2 Buildings other than one- and two-family dwellings, Group R-3 and R-4 buildings and townhouses. The minimum fire-flow and flow duration for buildings other than one- and two-family dwellings, Group R-3 and R-4 buildings and townhouses shall be as specified in Tables B105.1(2) and B105.2.

Exceptions: [SFM] Group B, S-2 and U occupancies having a floor area not exceeding 1,000 square feet, primarily constructed of noncombustible exterior walls with wood or steel roof framing, having a Class A roof assembly, with uses limited to the following or similar uses:

1. California State Parks buildings of an accessory nature (restrooms).
2. Safety roadside rest areas (SRRA), public restrooms.
3. Truck inspection facilities (TIF), CHP office space and vehicle inspection bays.
4. Sand/salt storage buildings, storage of sand and salt.

The maximum fire flow reduction for all commercial buildings greater than 30,000 square feet and residential podium buildings shall not exceed 25 percent of the fire flow specified in Table B105.1(2). The maximum fire flow reduction for all other buildings shall not exceed 50 percent of the fire flow specified in Table B105.1(2).

16.40.400 Appendix C – Fire Hydrant Locations and Distribution.

Amend Section C102 of Appendix C of the 2022 California Fire Code to read:

C102.1 Minimum number of fire hydrants for a building. The number of fire hydrants available to a building shall be not less than the minimum specified in Table C102.1, utilizing the base fire flow without fire sprinkler reduction.

16.40.420 Appendix D – Fire Apparatus Access Roads.

Delete Section D103.1 as follows:

Amend Section D103.2 as follows:

D103.2 Grade. The maximum grade of a fire department apparatus access road shall not exceed 15-percent, unless approved by the fire code official.

Amend Section D103.3 as follows:

D103.3 Turning radius. The required turning radius of a fire apparatus access roads shall be a minimum of 30 feet inside, and a minimum of 50 feet outside.

Amend Section D103.4 to read:

D103.4 Dead ends. Dead-end fire apparatus access roads and/or driveways in excess of 150 feet (45 720 mm) shall be provided with width and turnaround provisions in accordance with Santa Clara County Fire Department apparatus access and turnaround standards.

Amend Section D103.6 to read:

D103.6 Signs. Where required by the Fire Code Official, fire apparatus access roads shall be designated and marked as a fire lane as set forth in Section 22500.1 of the California Vehicle Code and the Santa Clara County Fire Department A-6 Standard. Signs shall have a minimum dimension of 12 inches (305 mm) wide by 18 inches (457 mm) high and have red letters on a white reflective background. Signs shall be posted on one or both sides of the fire apparatus road as required by Section D103.6.1 or D103.6.2.

Chapter 16.42 of the Cupertino Municipal Code is hereby repealed in its entirety and replaced with the following Chapter 16.42 to be entitled, numbered, and to read as follows:

CHAPTER 16.42: PROPERTY MAINTENANCE CODE

- A. The provisions of the 2021 International Property Maintenance Code and each and all of the regulations, provisions, conditions and terms of the code is referred to as if fully set forth in this chapter, and is by such reference adopted.
- B. One (1) copy of the code therefore is on file in the office of the Building Official pursuant to Health and Safety Code Section 18942 and are made available for public inspection.

Chapter 16.54 of the Cupertino Municipal Code is hereby repealed in its entirety and replaced with the following Chapter 16.54 to be entitled, numbered, and to read as follows:

CHAPTER 16.54: ENERGY CODE

- A. The provisions of the 2022 California Energy Code and each and all of the regulations, provisions, conditions and terms of the code is referred to as if fully set forth in this chapter, and is by such reference adopted.
- B. One (1) copy of the code therefore is on file in the office of the Building Official pursuant to Health and Safety Code Section 18942 and are made available for public inspection.

[Title 16 – Chapter 16.56 – No Change]

Chapter 16.58 of Title 16 of the Cupertino Municipal Code is hereby repealed in its entirety and replaced with the following Chapter 16.58 to be entitled, numbered, and to read as follows:

Chapter 16.58: GREEN BUILDING STANDARDS CODE

Section

- 16.58.010 Adoption of the 2022 California Green Building Standards Code.
- 16.58.015 Adoption of Appendix Chapters.
- 16.58.020 Local Amendments.
- 16.58.030 Title.
- 16.58.040 Scope.
- 16.58.100 Mandatory Requirements.
- 16.58.110 Project Types.

