

ORDINANCE NO.

**AN ORDINANCE OF THE CITY OF SAN JOSE AMENDING
VARIOUS SECTIONS OF CHAPTERS 24.10 AND 24.12 OF
TITLE 24 (TECHNICAL CODES) OF THE SAN JOSE
MUNICIPAL CODE TO ADOPT PROVISIONS OF THE 2025
CALIFORNIA GREEN BUILDING STANDARDS AND
BUILDING ENERGY EFFICIENCY STANDARDS WITH
CERTAIN EXCEPTIONS, MODIFICATIONS, AND
ADDITIONS RELATED TO EXISTING SINGLE-FAMILY
CONSTRUCTION WHICH SERVE AS A REACH CODE TO
INCREASE BUILDING EFFICIENCY, MANDATE
ELECTRIC **AND SOLAR** READINESS, AND INCENTIVIZE
ALL ELECTRIC DEVELOPMENT**

WHEREAS, pursuant to Sections 17922, 17958, 17958.5, 17958.7 and 18941.5 of the California Health and Safety Code, the City of San José ("City") may adopt the provisions of the Green Building Standards Code and Building Energy Efficiency Standards with certain amendments to those provisions which are reasonably necessary to protect the health, welfare and safety of the citizens of San José because of local climatic, geological, and topographical conditions; and

WHEREAS, the City Council of the City of San José ("City Council") hereby makes the following findings with respect to local geological, topographical, and climatic conditions relating to the amendments to the California Codes for which such findings are required:

- A. The San Francisco Bay area region is densely populated and located in an area of high seismic activity. The City is bounded by the Hayward and San Andreas faults capable of producing major earthquakes; and
- B. Gas appliances and associated piping located in the ground and in buildings increase the risk of explosion or fire if there is a structural failure due to a seismic event especially considering the City's number of older buildings and increasing density; and
- C. Severe seismic events could disrupt communications, damage gas mains, cause extensive electrical hazards, and place extreme demands on the limited and widely dispersed resources of the Fire Department, resulting in challenges in meeting the fire and life safety needs of the community; and

- D. The local geographic, topographic, and climatic conditions pose an increased hazard in acceleration, spread, magnitude, and severity of potential fires in the City, and may cause a delayed response from emergency responders, allowing further growth of fires; and
- E. Increased levels of atmospheric greenhouse gases have resulted in global temperature increases, causing a variety of local changes, including extreme weather conditions, sea level rise, more frequent heat waves and extended periods of drought. Local geographic, topographic, and climatic conditions include increased risk of the following:
1. Fires: In addition to the increased risk as a result of earthquakes, the City is surrounded by hills, both adjacent to and within City limits. The dry brush and steep terrain are particularly susceptible to wildfires. The City, through its Fire Department, has designated approximately 54.5 square miles of the City's 180 square miles of incorporated area as Wildland Urban Interface ("WUI"). These areas in the southwestern and southeastern areas of the City, known as the Almaden Valley and East Foothills, have heightened construction and regulatory standards to mitigate the spread of wildfires. In addition, wildfires located outside of the area in 2018 created a blanket of toxic smoke over the City, causing the worst air quality on record by the Bay Area Air District for two (2) consecutive weeks; and
 2. Landslides: Extreme storms as a result of climate change increase the chance of rainfall-induced landslides; fire and drought may kill vegetation in the City's WUI, increasing runoff and potential for landslides; and
 3. Drought: Prolonged periods of drought as a result of climate change may deplete reservoirs and the groundwater basin serving San Jose; in 2021, Governor Newsom included Santa Clara County in a statewide emergency declaration specifically for drought conditions, and local agencies, including the Santa Clara Valley Water District, Santa Clara County, and City of San José issued emergency proclamations regarding drought conditions; and
 4. Flooding: Extreme weather conditions such as sudden, prolonged rainfall as result of climate change could result in spillover from local dams, including the Anderson Dam, which can result in flooding of local creeks which run through San José, such as Coyote Creek as the City experienced in 2017, as well as flooding that was the result of atmospheric river conditions requiring monitoring of Ross Creek, the

