#### ORDINANCE NO. 2025-19

AN ORDINANCE OF THE CITY OF SANTA CRUZ AMENDING CHAPTER 18.15 - ENERGY CODE, ADOPTING LOCAL AMENDMENTS TO THE CALIFORNIA ENERGY CODE, PART 6 OF THE CALIFORNIA BUILDING CONSTRUCTION AND FIRE PREVENTION CODE

WHEREAS, The State of California has a goal to achieve carbon neutrality by 2045; and

WHEREAS, The California Air Resources Board (CARB) has introduced zero-emission appliance standards with a phased implementation beginning in 2027 to reduce greenhouse gas emissions and improve air quality, with an expectation that all new space and water heaters sold in California meet zero-emission standards by 2030; and

WHEREAS, The City adopted its Climate Action Plan 2030 (CAP 2030) in 2022 with a legal target to reduce emissions 40% from 1990 levels by 2030 and an aspirational target of carbon neutrality by 2035, 10 years earlier than the State target; and

WHEREAS, The CAP 2030 contains three measures related to existing building energy use which accounts for 24% of greenhouse gas emissions regulated by CARB, including Measure BE-2, to electrify 31% of existing residential buildings by 2030 and 53% by 2035; Measure BE-3, to electrify 26% of existing commercial buildings by 2030 and 45% by 2035; and Measure BE-5 is to increase resiliency through equitable energy efficiency and local solar programs; and

WHEREAS, in June 2012, the City adopted its General Plan, which includes but is not limited to Goal NRC4 —"Effective leadership and action in reducing and responding to global warming"— which, together with Policy NRC4.1, obligates the City to trim community-wide GHG emissions 30 percent by 2020 and 80 percent by 2050; NRC4.1.4, which calls for the continued expansion of municipal energy-efficiency programs to lower building energy use; and Goal NRC7, which seeks a "reduction in energy use, and significant production and use of renewable energy," while Policy NRC7.1.4 requires all new development to provide passive heating/cooling design and solar-ready site orientation; and

WHEREAS, Considering that 96% of the City's building stock is residential and 87% of residential buildings are single family homes older than 1978, large renovations are one of the best opportunities to make improvements to single family homes resulting in reduced energy use and emissions and improved comfort and satisfaction; and

WHEREAS, Public Resources Code Section 25402.1(h)(2) allows local agencies to adopt local amendments that are cost-effective and that require greater energy reduction/conservation than the California Energy Code; and

WHEREAS, the California Energy Codes and Standards Statewide Utility Program, has determined specific modifications to the 2025 State Energy Code for each climate zone that are cost-effective; and that such modifications will result in designs that consume less energy than they would under the 2025 State Energy Code; and

WHEREAS, staff has reviewed the "2024 Existing Building Cost-Effectiveness Study" and associated data, and find them sufficient to illustrate compliance with the requirements set forth under California Administrative Code Chapter 10-106; and

WHEREAS, based on these studies, the City finds the proposed local amendments to the 2025 California Energy Code to be cost-effective and consume less energy than permitted by Title 24, Part 6; and

WHEREAS, the 2025 California Energy Code offers compliance options that were established through the public rulemaking process of the code update; and

WHEREAS, pursuant to California Health & Safety Code § 17958.7, the Council expressly declares that the proposed amendments to the Energy Code are reasonably necessary because of local climatic, topological, and geological conditions as set forth in Section 2 of this Ordinance; and

WHEREAS, the requirements specified in this Ordinance were reviewed via public comment and through a publicly noticed public hearing process; and

WHEREAS, that, pursuant to the Public Resources Code section 25402.1(h)(2) and Section 10-106 of the 2025 California Administrative Code, the City Council of the City of Santa Cruz 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

WHEREAS, The municipal code amendments are consistent with the Negative Declaration approved for the City of Santa Cruz 2030 Climate Action Plan adopted by City Council on September 13, 2022, and therefore, no further environmental review under the California Environmental Quality Act (CEQA) is required; the amendments are exempt from CEQA under the general rule, 15061(b)(3), because it can be seen with certainty that the provisions contained herein would not have the potential for causing a significant effect on the environment; and, this ordinance is exempt per CEQA Guidelines Section 15308, Class 8, Actions by Regulatory Agencies for Protection of Natural Resources, since the proposed ordinance would institute regulatory requirements intended to protect the environment and natural resources; and

WHEREAS, the changes pursuant to this ordinance will go into effect on January 1, 2026.