- 16.58.120 Residential Projects.
- 15.58.130 Residential New Construction – Equal To or Less Than Nine (9) Homes.
- 16.58.140 Residential New Construction – Greater than Nine (9) Homes.
- 16.58.150 Major Multi-Family Residential Renovations/Additions
- 16.58.160 Non-Residential New Construction, Small.
- 16.58.170 Non-Residential New Construction, Medium.
- 16.58.180 Non-Residential New Construction, Large.
- 16.58.190 Non-Residential Renovation/Additions, Minor.
- 16.58.200 Non-Residential Renovations/Additions, Major.
- 16.58.210 Tenant Improvements.
- 16.58.220 Mixed-Use.
- 16.58.230 Table 101.10 – Added.
- 16.58.240 Alternate Green Building Standards.
- 16.58.250 Verification.
- 16.58.260 Exemptions.
- 16.58.280 Definitions.
- 16.58.300 Compliance with Local Water-Efficient Landscape Ordinance – Residential.
- 16.58.310 Compliance with Local Water-Efficient Landscape Ordinance – Non-Residential.
- 16.58.400 Electrical Vehicle (EV) Charging – Residential.
- 16.58.420 Electrical Vehicle (EV) Charging – Non-Residential.

16.58.010 Adoption of the 2022 California Green Building Standards Code.

- A. The provisions of the 2022 California Green Building Standards Code and each and all of the regulations, provisions, conditions and terms of the code is referred to as if fully set forth in this chapter, and, except as to additions, deletions and amendments hereinafter described, such code is hereby adopted and made a part hereof, the same as if fully set forth in this Chapter.
 - 1. In accordance with California Health and Safety Code Sections 17958.7 and 18941.5, express findings that modifications to the California Green Building Standards Code are reasonably necessary because of local climatic, geological, or topographical conditions are either already on file with the California Building Standards Commission or will be filed prior to the effective date of the ordinance codified in this Chapter.
- B. One (1) copy of the code therefore is on file in the office of the Building Official pursuant to Health and Safety Code Section 18942 and is made available for public inspection.

16.58.015 Adoption of Appendix Chapters.

No Appendix Chapters from the 2022 California Green Building Standards Code have been adopted.

16.58.020 Local Amendments.

The following provisions of this Chapter shall constitute local amendments to the cross-referenced provisions of the 2022 California Green Building Standards Code and shall be deemed to amend the cross-referenced sections of said Code with the respective provisions set forth in this Chapter.

16.58.030 Title.

Amend Section 101.1 of the 2022 California Green Building Standards Code to read as follows:

101.1 Title. These regulations shall be known as the California Green Building Standards Code as amended by the City of Cupertino and may be cited as such and will be referred to herein as “this code.” The California Green Building Standards Code as amended by the City of Cupertino is an amendment to Part 11 of 12 parts of the official compilation and publication of the adoption, amendment, and repeal of building regulations to the California Code of Regulations, Title 24, also referred to as the California Building Standards Code.

16.58.040 Scope.

Amend Section 101.3 of the 2022 California Green Building Standards Code to read as follows:

101.3 Scope. The provisions of this code shall apply to the planning, design, operation, construction, use and occupancy of every newly constructed building or structure, unless otherwise indicated in this code for the City of Cupertino.

The California Green Building Standards Code also is hereby amended to apply to additions, renovations and tenant improvements of privately-owned buildings and structures in accordance with the provisions of this Chapter.

It is not the intent that this code substitute or be identified as meeting the certification requirements of any private, third-party green building program.

16.58.100 Mandatory Requirements.

Amend Section 101.10 of the 2022 California Green Building Standards Code to read as follows:

101.10 Mandatory Requirements. This code contains mandatory green building measures. In addition, this Chapter contains required minimum green building measures as amended by the City of Cupertino. All new buildings and structures, additions, renovations and tenant improvements subject to requirements in Table 101.10 shall comply with the mandatory measures of the 2022 California Green Building Standards Code as adopted by the state in addition to local amendments included in this code, regardless of height or number of stories, unless specifically exempted by this code.

16.58.110 Project Types.

Add Section 101.10.1 of the 2022 California Green Building Standards Code to read as follows:

101.10.1 Project Types - as set forth in Table 101.10.

16.58.120 Residential Projects.

Add Section 101.10.1.1 of the 2022 California Green Building Standards Code to read as follows:

101.10.1.1 Residential Projects - as set forth in Table 101.10.

16.58.130 Residential New Construction – Equal To or Less than Nine (9) Homes.

Add Section 101.10.1.1.1 of the 2022 California Green Building Standards Code to read as follows:

101.10.1.1.1 Residential New Construction - Equal To or Less than Nine (9) Homes
- as set forth in Table 101.10.

16.58.140 Residential New Construction – Greater than Nine (9) Homes.

Add Section 101.10.1.1.2 of the 2022 California Green Building Standards Code to read as follows:

101.10.1.1.2 Residential New Construction - Greater than Nine (9) Homes or More
- as set forth in Table 101.10.

16.58.150 Major Multi-Family Residential Renovations/Additions.

Add Section 101.10.1.1.3 of the 2022 California Green Building Standards Code to read as follows:

101.10.1.1.3 Major Multi-Family Residential Renovations/Additions - as set forth in Table 101.10. Requirements shall only apply to the area of renovation/addition.