Guadalupe River, and Upper Penitencia Creek as the City experienced in January and February of 2023; and

5. Sea Level Rise: Sea level rise as a result of climate change will have a dramatic local impact on the City. The City's Alviso area borders the southern end of the San Francisco Bay and is particularly vulnerable to sea level rise and is at an increased risk of flooding; and
 6. Heat: Increased heat as a result of climate change can have a local impact on the health, safety, and welfare of the City's population, especially the elderly, disabled, children, and those without resources to purchase air conditioning; and
- F. In November 2011, the City Council adopted the Envision San José 2040 General Plan which includes a Greenhouse Gas Reduction Strategy (updated in 2020) with "GHGRS 4 – Building Retrofits – Natural Gas" stating "The City will support a transition to building decarbonization through increased efficiency improvements in the existing building stock and reduced use of natural gas appliances and equipment; and
- G. In February 2018, the City Council adopted Climate Smart San José, which included strategies to create all electric homes; and
1. Increasing and encouraging the use of electric appliances will help the City meet its goals under Climate Smart San José to reduce greenhouse gas emissions; and
 2. The most cost-effective time to integrate electrical infrastructure into existing buildings is during significant alterations and additions, allowing for electrical infrastructure that is installed alongside other significant improvements, and during the installation or replacement of appliances such as air-conditioning; and
- H. Failure to address and substantially reduce greenhouse gas emissions creates an increased risk to the health, safety and welfare of city residents. Council considers and adopts as findings the analysis contained in the staff report and prior reports to Council including those related to the declaration of a climate emergency and those for the September 17, 2019, City Council meeting; and
- I. Amendments to the California Codes have been adopted in the past by the City Council based on specific findings of local geographic, topographic, and climatic

conditions; and the Council hereby reaffirms such findings and confirms that the facts on which such findings were based continue to exist; and

- J. The provisions of this Ordinance establishing certain more restrictive standards than the California Codes will better serve to prevent or minimize structural damage resulting from local conditions; and

WHEREAS, the City Council hereby makes the additional following findings with respect to cost effectiveness of any amendments to the California Codes for which such findings are required:

- A. California Health and Safety Code section 17958 requires that cities adopt building regulations that are substantially the same as those adopted by the California Building Standards Commission and contained in the 2025 California Building Standards Code; and
- B. The 2025 California Energy Code is Part 6 of the 2025 California Building Standards Code which implements minimum energy efficiency standards in buildings through mandatory requirements, prescriptive standards, and performance standards; and
- C. On or about September 20, 2016, the State of California enacted Senate Bill (SB) 32, which added Health and Safety Code Section 38566 to require greenhouse gas emissions to be reduced to 40 percent below 1990 levels by no later than December 31, 2030; and
- D. Consistent with Climate Smart San José, the local amendments to the 2025 California Energy Code establish requirements for single-family structures which will reduce demands for local energy resources, reduce regional pollution, and promote a lower contribution to greenhouse gas emissions; and
- E. These amendments are reasonably necessary because of health and safety concerns as San José residents suffer from asthma and other health conditions associated with poor indoor and outdoor air quality exacerbated by the combustion of methane gas; and
- F. Public Resources Code Section 25402.1(h)2 and Title 24, Part 1, Chapter 10, Section 10-106 of the 2025 California Administrative Code establish a process which allows local adoption of energy standards that are more stringent than the statewide Standards, provided that a determination that the standards are cost effective is adopted at a public meeting and subsequently filed with the California Energy Commission, and the California Energy Commission finds that the

standards will require buildings to be designed to consume less energy than permitted by the 2025 California Energy Code; and