BE IT ORDAINED By the City of Santa Cruz as follows:

**Section 1** <u>Incorporation of Recitals.</u> The foregoing recitals are found to be true and correct, and are incorporated by this reference into this action;

# Section 2 Findings.

(a) Pursuant to the Public Resources Code section 25402.1(h)(2) and Section 10-106

- of the 2025 California Administrative Code, 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.
- (b) The Council finds and declares that the unique characteristics of the topographic, geologic, and climatic conditions found in the City of Santa Cruz make the local amendments to the 2025 California Energy Code reasonable and necessary, and adopts the following findings of fact in support of the changes or modification contained herein:
  - (i) The City of Santa Cruz's northern and western neighborhoods abut the Santa Cruz Mountains, creating a wildland-urban interface and heightened fire risk. The 2020 CZU Lightning Complex fire showed that large, fast-moving wildfires can reach these areas. Cutting local greenhouse-gas pollution is a practical way to lessen the frequency and intensity of future fires.
  - (ii) Since 2021 the City has faced several destructive flood events. A late-January 2021 atmospheric-river storm triggered debris-flow, causing evacuations. Between December 30, 2022, and January 18, 2023, several atmospheric rivers overtopped the San Lorenzo River, damaged downtown levees and coastal infrastructure. Finally, a powerful winter storm in December 2024 partially collapsed the Santa Cruz Municipal Wharf, leading Governor Newsom to issue an emergency proclamation on February 14, 2025. These recent disasters underscore that greenhouse-gas emissions are amplifying flood hazards. Accordingly, more restrictive local Energy Code measures are reasonably necessary to safeguard public health, safety, and welfare.
  - (iii)In January 2023, successive atmospheric-river storms overwhelmed the Coast Pump Station on the San Lorenzo River, ruptured the Newell Creek Pipeline, the city's lone conduit from Loch Lomond Reservoir to the Graham Hill Water Treatment Plant, and pushed raw-water turbidity at the plant to its highest level on record. These escalating, climate-linked disruptions to critical infrastructure make the Ordinance's stricter local Energy Code requirements a necessary safeguard for public health, safety, and welfare.
  - (iv)Santa Cruz occupies a narrow marine terrace bounded by 15- to 30-foot mudstone cliffs along West Cliff Drive and the San Lorenzo River. This layout channels storm waves onto easily eroded bluffs and funnels runoff into downtown, as seen when the January 2023 bomb-cyclone washed out parts of West Cliff and a December 2023 surge increased damages to over \$30 million. The City's Local Hazard Mitigation and Climate Adaptation Plan (2025-2030) ranks these cliffs and the river plain as high-risk for erosion, liquefaction, and quake impacts. To slow erosion, temper storm intensity, and protect key corridors, stricter Energy Code measures that curb greenhouse-gas emissions

are essential.

- (v) Given the unique geological, topographical, and climatic characteristics of Santa Cruz, failure to address and substantially reduce greenhouse gas emissions creates an increased risk to the health, safety, and welfare of City residents.
- (c) The standards imposed by this Ordinance are necessary because they directly advance General Plan 2030 directives that require Santa Cruz to cut greenhouse-gas emissions and improve building energy performance. Goal NRC4 —"Effective leadership and action in reducing and responding to global warming"— together with Policy NRC4.1, obligates the City to trim community-wide GHG emissions 30 percent by 2020 and 80 percent by 2050. Policy NRC4.1.4 calls for the continued expansion of municipal energy-efficiency programs to lower building energy use. Complementing these targets, Goal NRC7 seeks a "reduction in energy use, and significant production and use of renewable energy," while Policy NRC7.1.4 requires all new development to provide passive heating/cooling design and solar-ready site orientation. Implementing more restrictive local Energy Code measures through this Ordinance is therefore reasonably necessary to align with the General Plan's adopted climate and energy objectives.
- (d) The Energy Code amendments are needed to implement General Plan 2030, adopted before June 10, 2025, which commits Santa Cruz to cut community-wide emissions 30 percent by 2020 and 80 percent by 2050 (Policy NRC4.1). The plan calls for continual expansion of municipal energy-efficiency programs (Policy NRC4.1.4) and requires new development to provide passive heating/cooling and solar-ready orientation (Policy NRC7.1.4). The Ordinance keeps the federally protected option for mixed-fuel residences but sets performance rules that make all-electric construction the easiest path to compliance, directly advancing the General Plan's greenhouse-gas reduction strategy under Health & Safety Code § 17958.7.