16.58.160 Non-Residential New Construction, Small.

Add Section 101.10.1.1.4 of the 2022 California Green Building Standards Code to read as follows:

101.10.1.1.4 Non-Residential New Construction, Small - as set forth in Table 101.10.

16.58.170 Non-Residential New Construction, Medium.

Add Section 101.10.1.1.5 of the 2022 California Green Building Standards Code to read as follows:

101.10.1.1.5 Non-Residential New Construction, Medium - as set forth in Table 101.10.

16.58.180 Non-Residential New Construction, Large.

Add Section 101.10.1.1.6 of the 2022 California Green Building Standards Code to read as follows

101.10.1.1.6 Non-Residential New Construction, Large - as set forth in Table 101.10.

16.58.190 Non-Residential Renovations/Additions, Minor.

Add Section 101.10.1.1.7 of the 2022 California Green Building Standards Code to read as follows:

101.10.1.1.7 Non-Residential Renovations/Additions, Minor – as set forth in Table 101.10. Requirements shall only apply to the scope of work of renovation/addition.

16.58.200 Non-Residential Renovations/Additions, Major.

Add Section 101.10.1.1.8 of the 2022 California Green Building Standards Code to read as follows:

101.10.1.1.8 Non-Residential Renovations/Additions, Major - as set forth in Table 101.10. Requirements shall only apply to the area of renovation/addition.

16.58.210 Tenant Improvements.

Add Section 101.10.1.1.9 of the 2022 California Green Building Standards Code to read as follows:

101.10.1.1.9 Tenant Improvements. Except as specified herein, the provisions of this code shall apply to the applicable tenant or occupant improvements to a project.

16.58.220 Mixed-Use.

Add Section 101.10.1.1.9 of the 2022 California Green Building Standards Code to read as follows:

101.10.1.1.9 Mixed-Use - as set forth in Table 101.10.

16.58.230 Table 101.10 – Added.

Add Table 101.10 of the 2022 California Green Building Standards Code to read as follows:

<i>Project Type</i>	<i>Minimum Green Building Requirement</i>	<i>Required Verification</i>
A. NEW CONSTRUCTION		
Residential		
Single Family and Multi-Family homes equal to or less than 9 homes:	<ul style="list-style-type: none"> • CALGreen Building Code in accordance with CALGreen’s minimum thresholds. 	City Review
Single Family and Multi-Family homes greater than 9 homes:	<ul style="list-style-type: none"> • GPR certified at minimum 50 points or • LEED Silver or Alternate Reference Standard per Section 101.10.2 	Third Party GPR or LEED certification as applicable Alternate Reference Standard: See Section 101.10.2
Non-Residential		
Small, Less than 25,000 SF:	<ul style="list-style-type: none"> • CALGreen Building Code * per Chapter 5 of the California Green Building Standards Code 	City Review
Mid-Size, from 25,000 to 50,000 SF:	<ul style="list-style-type: none"> • LEED Certified or • Alternate Reference Standard per Section 101.10.2 	Third Party LEED Certification Alternate Reference Standard: See Section 101.10.2
Large, Greater than 50,000 SF:	<ul style="list-style-type: none"> • LEED Silver or • Alternate Reference Standard per Section 101.10.2 	Third Party LEED Certification Alternate Reference Standard: See Section 101.10.2
B. RENOVATIONS AND ADDITIONS		
Residential		

Single-Family	<ul style="list-style-type: none"> • CALGreen Building Code in accordance with CALGreen’s minimum thresholds. 	City Review
Multi-Family (minor):	<ul style="list-style-type: none"> • CALGreen Building Code in accordance with CALGreen’s minimum thresholds. 	City Review
Multi-family (major): Renovations and/or additions with a Floor Area Ratio (FAR) increase $\geq 50\%$ and at least 35,000 square feet, and that replace or substantially alter the HVAC system and at least two of the following: building envelope, hot water system and lighting system.	<ul style="list-style-type: none"> • GPR minimum 50 pts or • LEED Certified or • LEED EBOM Certified or • Alternate Reference Standard per Section 101.10.2 	Third Party GPR or LEED Certification as applicable Alternate Reference Standard: See Section 101.10.2
Non-Residential		
Minor: Renovations and/or additions that do not meet the higher thresholds for "major renovations and additions" outlined as defined in (ii) below.	<ul style="list-style-type: none"> • CALGreen Building Code in accordance with CALGreen’s minimum thresholds. 	City Review
Major: Renovations and/or additions that comprise at least 35,000 square feet, and replace or substantially alter the HVAC system and two of the following: building envelope, hot water system, and lighting system.	<ul style="list-style-type: none"> • LEED Certified (applicable only to the area of renovation/addition) or • LEED EBOM Certified or • Alternate Reference Standard per Section 101.10.2 	Third Party LEED Certification Alternate Reference Standard: See Section 101.10.2
Mixed-Use		
<p>For new and renovation/addition projects with residential and non-residential components, the use shall comply by either:</p> <ol style="list-style-type: none"> 1. Meeting the applicable requirements for each use; or 2. Meeting the applicable requirements for the use that comprises the majority of the project’s square footage where uses are attached and/or combined in a building. 		
<p>Notes: <i>“Major” renovations and/or additions apply only to the area of the renovation/addition unless the LEED EBOM Certified option is selected.</i> *Chapter 5 of the California Green Building Standards Code (Cal Green Mandatory) requirements shall only be applied to elements included in the scope of a project, unless otherwise required by the California Green Building Standards Code.</p>		