- G. A June 9, 2025, Cost-Effectiveness Study: Single Family AC to Heat Pump Replacement prepared by Frontier Energy, Inc. and Misti Bruceri & Associates, LLC, funded by California utility ratepayers and submitted to the California Energy Commission supports and documents the cost-effectiveness of the Ordinance; and
- H. City Council has determined the cost effectiveness studies prepared by the California Statewide Codes and Standards Reach Code Program and associated study data are sufficient to illustrate that the standards contained in this ordinance are cost effective and will require buildings to be designed to consume less energy than permitted by the 2025 California Energy Code; and
- I. Based upon these analyses, pursuant to the Public Resources Code section 25402.1(h)(2) and Title 24, Part 1, Chapter 10, Section 10-106 of the 2025 California Administrative Code, the City Council finds and determines the following: (1) The locally adopted energy efficiency standards contained in this ordinance are cost-effective, and (2) the efficiency standards in this ordinance will require buildings to be designed to consume less energy compared to the 2025 California Energy Code; and
- J. The content and details of this ordinance were the subject of a public stakeholder workshop conducted on July 23 and 24, 2025, which included attendees such as architects, energy modelers, designers, builders, developers, contractors, and residents; and
- K. The Department of Energy sets the minimum efficiency standards for equipment and appliances; none of the provisions of this Ordinance change minimum efficiency standards, and the Ordinance meets the criteria in 42 USC Section 4297, and further
 - 1. The Ordinance permits a builder to select the items whose combined energy efficiency meets an overall building target; and
 - 2. The Ordinance does not require covered appliances to exceed federal standards; the performance pathway allows different options in fuel types; and
 - 3. The Ordinance offers options for compliance including appliances that exceed federal standards on a “one for one equivalency energy use or

equivalent cost basis” ~~and uses the source energy target values for all buildings using Longterm Systemwide Cost;~~ and

4. The Ordinance bases any baseline building design with covered products that do not exceed federal standards; and
5. The Ordinance offers at least one optional combination of items that does not exceed federal standards for any covered appliances; and
6. The Ordinance frames energy targets as a total for the entire building; and
7. The Ordinance uses the appropriate test procedures for determining energy consumption for covered products.

WHEREAS, this Ordinance was found to be categorically exempt from environmental review, per the provisions of the California Environmental Quality Act (CEQA) of 1970, as amended, 14 California Code of Regulations Section 15308, and Title 21 of the San José Municipal Code, under File Number ER25-147; actions by a Regulatory Agencies for the Protection of the Environment; and

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

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

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF SAN JOSE:

SECTION 1. Section 24.10.100 of Chapter 24.10 of Title 24 of the San José Municipal Code is amended to read as follows:

24.10.100 Adoption of Technical Provisions of the California Green Building Standard Code

- A. Except as otherwise provided for in this Chapter, the residential mandatory measures and nonresidential mandatory measures of the California Green Building Standards (CALGreen) ~~2022-2025~~ edition, together with those omissions, amendments, exceptions and additions thereto as amended in Title 24 of the California Code of Regulations are approved and adopted and are

hereby incorporated in this Chapter by reference and made a part hereof the same as if fully set forth herein.

- B. One copy of the CALGreen Code has been filed for use and examination of the public in the Office of the City Clerk of the City of San José.

SECTION 2. Section 24.10.120 of Chapter 24.10 of Title 24 of the San José Municipal Code is amended to read as follows:

24.10.120 Cross-References to CALGreen

The provisions of this Chapter contain cross-references to the ~~2022-2025~~ CALGreen Code to facilitate references and comparison to those provisions.

SECTION 3. A new section 24.10.210 is added to Part 2 - Residential Mandatory Measures, of Chapter 24.10 of Title 24 of the San José Municipal Code, to be numbered, entitled and to read as follows:

24.10.210 Alterations to existing buildings (CALGreen, App. A4, §§ A4.204.1-A4.204.1.1)

CALGreen, Appendix A4, Sections A4.204.1 and A4.204.1.1, are amended to read as follows:

A4.204.1 Energy Efficiency. Alterations to existing residential buildings shall comply with Sections A4.204.1.1 ~~and A4.204.1.2~~.