**Section 3** <u>Severability</u>. If any word, phrase, sentence part, section, subsection or other portion of this amendment or any application thereof to any person or circumstance is declared void, unconstitutional, or invalid for any reason, then such word, phrase, sentence, part, section, subsection, or other portion, or the prescribed application thereof, shall be severable, and the remaining provisions of this amendment, and all applications thereof, not having been declared void, unconstitutional or invalid, shall remain in full force and effect.

Section 4 <u>CEQA</u>. This ordinance is categorically exempt from CEQA because it is an action taken by a regulatory agency for the purpose of protecting the environment (CEQA Guidelines Section 15308). In addition, this ordinance is exempt from CEQA under the general rule, 15061(b)(3), on the grounds that these standards are more stringent than the State energy standards, there are no reasonably foreseeable adverse impacts, and there is no possibility that the activity in question may have a significant effect on the environment. The following findings are made in support of these determinations:

- i) The purpose of the implementation of a Reach Code is to reduce the amount of greenhouse gas emissions in the City that are produced from buildings.
- ii) The Reach Code approval process requires that the City determines that the local standards will require buildings to be designed to consume less energy than current statewide requirements. Furthermore, the California Energy Commission approval process requires that the City make the findings as part of its approval process. Therefore, the Reach Code standards can only go into effect if they protect the environment by making buildings more efficient.

**Section 5** Section 18.15.040 of Chapter 18.15 of the Santa Cruz Municipal Code is hereby amended to read as follows:

### 18.050.040 ENERGY CODE — MODIFICATIONS.

The following sections of the code as adopted in Section 18.15.030 are hereby modified as follows:

Section 100.1(b) of the CEnC is amended to add the following:

**MAJOR ADDITION** is any change to an existing building that increases conditioned floor area by 350 or more square feet in a one-year period.

**MAJOR ALTERATION** is any construction or renovation to an existing structure other than a repair whose altered components cover 350 or more square feet in a one-year period. A project that consists only of roof and/or fenestration replacement is not considered a major alteration.

Section 130.0 of the CEnC is amended to read as follows:

a) The design and installation of all lighting systems and equipment in nonresidential and hotel/motel buildings, outdoor lighting, and electrical power distribution systems within the scope of Section 100.0(a), shall comply with the applicable provisions of Sections 130.0 through 130.6.

Subchapter 4 of the CEnC is amended to add Section 130.6 to be numbered, entitled, and to read as follows:

130.6 Electric Readiness Requirements for Systems Using Gas or Propane

Where nonresidential systems using gas or propane are installed, construction drawings shall indicate electrical infrastructure and physical space accommodating the future installation of an electric heating appliance by including the following, as certified by a registered design professional or licensed electrical contractor:

a) Branch circuit wiring, electrically isolated and designed to serve all electric heating

appliances in accordance with manufacturer requirements and the California Electrical Code, including the appropriate voltage, phase, minimum amperage, and an electrical receptacle or junction box within five feet of the appliance that is accessible with no obstructions. Appropriately sized conduit may be installed in lieu of conductors.

- b) Labeling of both ends of the unused conductors or conduit that includes the terms "For Future Electrical Appliance."
- c) Reserved circuit breakers in the electrical panel for each branch circuit, appropriately labeled (e.g., "Reserved for Future Electric Range"), and positioned on the opposite end of the panel supply conductor connection.
- d) Connected subpanels, panelboards, switchboards, busbars, and transformers that are sized to serve the future electric heating appliances. The electrical capacity requirements shall be adjusted for demand factors in accordance with the California Electric Code.
- e) Physical space for future electric heating appliances, including equipment footprint, and if needed, a pathway reserved for routing of ductwork to heat pump evaporator(s), all of which shall be depicted on the construction drawings. The footprint necessary for future electric heating appliances may overlap with non-structural partitions and with the location of currently designed gas-fueled equipment.

### Section 150.0 of the CEnC is amended as follows:

Single-family residential buildings shall comply with the applicable requirements of Sections 150(a) through 150.0(w).