16.58.240 Alternate Green Building Standards.

Add Section 101.10.2 of the 2022 California Green Building Standards Code to read as follows:

101.10.2 Alternate Green Building Standards. The applicant may request to apply an alternate green building standard for a project in lieu of the minimum standards per Table 101.10. In making a determination in response to an application under this section, the Building Official may allow an alternate standard if he/she finds that the proposed alternative standard complies with all of the following:

- A. Addresses a comprehensive scope of green building issues including energy efficiency, water efficiency, resource efficient materials, and healthy building practices;
- B. Applies standards that are, when taken as a whole, as stringent as the GPR and LEED standards;
- C. Includes a formalized certification process that incorporates third party verification; and
- D. The project will advance the purposes of this Chapter.

16.58.250 Verification.

Amend Section 102.3 of the 2022 California Green Building Standards Code to read as follows:

102.3 Verification. Documentation of conformance for applicable green building measures shall be provided to the City of Cupertino. Verification that the project meets the applicable environmental standards occurs through either the Third-Party process or City Review per the requirements in Table 101.10. The following lists the verification requirements for Third Party verification, and alternative methods:

- A. **Third Party Certification.** A project will be required to meet the Third-Party certification process if the City determines that the project meets or exceeds the applicable thresholds listed in Table 101.10. The applicant shall submit all of the following to the City, in addition to other application requirements, to assist the City in determining compliance with the green building requirements:

1. **Planning Application.** A green building checklist that includes cross-references to appropriate locations in the construction documents for all prerequisites and selected points or credits that demonstrates that the proposed project meets the applicable minimum requirements.
2. **Building Permit.**
 - a. Proof of project registration with administrating body of the applicable reference standard, and
 - b. A green building checklist that includes cross-references to appropriate locations in the construction documents for all prerequisites and selected points or credits; that demonstrate that the proposed project meets the applicable minimum requirements, and
3. **Green Building Deposit.** The green building deposit in an amount that may be set from time to time by resolution of the City Council. The applicant may provide the deposit in the form of cash or in any other form that the City finds acceptable to meet the purposes of this Section. The full amount of the deposit shall be returned upon the certification document being provided per 102.3 (A)(4). If however, the project does not meet the requirements of this Chapter, as applied to the project, then the City shall retain the full amount of the deposit and shall use the deposit solely to advance the purposes of this Chapter.
4. **Time Limit.** Within 18 months of Final Occupancy - Provide certification document for LEED, GPR or alternate rating standard in a form accepted by the City per Table 101.10. The Building Official may grant a one-time 6-month extension.

16.58.260 Exemptions.

Added Section 102.3.1 of the 2022 California Green Building Standards Code to read as follows:

102.3.1 Exemptions. The Building Official shall determine the maximum feasible threshold of compliance reasonably achievable for the project. Projects that are exempted from the requirements of the California Green Building Standards Code as amended by the City of Cupertino shall meet the requirement in section A and at least one of the requirements in sections B-D:

- A. Projects that demonstrate that it is not feasible for the project to fully meet the green building requirements and that the purposes of this chapter will have been

achieved to the maximum extent possible shall be exempted only for the specific rating system prerequisite that has been determined to be infeasible.

- B. Projects that demonstrate compliance with this code but which will conflict with the Cupertino General Plan and/or Municipal Code Ordinance, such as those requiring historic preservation as determined by the Director of Community Development; or
- C. Projects that demonstrate compliance with this code but which will conflict with the California Building Standards Code; or
- D. Projects with atypical energy-related design requirements and/or patterns of use that make compliance with the thresholds of this code infeasible.