A4.204.1.1 Altered Space-Conditioning System Serving Existing Single-Family Dwelling Units – Mechanical Cooling. When a space-conditioning system serving an existing single-family dwelling unit is altered in climate zones 1 through 14 and 16 by installation or replacement of an air conditioner, the altered system shall comply with either a or b below in addition to the requirements for installation specified by Title 24, Part 6, Sections 150.2(b)1E and 150.2(b)1F:

- a. A heat pump shall be the primary heating source and sized according to the system selection requirements specified by Title 24, Part 6 of Section 150.0(h)5. Supplemental heating may be provided by ~~an existing~~ gas furnace or ~~existing~~ electric resistance heating as specified in Title 24, Part 6, Sections 150.0(h)7 and 150.0(i); or
- b. An air conditioner shall meet ~~the following all the~~ requirements in either subsection I or II below:

li. Systems with Existing Duct Distribution Systems: ~~R-8 duct insulation for ducts located in unconditioned space; and~~

Aii. The duct system measured air leakage shall be equal to or less than 510 percent of the system air handler airflow as confirmed through field verification and diagnostic testing, per the requirements in Title 24, Part 6, Reference Residential Appendix Section RA3.1.4.3.1; and

Exception 1 to A4.204.1.1.b.i.A. If it is not possible to meet the duct sealing requirements, all accessible leaks shall be sealed and verified through a visual inspection and a smoke test by a certified ECC-Rater utilizing the methods specified in Reference Residential Appendix Section RA3.1.4.3.5.

Exception 2 to A4.204.1.1.b.i.A: Existing duct systems, constructed, insulated or sealed with asbestos.

Biii. Demonstrate, in every control mode, airflow greater than or equal to 400-300 CFM per ton of nominal cooling capacity through the return grilles, and an air-handling unit fan efficacy less than or equal to 0.45 W/CFM. The airflow rate and fan efficacy requirements in this section shall be confirmed through field verification and diagnostic testing, following the procedures outlined in Title 24, Part 6, Reference Residential Appendix RA3.3; and

Exception 1 to A4.204.1.1.b.i.B: Systems unable to comply with the minimum airflow rate and system efficacy requirements shall demonstrate compliance by satisfying all of the following:

1. Following the procedures in Section RA3.3.3.1.5;
2. Installing a system thermostat that conforms to the specifications in Section 110.12;
3. For standard ducted systems (without zoning dampers), meet the applicable minimum total return filter grille nominal area requirements in Table 150.0-B or 150.0-C as confirmed by field verification and diagnostic testing in accordance with the procedures

in Reference Residential Appendix Sections RA3.1.4.4 and RA3.1.4.5. The design clean-filter pressure drop requirements specified by Section 150.0(m)12D for the system air filter(s) shall conform to the requirements given in Tables 150.0-B and 150.0-C.

Exception 2 to Section A4.204.1.1.b.I.B: Multispeed compressor systems or variable speed compressor systems shall verify air flow (cfm/ton) and fan efficacy (Watt/cfm) for system operation at the maximum compressor speed and the maximum air handler fan speed.

Exception 3 to Section A4.204.1.1.b.I.B: Gas furnace air-handling units manufactured prior to July 3, 2019 shall comply with a fan efficacy value less than or equal to 0.58 W/cfm as confirmed by field verification and diagnostic testing in accordance with the procedures given in Reference Residential Appendix RA3.3.