NOTE: The requirements of Sections 150.0 (a) through (v) apply to newly constructed buildings. Sections 150.2(a) and 150.2(b) specify which requirements of Sections 150.0(a) through 150.0(r) also apply to additions or alterations. Major Additions, Major Alterations, or combinations shall also be required to comply with Section 150.0(w). The City of Santa Cruz amendments to sections 150.0 (t) do not apply to additions or alterations or the following types of new construction statewide exemption accessory dwelling units:

- 1. One accessory dwelling unit per lot with a proposed single-unit building, including a single-family dwelling, or a townhome, or a detached residential condominium or apartment unit on a lot with multiple single-unit buildings, if all of the following apply:
  - i. The accessory dwelling unit is within the proposed space of a single-unit building.
  - ii. The accessory dwelling unit has an exterior entrance separate from that of the primary dwelling unit.

- iii. The side and rear setbacks are sufficient for fire and safety.
- 2. One detached, new construction accessory dwelling unit per lot that meets the following standards:
  - i. The accessory dwelling unit shall be located on a lot with a proposed or existing single-unit building, including a single-family dwelling, or a townhome, or a detached residential condominium or apartment unit on a site with multiple single-unit buildings.
  - ii. The accessory dwelling unit size shall not exceed 800 square feet in floor area.
  - iii. Interior side yard and rear yard setbacks shall be at least four feet.
  - iv. The accessory dwelling unit shall meet one of the following height limitations as measured to the roof peak:
    - 1. A height of 16 feet; or
    - 2. A height of 18 feet if the accessory dwelling unit is on a lot within one-half of one mile walking distance of a major transit stop or a high-quality transit corridor, as those terms are defined in Section 21155 of the Public Resources Code. This height can be increased an additional two feet to twenty feet to accommodate a roof pitch on the accessory dwelling unit that is aligned with the roof pitch of the primary dwelling unit.
- 3. One junior accessory dwelling unit per lot zoned to allow single-family dwellings and within the walls of a proposed single-unit building, including a single-family dwelling, townhome, or detached residential condominium or apartment unit on a lot with multiple detached single-unit dwellings.
- (a)-(v): Subsections 150.0(a) (s) are adopted without modification.
- (t) Heat pump space heater ready. Systems using a gas or propane furnace to serve individual dwelling units shall include the following:
  - 1. A dedicated 240-volt branch circuit wiring shall be installed within 3 feet from the furnace and accessible to the furnace with no obstructions. The branch circuit conductors shall be rated at 30 amps minimum. The blank cover shall be identified as "240V ready." All electrical components shall be installed in accordance with the California Electrical Code.
  - 2. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future heat pump space heater installation. The reserved space shall be permanently marked as "For Future 240V"

use."

3. A designated exterior location for a future heat pump compressor unit with either a drain or natural drainage for condensate and adequate space to maintain the equipment in accordance with California Mechanical Code 304.1 & California Electrical Code 110.26.

Section 150.0(w) is added to read as follows:

- (w) Mandatory Requirements for Existing Building Additions and Alterations. Existing Building Additions and Alterations shall meet the requirements of Items 1 through 3 below, as applicable:
  - 1. **Major addition.** Any major addition shall require installation of a set of measures from the Measure Menu Table, Table 150.0-I to achieve a total score that is equal to or greater than 9. In addition, all mandatory measures listed in Table 150.0-I shall be installed. Measure verification shall be explicitly included as an addendum to the Certificate of Compliance to be filed pursuant to 2025 Title 24 Section 10-103. Installed measures shall meet the specifications in Table 150.0-J.
  - 2. **Major alteration.** Any major alteration shall require installation of a set of measures from the Measure Menu Table, Table 150.0-I to achieve a total score that is equal to or greater than 9. In addition, all mandatory measures listed in Table 150.0-I shall be installed. Measure verification shall be explicitly included as an addendum to the Certificate of Compliance to be filed pursuant to 2025 Title 24 Section 10-103. Installed measures shall meet the specifications in Table 150.0-J.
  - 3. Combination alterations and additions. Any project that includes an addition and alteration whose altered components cover 350 square feet or greater shall require installation of a set of measures from the Measure Menu Table, Table 150.0-I to achieve a total score that is equal to or greater than 9. In addition, all mandatory measures listed in Table 150.0-1 shall be installed. Measure verification shall be explicitly included as an addendum to the Certificate of Compliance to be filed pursuant to 2025 Title 24 Section 10-103. Installed measures shall meet the specifications in Table 150.0-J.
  - 4. Water heating system electric readiness. Any project that includes a major addition, major alteration, or combination alteration and addition that requires water heating system electric readiness shall meet the requirements of section 150.0 (n)1:

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

Exception 2 to Section 150.0(w): If compliance costs exceed 20% of total project valuation or due to conditions specific to the project, it is technically

infeasible to achieve compliance through any available set of measures, the applicant may request an exemption as set forth below. In applying for an exemption, the burden is on the applicant to show hardship or infeasibility.