16.58.280 Definitions.

Amend Section 202 of the 2022 California Green Building Standards Code to add or amend the following definitions:

Affordable Housing. Residential buildings that entirely consist of units below market rate and whose rents or sales prices are governed by local agencies to be affordable based on area median income.

Decision maker. The person or entity with final approval authority over the underlying project.

Direct Current Fast Charging (DCFC). A parking space provided with electrical infrastructure that meets the following conditions:

- A. A minimum of 48 kVa (480 volt, 100-ampere) capacity wiring.
- B. Electric vehicle supply equipment (EVSE) located within three (3) feet of the parking space providing a minimum capacity of 80-ampere.

Green Building Checklist. A checklist, typically with prerequisites and credits and/or points that is developed by the administrators of green building certification systems and used to determine whether a development project can achieve certification.

Green Point Rated (GPR). A residential green building rating system developed by Build It Green. Projects can use any of the adopted GPR checklists that most appropriately apply to the project type proposed.

Leadership in Energy and Environmental Design (LEED). A green building rating system developed by the U.S. Green Building Council for residential and non-residential projects. Projects can use any of the adopted LEED checklists that most appropriately apply to the project type proposed.

Electric Vehicle Supply Equipment (EVSE). The conductors, including the ungrounded, grounded and equipment grounding conductors and the electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.

Level 2 EV Capable. A parking space provided with electrical infrastructure that meets the following requirements:

- A. Conduit that links a listed electrical panel with sufficient capacity to a junction box or receptacle located within three (3) feet of the parking space.
- B. The conduit shall be designed to accommodate at least 8.3 kVa (208/240 volt, 40-ampere) per parking space. Conduit shall have a minimum nominal trade size of 1 inch inside diameter and may be sized for multiple circuits as allowed by the California Electrical Code. Conduit shall be installed at a minimum in spaces that will be inaccessible after construction, either trenched underground or where penetrations to walls, floors, or other partitions would otherwise be required for future installation of branch circuits, and such additional elements deemed necessary by the Building Official. Construction documents shall indicate future completion of conduit from the panel to the parking space, via the installed inaccessible conduit.
- C. The electrical panel shall reserve a space for a 40-ampere overcurrent protective device space(s) for EV charging, labeled in the panel directory as "EV CAPABLE."
- D. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.
- E. The parking space shall contain signage with at least a 12" font adjacent to the parking space indicating the space is EV Capable.

Level 1 EV Ready. A parking space that is served by a complete electric circuit with the following requirements:

- A. A minimum of 2.2 kVa (110/120 volt, 20-ampere) capacity wiring.
- B. A receptacle labeled “Electric Vehicle Outlet” or electric vehicle supply equipment located within three (3) feet of the parking space. If EVSE is provided the minimum capacity of the EVSE shall be 16-ampere.
- C. Conduit oversized to accommodate future Level 2 EV Ready (208/240 volt, 40-ampere) at each parking space.

Level 2 EV Ready. A parking space that is served by a complete electric circuit with the following requirements:

- A. A minimum of 8.3 kVa (208/240 volt, 40-ampere) capacity wiring.
- B. A receptacle labeled “Electric Vehicle Outlet” or electric vehicle supply equipment located within three (3) feet of the parking space. If EVSE is provided the minimum capacity of the EVSE shall be 30-ampere.

Low Power Level 2 EV Ready. A parking space that is served by a complete electric circuit with the following requirements:

- A. A minimum of 4.1 kVA (208/240 Volt, 20-ampere) capacity wiring.
- B. A receptacle labeled “Electric Vehicle Outlet” or electric vehicle supply equipment located within three (3) feet of the parking space. If EVSE is provided the minimum capacity of the EVSE shall be 16-ampere.
- C. Conduit oversized to accommodate future Level 2 EV Ready (208/240 volt, 40-ampere) at each parking space.

Low Power Level 2 Electric Vehicle (EV) Charging Receptacle. [HCD] A 208/240 Volt 20- ampere minimum branch circuit and a receptacle for use by an EV driver to charge their electric vehicle or hybrid electric vehicle.

Minimum Green Building Requirement. The minimum green building requirement that applies to a particular project, as listed in column 2 of Table 101.10.

Required Verification. The standards that correspond to the requirements of a particular green building rating system and project type, as listed in column 3 of

Table 101.10, for which verification procedures are fully set forth in Section 102.3.

Feasible. Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.

16.58.300 Compliance with Local Water - Efficient Landscape Ordinance - Residential.

Add Section 4.304.1.1 of the 2022 California Green Building Standards Code to read as follows:

4.304.1.1 Compliance with Local Water-Efficient Landscape Ordinance. Residential projects must comply with the City of Cupertino's Landscape Ordinance, pursuant to Chapter 14.15 of the Cupertino Municipal Code.