Civ. In all climate zones, refrigerant charge verification requirements shall meet the requirements in Title 24, Part 6 Section 150.2(b)1Fiib, including the minimum airflow rate specified in Section 150.2(b)1Fiia; and

Dv. Vented attics shall have insulation installed to achieve a U-factor of 0.020 or insulation installed at the ceiling level shall result in an insulated thermal resistance of R-49 or greater for the insulation alone; luminaires not rated for insulation contact must be replaced or retrofitted with a fireproof cover that allows for insulation to be installed directly over the cover; and

Exception 1 to Section A4.204.1.1.b.I.D: Dwelling units with at least R-38 existing insulation installed at the ceiling level.

Exception 2 to Section A4.204.1.1.b.I.D: Dwelling units where the alteration would directly cause the disturbance of asbestos unless the alteration is made in conjunction with asbestos abatement.

Exception 3 to Section A4.204.1.1.b.I.D: Dwelling units with knob and tube wiring located in the vented attic.

Exception 4 to Section A4.204.1.1.b.I.D: Where the accessible space in the attic is not large enough to accommodate the required R-value, the entire accessible space shall be filled with insulation provided such installation does not violate Section 806.3 of Title 24, Part 2.5.

Evi. Air seal all accessible areas of the ceiling plane between the attic and the conditioned space including all joints, penetrations and other openings that are potential sources of air leakage by caulking, gasketing, weather-stripping or otherwise sealing to limit infiltration and exfiltration~~in accordance with the requirements in Title 24, Part 6 Section 150.2(b)1~~**Jii.**

Exception 1 to Section A4.204.1.1.b.I.E: Dwelling units with at least R-38 existing insulation installed at the ceiling level.

Exception 2 to Section A4.204.1.b.I.E: Dwelling units where the alteration would directly cause the disturbance of asbestos unless the alteration is made in conjunction with asbestos abatement.

Exception 3 to Section A4.204.1.1.b.I.E: Dwelling units with atmospherically vented space heating or water heating combustion appliances located inside the pressure boundary of the dwelling unit.

II. Entirely New or Complete Replacement Duct Systems:

A. R-8 duct insulation shall be installed for all new ducts located in unconditioned space; and

B. The total duct system measured air leakage shall be equal to or less than 5 percent of the system air handler airflow as confirmed through field verification and diagnostic testing, per the requirements in Title 24, Part 6, Reference Residential Appendix Section RA3.1.4.3.1; and

C. Demonstrate, in every control mode, airflow greater than or equal to 350 CFM per ton of nominal cooling capacity through the return grilles, and an air-handling unit fan efficacy less than or equal to 0.35 W/CFM. The airflow rate

and fan efficacy requirements in this section shall be confirmed through field verification and diagnostic testing, following the procedures outlined in Title 24, Part 6, Reference Residential Appendix RA3.3; and

D. In all climate zones, refrigerant charge verification requirements shall meet the requirements in Title 24, Part 6 Section 150.2(b)1Fiib; and

E. In Climate Zones 1-4, 6, and 8-16 if the air handler and ducts are located within a vented attic, vented attics shall have insulation installed to achieve a U-factor of 0.020 or insulation installed at the ceiling level shall result in an insulated thermal resistance of R-49 or greater for the insulation alone; luminaires not rated for insulation contact must be replaced or retrofitted with a fireproof cover that allows for insulation to be installed directly over the cover; and

Exception 1 to Section A4.204.1.1.b.II.E: In Climate Zones 1, 3, and 6, dwelling units with at least R-19 existing insulation installed at the ceiling level.

Exception 2 to Section A4.204.1.1.b.II.E: Dwelling units where the alteration would directly cause the disturbance of asbestos unless the alteration is made in conjunction with asbestos abatement.

Exception 3 to Section A4.204.1.1.b.II.E: Dwelling units with knob and tube wiring located in the vented attic.

Exception 4 to Section A4.204.1.1.b.II.E: Where the accessible space in the attic is not large enough to accommodate the required R-value, the entire accessible space shall be filled with insulation provided such installation does not violate Section 806.3 of Title 24, Part 2.5.