- 1. Application. Based on the following, the applicant shall identify in writing the specific requirements of the standards for compliance that the project is unable to achieve and the circumstances that make it a hardship or infeasible for the project to comply with this chapter. The applicant may not petition for relief from any requirement of the 2025 California Energy Code (Title 24, Part 6) and referenced standards, or the 2025 California Green Building Standards (Title 24, Part 11) of the California Building Standards Code. Circumstances that constitute hardship or infeasibility shall include one of the following:
  - i. That the cost of achieving compliance is disproportionate to the overall cost of the project;
  - ii. That it is technically infeasible to achieve compliance through all packages due to conditions specific to the project; That strict compliance with these standards would create or maintain a hazardous condition(s) and present a life safety risk to the occupants.
  - 2. Granting of exemption. If the chief building official determines that it is a hardship or infeasible for the applicant to fully meet the requirements of this chapter and that granting the requested exemption will not cause the building to fail to comply with the 2025 California Energy Code (Title 24, Part 6) and referenced standards, or the 2025 California Green Building Standards (Title 24, Part 11) of the California Building Standards Code, the chief building official shall determine the minimum feasible threshold of compliance reasonably achievable for the project. If an exemption is granted, the applicant shall be required to comply with this chapter in all other respects and shall be required to achieve the threshold of compliance determined to be achievable by the chief building official.
  - 3. Denial of exemption. If the chief building official determines that it is reasonably possible for the applicant to fully meet the requirements of this chapter, the request shall be denied, and the applicant shall be notified of the decision in writing. The project and compliance documentation shall be modified to comply with the standards for compliance.
- a. Appeal. Any aggrieved applicant or person may appeal the determination of the chief building official regarding the granting or denial of an exemption or compliance with any other provision of this chapter. An appeal of a determination of the chief building official shall be filed in writing with the Board of Building and Fire Appeals.

Exception 3 to Section 150.0(w): If the dwelling unit has previously installed

measures from the Measure Menu, Table 150.0-1, and compliance can be demonstrated to the building official, then these measures shall not be required to be newly installed, and appropriate credit shall be included in the applicable compliance calculations.

**Exception 4 to Section 150.0(w):** The applicant may request an exemption to any requirements of this chapter which would impair the historic integrity of any building listed on a local, state, or federal register of historic structures, as determined by the Planning Director or designee and as regulated by the California Historic Building Code (Title 24, Part 8). In making a determination of exemption, the Planning Director or designee may require the submittal of an evaluation by an architectural historian or similar expert.

Exception 5 to Section 150.0(w): An alteration that consists solely of seismic safety improvements.

Exception 6 to Section 150.0(w): Buildings which are temporary (such as construction trailers).

Exception 7 to Section 150.0(w): An alteration that consists solely of roof and/or fenestration projects.

**Exception 8 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 9 to Section 150.0(w): One accessory dwelling unit and one junior accessory dwelling unit per lot with a proposed or existing single-family dwelling if all of the following apply:

- (1) The accessory dwelling unit or junior accessory dwelling unit is within the proposed space of a single-family dwelling or existing space of a single-family dwelling or accessory structure and may include 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.
- (2) The space has exterior access from the proposed or existing single-family dwelling.
- (3) The side and rear setbacks are sufficient for fire and safety.

Exception 10 to Section 150.0(w): Where the project includes an accessory dwelling unit or junior accessory dwelling unit that is attached to the primary dwelling unit, either as a new addition or converted from within the space of

the primary dwelling unit, and there is not an additional combination alteration/addition to the primary dwelling unit of at least 350 square feet, then the primary dwelling unit is exempt from the requirements.

Exception 11 to section 150.0(w): Single family homes built after December 31, 1991.