16.58.310 Compliance with Local Water - Efficient Landscape Ordinance - Non-Residential.

Add Section 5.304.1.1 of the 2022 California Green Building Standards Code to read as follows:

5.304.1.1 Compliance with Local Water-Efficient Landscape Ordinance. Non-residential projects must comply with the City of Cupertino's Landscape Ordinance, pursuant to Chapter 14.15 of the Cupertino Municipal Code.

16.58.400 Electric Vehicle (EV) Charging – Residential.

Amend Section 4.106.4 of the 2022 California Green Building Standards Code to read as follows:

4.106.4 Electric Vehicle (EV) Charging. Residential construction shall comply with Section 4.106.4.1 or 4.106.4.2, and 4.106.4.3, to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the California Electrical Code, Article 625. For EVCS signs, refer to Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and

Pavement Markings) or its successor(s). Calculation for spaces shall be rounded up to the nearest whole number.

Exceptions:

1. On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:
 - 1.1. Where there is no local utility power supply or the local utility is unable to supply adequate power.
 - 1.2. Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 4.106.4, may increase construction cost by an average of \$4,500 per parking space for market rate housing or \$400 per parking space for affordable housing. EV infrastructure shall be provided up to the level that would not exceed this cost for utility service.
2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities and without electrical panel upgrade or new panel installation. Detached ADUs, attached ADUs, and JADUs without additional parking but with electrical panel upgrades or new panels must have reserved breakers and electrical capacity according to the requirements of 4.106.4.1.
3. Multifamily residential R-2 building projects that have approved entitlements before the code effective date.

4.106.4.1 One- and Two-Family Dwellings and Town-Houses with Private Garages.

4.106.4.1.1 New Construction. One parking space provided shall be a Level 2 EV Ready space. If a second parking space is provided, it shall be provided with a Level 1 EV Ready space.

4.106.4.1.2. Existing Building. Parking additions or electrical panel upgrades must have reserved breaker spaces and electrical capacity according to the requirements of 4.106.4.1.1.

4.106.4.2 Multifamily Dwellings with Residential Parking Facilities.

Requirements apply to parking spaces that are assigned or leased to individual

dwelling units, as well as unassigned residential parking. Visitor or common area parking is not included.

4.106.4.2.1 New Construction. Forty percent (40%) of dwelling units with parking spaces shall be EVCS with Level 2 EV Ready. ALMS shall be permitted to reduce load when multiple vehicles are charging. Sixty percent (60%) of dwelling units with parking spaces shall be provided with at minimum a Level 1 EV Ready space. EV ready spaces and EVCS in multifamily developments shall comply with California Building Code, Chapter 11A, Section 1109A. EVCS shall comply with the accessibility provisions for EV chargers in the California Building Code, Chapter 11B.

Note: The total number of EV spaces should be one-hundred percent (100%) of dwelling units or one-hundred percent (100%) of parking spaces, whichever is less.

4.106.4.2.2 Existing Buildings.

1. When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten percent (10%) of the total number of parking spaces added or altered shall be EVCS. Any existing EV Capable spaces on the building property required by the locally adopted codes at the time of building permit shall be upgraded to a minimum of Level 1 EV Ready. Upgrades shall be required at currently designated vehicle parking spaces. Upgrades shall be required for remaining parking spaces after meeting the accessibility requirements of California Building Code Chapters 11A and 11B.
2. When new parking facilities are added and ALMS is installed, the ALMS system must be designed to deliver no less than 2.2 kVa (110/120 volt, 20-ampere).

4.106.4.3 Electric Vehicle Charging Stations (EVCS).

Electric vehicle charging stations required by Section 4.106.4.2 shall comply with Section 4.106.4.3.

Exception: Electric vehicle charging stations serving public accommodations, public housing, motels, and hotels shall not be required to comply with this section. See California Building Code, Chapter 11B, for applicable requirements.

4.106.4.3.1 Location.

EVCS shall comply with at least one of the following options:

1. The charging space shall be located adjacent to an accessible parking space meeting the requirements of the California Building Code, Chapter 11A, to allow use of the EV charger from the accessible parking space.
2. The charging space shall be located on an accessible route, as defined in the California Building Code, Chapter 2, to the building.

Exception: Electric vehicle charging stations designed and constructed in compliance with the California Building Code, Chapter 11B, are not required to comply with Section 4.106.4.3.1 and Section 4.106.4.3.2, Item 3.

4.106.4.3.2 Dimensions.

The charging spaces shall be designed to comply with the following:

1. The minimum length of each EV space shall be 18 feet (5486 mm).
2. The minimum width of each EV space shall be 9 feet (2743 mm).
3. One in every 25 charging spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet (3658 mm).
 - a. Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.