F. In Climate Zones 2, 4, and 8-16, air seal all accessible areas of the ceiling plane between the attic and the conditioned space including all joints, penetrations and other openings that are potential sources of air leakage by caulking,

gasketing, weather-stripping or otherwise sealing to limit infiltration and exfiltration.

Exception 1 to Section A4.204.1.1.b.II.F: Dwelling units with at least R-19 existing insulation installed at the ceiling level.

Exception 2 to Section A4.204.1.1.b.II.F: Dwelling units where the alteration would directly cause the disturbance of asbestos unless the alteration is made in conjunction with asbestos abatement.

Exception 3 to Section A4.204.1.1.b.II.F: Dwelling units with atmospherically vented space heating or water heating combustion appliances located inside the pressure boundary of the dwelling unit.

Exception 1 to Section A4.204.1.1: Where the capacity of the existing main electrical service panel is insufficient to supply the electrical capacity of a heat pump and where the existing main electrical service panel is sufficient to supply a new or replacement air conditioner, as calculated according to the requirements of California Electrical Code Article 220.83 or Article 220.87. Documentation of electrical load calculations in accordance with Article 220 must be submitted to the enforcement agency prior to permitting for both the heat pump and proposed air conditioner.

Exception 2 to Section A4.204.1.1: Where the required capacity of a heat pump to meet the system selection requirements of Section 150.0(h)5 is greater than or equal to 12,000 Btu/h more than the greater of the required capacity of an air conditioner to meet the design cooling load OR the capacity of the existing air conditioner. Documentation of heating and cooling load calculations in accordance with 150.0(h) must be submitted to the enforcement agency prior to permitting for both the heat pump and proposed air conditioner.

SECTION 4. Section 24.12.100 of Chapter 24.12 of Title 24 of the San José Municipal Code is amended to read as follows:

24.12.100 Adoption of Technical Provisions of the California Building Energy Efficiency Standards

- A. Except as otherwise provided for in this Chapter, the California Building Energy Efficiency Standards 2022-2025 edition, including the appendices thereto, together with those omissions, amendments, exceptions and additions thereto as

amended in Title 24 of the California Code of Regulations are approved and adopted, and are hereby incorporated in this Chapter by reference and made a part hereof the same as if fully set forth herein.

- B. One copy of the California Building Energy Efficiency Standards has been filed for use and examination of the public in the Office of the City Clerk of the City of San José.

SECTION 5. A new section 24.12.105 is added to Chapter 24.12 of Title 24 of the San José Municipal Code, to be numbered, entitled, and to read as follows:

24.12.105 Scope (Energy Standards, Subch. 1, §100.0)

Energy Standards, Subchapter 1, Section 100.0 is amended to add the following subsection (i):

- (i) **Single Family Building Remodel Energy Reach Code - Purpose and Intent.**
In addition to all requirements of the California Energy Code applicable to Single Family building additions and alterations, the electric readiness measures specified in Sections 150.0(w) shall be required for certain single family additions and alterations.

SECTION 6. Section 24.12.110 of Chapter 24.12 of Title 24 of the San José Municipal Code is repealed and replaced by a section to be numbered, entitled, and to read as follows:

24.12.110 Definitions and Rules of Construction (Energy Standards, Subch. 1, §100.1)

Energy Standards, Subchapter 1, Section 100.1(b) is amended to add the following definitions:

LEVEL 2 ELECTRIC VEHICLE (EV) CHARGING RECEPTACLE is a 208/240-volt 40-ampere minimum branch circuit and a receptacle.

LOW POWER LEVEL 2 ELECTRIC VEHICLE (EV) CHARGING RECEPTACLE is a 208/240-volt 20-ampere minimum branch circuit and a receptacle

SECTION 7. Section 24.12.120 of Chapter 24.12 of Title 24 of the San José Municipal Code is amended to read as follows:

24.12.120 Cross-References to the Building Energy Efficiency Standards

The provisions of this Chapter contain cross-references to the ~~2022~~ 2025 Building Energy Efficiency Standards for Residential and Non-Residential Buildings (Energy Standards) to facilitate references and comparison to those provisions.