Exception: Where the City's Municipal or Zoning Code permits parking space dimensions that are less than the minimum requirements stated in this section 4.106.4.3.2, and the compliance

with which would be infeasible due to particular circumstances of a project, an exception may be granted while remaining in compliance with California Building Code Section Table 11B-228.3.2.1 and 11B-812, as applicable.

4.106.4.4 Direct Current Fast Charging Stations. One DCFC may be substituted for up to five (5) EVCS to meet the requirements of 4.106.4.1 and 4.106.4.2. Where ALMS serve DCFC stations, the power demand from the DCFC shall be prioritized above Level 1 and Level 2 spaces.

16.58.420 Electric Vehicle (EV) Charging – Non-Residential

Amend Section 5.106.5.3 of the 2022 California Green Building Standards Code to read as follows:

5.106.5.3 Electric Vehicle (EV) Charging. Construction to provide electric vehicle infrastructure and facilitate electric vehicle charging shall comply with Section 5.106.5.3.1 and shall be provided in accordance with regulations in the California Building Code and the California Electrical Code. Accessible EVCS shall be provided in accordance with the California Building Code Chapter 11B Section 11B-228.3. For EVCS signs, refer to Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s). Calculation for spaces shall be rounded up to the nearest whole number.

Exceptions:

1. On a case-by-case basis where the local enforcing agency has determined compliance with this section is not feasible based upon one of the following conditions:
 - a. Where there is no local utility power supply.
 - b. Where the local utility is unable to supply adequate power.
 - c. Where there is evidence suitable to the local enforcement agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may increase construction cost by an average of \$4,500 per parking space. EV infrastructure

shall be provided up to the level that would not exceed this cost for utility service.

2. Parking spaces accessible only by automated mechanical car parking systems are not required to comply with this code section.

5.106.5.3.1 Nonresidential Occupancy Class B Offices – Shared Parking Space.

5.106.5.3.1.1 New Construction. Twenty percent (20%) of parking spaces shall be EVCS with Level 2 EV Ready. ALMS shall be permitted to reduce load when multiple vehicles are charging. Thirty percent (30%) of parking spaces provided shall be Level 2 EV Capable.

5.106.5.3.1.2 Existing Buildings. When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten percent (10%) of the total number of parking spaces added or altered shall be EVCS with Level 2 EV Ready. Any existing EV Capable spaces on the building property required by the locally adopted codes at the time of building permit shall be upgraded to a minimum of Level 1 EV Ready. Upgrades shall be required at currently designated vehicle parking spaces. Upgrades shall be required for remaining parking spaces after meeting the accessibility requirements of California Building Code Chapters 11A and 11B.

5.106.5.3.2 Hotel and Motel Occupancies – Shared Parking Facilities.

5.106.5.3.2.1 New Construction. Five percent (5%) of parking spaces provided shall be EVCS with Level 2 EV Ready. ALMS shall be permitted to reduce load when multiple vehicles are charging. Twenty-five percent (25%) of parking spaces provided shall be Low Power Level 2 EV Ready space. Ten percent (10%) of parking spaces provided shall be Level 2 EV Capable.

5.106.5.3.2.2 Existing Buildings. When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten percent (10%) of the total number of parking spaces added or altered shall be EVCS with Level 2 EV Ready. Any existing EV Capable spaces on the building property required by

the locally adopted codes at the time of building permit shall be upgraded to a minimum of Level 1 EV Ready. Upgrades shall be required at currently designated vehicle parking spaces. Upgrades shall be required for remaining parking spaces after meeting the accessibility requirements of California Building Code Chapters 11A and 11B.

5.106.5.3.3 All Other Nonresidential Occupancies – Shared Parking Facilities.

5.106.5.3.3.1 New Construction. Ten percent (10%) of parking spaces provided shall be EVCS with Level 2 EV Ready. ALMS shall be permitted to reduce load when multiple vehicles are charging. Ten percent (10%) of parking spaces provided shall be Level 2 EV Capable.

5.106.5.3.3.2 Existing Buildings. When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten percent (10%) of the total number of parking spaces added or altered shall be EVCS with Level 2 EV Ready. Any existing EV Capable spaces on the building property required by the locally adopted codes at the time of building permit shall be upgraded to a minimum of Level 1 EV Ready. Upgrades shall be required at currently designated vehicle parking spaces. Upgrades shall be required for remaining parking spaces after meeting the accessibility requirements of California Building Code Chapters 11A and 11B.

5.106.5.3.4 Direct Current Fast Charging Stations. One DCFC may be substituted for up to five (5) EVCS to meet the requirements of 5.106.5.3.1, 5.106.5.3.2, and 5.106.5.3.3. Where ALMS serve DCFC stations, the power demand from the DCFC shall be prioritized above Level 1 and Level 2 spaces.