SECTION 8. Section 24.12.500 of Chapter 24.12 of Title 24 of the San José Municipal Code is repealed and replaced by a section to be numbered, entitled, and to read as follows:

24.12.500 Mandatory Features and Devices for Low-Rise Residential Buildings (Energy Standards, Subch. 7 §150.0)

Energy Standards, Subchapter 1, Section 150.0 is amended to add the following subsection (w):

(w) Electric Readiness for Alterations

1. **Electric range.** Where branch circuits or receptacles are added or altered in a kitchen and the work requires an electrical permit, install electrical components in accordance with the California Electrical Code. The electrical components shall include either of the following:
 - A. A 125 volt, 20 amp electrical receptacle that is connected to the electric panel with a 120/240 volt 3 conductor branch circuit rated at 50 amps minimum, within 3 feet from the appliance and accessible to the appliance with no obstructions. Both ends of the unused conductor shall be labeled with the word “spare” and be electrically isolated. Space shall be reserved for a single pole circuit breaker in the electrical panel adjacent to the circuit breaker for the branch circuit and labeled with the words “Future Use”.
 - B. A pathway for a future 240 volt 50 amp minimum branch circuit that shall consist of either conductors or raceway from the main electrical service panel. The main electric panel shall have space reserved to allow for the installation of a double pole circuit breaker for a future electric range

installation. The reserved space shall be permanently marked as "For Future 240V use". The raceway or conductors shall terminate at a junction box within 3 feet of the appliance. The blank cover shall be identified as "240V ready".

2. **Electric dryer.** Where a branch circuit is added or altered within 3 feet of a gas or propane clothes dryer and the work requires an electrical permit, install electrical components in accordance with the California Electrical Code. The electrical components shall include either of the following:
 - A. A dedicated 125 volt, 20 amp electrical receptacle that is connected to the electric panel with a 120/240 volt 3 conductor branch circuit rated at 30 amps minimum, within 3 feet from the appliance and accessible to the appliance with no obstructions. Both ends of the unused conductor shall be labeled with the word "spare" and be electrically isolated. Space shall be reserved for a single pole circuit breaker in the electrical panel adjacent to the circuit breaker for the branch circuit and labeled with the words "Future Use"; or,
 - B. A pathway for a future 240 volt 30 amp minimum branch circuit that shall consist of either conductors or raceway from the main electrical service panel. The main electric panel shall have space reserved to allow for the installation of a double pole circuit breaker for a future heat pump dryer installation. The reserved space shall be permanently marked as "For Future 240V use". The raceway or conductors shall terminate at a junction box within 3 feet of the appliance. The blank cover shall be identified as "240V ready".
3. **Heat pump water heater.**
 - A. If wall framing is removed or replaced within 3 feet of a gas or propane water heating appliance, space suitable for the future installation of a heat pump water heater (HPWH) shall be provided. The space shall be at least 2.5 feet by 2.5 feet wide and 7 feet tall and shall include a condensate drain that is no more than 2 inches higher than the base of an installed water heater and allows natural draining without pump

assistance or installed piping or tubing within 3 feet of the water heater location to a condensate drain or exterior location. If pump assistance is needed, a receptacle on a 120 volt, minimum 15 amp branch circuit for a condensate pump must be available within 3 feet of the water heater location.

B. Where branch circuits are altered or added within 3 feet of an existing gas or propane water heater or within 10 feet of the designated future location of a heat pump water heater as required under Section 150.0(w)3A, and the work requires an electrical permit, install electrical components in accordance with the California Electrical Code. The electrical components shall include either of the following:

- i. A dedicated 125 volt, 20 amp electrical receptacle that is connected to the electric panel with a 120/240 volt 3 conductor, 10 AWG copper branch circuit rated at 30 amps minimum, within 3 feet from the water heater and accessible to the water heater with no obstructions. Both ends of the unused conductor shall be labeled with the word "spare" and be electrically isolated. Space shall be reserved for a single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit and labeled with the words "Future 240V Use"; or
- ii. A pathway for a future 240 volt 30 amp minimum branch circuit that shall consist of either conductors or raceway from the main electrical service panel. The main electric panel shall have space reserved to allow for the installation of a double pole circuit breaker for a future HPWH installation. The reserved space shall be permanently marked as "For Future 240V use". The pathway shall terminate at a junction box within 3 feet of the appliance. The blank cover shall be identified as "240V ready".

4. **Electrical Power Upgrades.** Increases in the electrical power infrastructure capacity serving a building shall only be permitted when all the following are documented and submitted to the building official:

- A. Calculations in accordance with California Electrical Code Article 220.83 determining future loads will exceed the capacity of the current electrical power infrastructure.
- B. Where data is available, calculations in accordance with California Electrical Code Article 220.87 determining that future loads exceed the capacity of the current electrical service infrastructure.
- C. Calculations for item (A) and item (B) above shall include at least one of the following:
 - i. At least one power management or circuit controlling device, serving electric-only appliances such as:
 - a. Water heater(s)
 - b. Clothes dryer(s)
 - c. Range(s)
 - d. Level 2 EV Charging Receptacle or
 - e. Low Power Level 2 EV Charging Receptacle
 - ii. At least one of the following electric-only appliances operating on 120V:
 - a. Water heater(s)
 - b. Clothes dryers(s)
 - c. Range(s)
 - iii. Circuit control between whole home load and Level 2 EV Charging Receptacle or Low Power Level 2 EV Charging Receptacle

Exception 1 to Section 150.0(w)4: The upgrade is solely the result of a project proposing electrical improvements supporting loads related to devices and uses not regulated by 150.0(w).

Exception 1 to Section 150.0(w): The project is the result of solely a repair as defined by Title 24 Part 2 Section 202.

Exception 2 to Section 150.0(w): If an electrical permit is not otherwise required for the project other than compliance with this section.

Exception 3 to Section 150.0(w): Where upgrades to the existing electrical panel or utility service are not proposed, electrical panel capacity shall not be required to exceed the existing utility electrical service to the building to meet compliance with this section. Capacity and overcurrent protection spaces shall be reserved to the extent allowable under the existing electrical panel capacity using the methodology in Section 150(w)4. Tandem overcurrent protection devices shall be used to the extent permissible under the California Electrical Code.

Exception 4 to Section 150.0(w): The project is the result of solely a safety improvement to remove a known hazard.

Exception 5 to Section 150.0(w): Mobile Homes, Manufactured Housing, or Factory-built Housing as defined in Division 13 of the California Health and Safety 12 Code (commencing with Section 17000 of the Health and Safety Code).

Exception 6 to Section 150.0(w): Emergency Housing pursuant to Appendix P of the California Building Code.

Exception 7 to Section 150.0(w): Creation of a new accessory dwelling unit or junior accessory dwelling unit that is within the existing space of a single family dwelling or accessory structure and includes an expansion of not more than 150 square feet beyond the same physical dimensions as the existing accessory structure. An expansion beyond the physical dimensions of the existing accessory structure shall be limited to accommodating ingress and egress. Or, if the project would not otherwise be a Covered Single Family Project were it not for the inclusion of an accessory dwelling unit or junior accessory dwelling unit that meets the criteria above.

SECTION 9. This Ordinance shall become effective on January 1, 2026.

PASSED FOR PUBLICATION of title this _____ day of _____, 2025, by the following vote:

AYES:

NOES:

ABSENT:

DISQUALIFIED:

MATT MAHAN
Mayor

ATTEST:

TONI J. TABER, MMC
City Clerk