5.106.5.4 Electric Vehicle Charging Readiness: Medium-Duty and Heavy-Duty. Construction shall comply with Section 5.106.5.4.1 to facilitate future installation of electric vehicle supply equipment (EVSE). Construction for warehouses, grocery stores and retail stores with planned off-street loading spaces shall also comply with Section 5.106.5.4.1 for future installation of medium- and heavy-duty EVSE. Accessible EVCS shall be provided in accordance with the California Building Code Chapter 11B Section 11B-228.3. For

EVCS signs, refer to Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

Exceptions:

1. On a case-by-case basis where the local enforcing agency has determined compliance with this section is not feasible based upon one of the following conditions:
 - a. Where there is no local utility power supply.
 - b. Where the local utility is unable to supply adequate power.
 - c. Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may increase construction cost by an average of \$4,500 per parking space. EV infrastructure shall be provided up to the level that would not exceed this cost for utility service.

5.106.5.4.1 Warehouses, Grocery Stores and Retail Stores with Planned Off-Street Loading Spaces.

In order to avoid future demolition when adding EV supply and distribution equipment, spare raceway(s) or busway(s) and adequate capacity for transformer(s), service panel(s) or subpanel(s) shall be installed at the time of construction in accordance with the California Electrical Code. Construction plans and specifications shall include, but are not limited to, the following:

1. The transformer, main service equipment and subpanels shall meet the minimum power requirement in Table 5.106.5.4.1 to accommodate the dedicated branch circuits for the future installation of EVSE.
2. The construction documents shall indicate one or more location(s) convenient to the planned off-street loading space(s) reserved for medium- and heavy-duty EV charging cabinets and charging dispensers, and a pathway reserved for routing of conduit from the termination of the raceway(s) or busway(s) to the charging cabinet(s) and dispenser(s), as shown in Table 5.106.5.4.1.

3. Raceway(s) or busway(s) originating at a main service panel or a subpanel(s) serving the area where potential future medium- and heavy-duty EVSE will be located and shall terminate in close proximity to the potential future location of the charging equipment for medium- and heavy-duty vehicles.
4. The raceway(s) or busway(s) shall be of sufficient size to carry the minimum additional system load to the future location of the charging for medium- and heavy-duty EVs as shown in Table 5.106.5.4.1.

TABLE 5.106.5.4.1, Raceway Conduit and Panel Power Requirements for Medium-and-Heavy-Duty EVSE

Building type	Building Size (sq. ft.)	Number of Off-street loading spaces	Additional capacity Required (kVa) for Raceway & Busway and Transformer & Panel
Grocery	10,000 to 90,000	1 or 2	200
		3 or Greater	400
	Greater than 90,000	1 or Greater	400
Retail	10,000 to 135,000	1 or 2	200
		3 or Greater	400
	Greater than 135,000	1 or Greater	400
Warehouse	20,000 to 256,000	1 or 2	200
		3 or Greater	400
	Greater than 256,000	1 or Greater	400

[Title 16 – Chapter 16.60 – No Change]

CHAPTER 16.62: HISTORICAL BUILDING CODE

- A. Except as otherwise provided in this chapter, the provisions of the 2022 California Historical Building Code and specified Appendices and each and all of the regulations, provisions, conditions and terms of the code is referred to as if fully set forth in this chapter, except such portions as are hereinafter deleted, modified or amended by this ordinance, and is by such adopted by reference.
- B. One (1) copy of each volume of the code therefore is on file in the office of the Building Official pursuant to Health and Safety Code Section 18942 and are made available for public inspection.

CHAPTER 16.64: EXISTING BUILDING CODE

- A. Except as otherwise provided in this chapter, the provisions of the 2022 California Existing Building Code and specified Appendices and each and all of the regulations, provisions, conditions and terms of the code is referred to as if fully set forth in this chapter, except such portions as are hereinafter deleted, modified or amended by this ordinance, and is by such adopted by reference.
- B. One (1) copy of each volume of the code therefore is on file in the office of the Building Official pursuant to Health and Safety Code Section 18942 and are made available for public inspection.

CHAPTER 16.68: REFERENCED STANDARDS CODE

- A. The provisions of the 2022 California Referenced Standards Code and specified Appendices and each and all of the regulations, provisions, conditions and terms of the code is referred to as if fully set forth in this chapter, except such portions as are hereinafter deleted, modified or amended by this ordinance, and is by such adopted by reference.
- B. One (1) copy of each volume of the code therefore is on file in the office of the Building Official pursuant to Health and Safety Code Section 18942 and are made available for public inspection.

[Title 16 – Chapter 16.70 – No Change]

[Title 16 – Chapter 16.72 – No Change]

[Title 16 – Chapter 16.74 – No Change]

[Title 16 – Chapter 16.80 – No Change]

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