## New Table 150.0-I is added to read as follows:

Table 150.0-I: Measure Menu

E1 E2	1	
	1	
	1	
E3	1	
E4	2	
E5	3	
E6	4	
E7	4	
E8	5	
E9	6	
E10	9	
E11	10	
E12	12	
E13	13	
E14	18	
M1	Mandatory	
M2	Mandatory	
M3	Mandatory	
Note: the measures in the Measure Menu shall conform to the specifications in Table 150.0-		
	E4 E5 E6 E7 E8 E9 E10 E11 E12 E13 E14 M1 M2 M3	

### New Table 150.0-J is added to read as follows:

**Table 150.0-J: Measure Specifications** 

ID	Measure Specification	
General Measures		
E1	Water Heating Package: Add exterior insulation meeting a minimum of	
	R-6 to existing storage water heaters. Insulate all accessible hot water pipes	
	with pipe insulation a minimum of 3/4 inch thick. This includes insulating the	
	supply pipe leaving the water heater, piping to faucets underneath sinks, and	
	accessible pipes in attic spaces or crawlspaces. Upgrade fittings in sinks and	
	showers to meet current California Green Building Standards Code (Title	
	24, Part 11) Section 4.303 water efficiency requirements.	

ID	Measure Specification
	Water heaters 20 gallons or less, or water heaters that are not able to add
	exterior insulation may not take credit for this measure.
	Exception 1: Water heater blanket is not required on water heaters less
	than 20 gallons.
	Exception 2: Water heater blanket not required if application of a water
	heater blanket voids the warranty on the water heater.
	Exception 3: Upgraded fixtures are not required if existing fixtures have
	rated or measured flow rates of no more than ten percent greater than
	2025 California Green Building Standards Code (Title 24, Part 11)
	Section 4.303 water efficiency requirements.
	Exception 4: Water heaters with factory installed insulation of R-24 or
Г2	greater
E2	Induction Cooktop: Replace existing gas and electric resistance stove top
E3	with inductive stove top and cap the gas line
E3	<b>Heat Pump Clothes Dryer:</b> Replace existing electric resistance clothes dryer with heat pump dryer with no resistance element and cap gas line.
E4	Air Sealing: Seal all accessible cracks, holes, and gaps in the building
L)4	envelope at walls, floors, and ceilings. Pay special attention to penetrations
	including plumbing, electrical, and mechanical vents, recessed can light
	luminaires, and windows. Weather-strip doors if not already present.
	runnanes, and windows. Weather strip doors it not already present.
	Verification shall be conducted by a certified HERS Rater that either: a)
	shows at least a 30 percent reduction from pre-retrofit conditions; or b)
	shows that the number of air changes per hour at 50 Pascals pressure
	difference (ACH50) does not exceed ten for Pre-1978 vintage buildings,
	seven for 1978 to 1991 vintage buildings and five for 1992-2010 vintage
	buildings. Compliance can also be demonstrated with blower door testing
	conducted by a certified HERS Rater no more than three years prior to the
	permit application date showing compliance with condition (a) or (b).
	If combustion appliances are located within the pressure boundary of the
	building, conduct a combustion safety test by a professional certified by the
	Building Performance Institute in accordance with the ANSI/BPI-1200-S-
	2017 Standard Practice for Basic Analysis of Buildings, the Whole House
	Combustion Appliance Safety Test Procedure for the Comfortable Home
	Rebates Program 2020 or the California Community Services and
	Development Combustion Appliance Safety Testing Protocol.
	Reducing the air leakage of a building can reduce the building's drying
	potential. When improving the air sealing of a building, consider if there is a
	need to add continuous ventilation to the building (if not already present).
E5	<b>Duct Sealing</b> : Air seal all space conditioning ductwork to meet the
	requirements of the 2025 Title 24 Section 150.2(b)IE. The duct system must
	be tested by a HERS Rater no more than three years prior to the alteration or
	addition permit application date to verify the duct sealing and confirm that

ID	Measure Specification
	the requirements have been met. This measure may not be combined with
	the New Ducts and Duct Sealing measure in this Table. Dwelling units
	without ductwork or where the ducts are in conditioned space may not take
	credit for this measure.
E6	<b>R-49 Attic Insulation</b> : Attic insulation shall be installed to achieve a
	weighted assembly U- factor of 0.020 or insulation installed at the ceiling
	level shall have a thermal resistance of R-49 or greater for the insulation
	alone. Recessed downlight luminaires in the ceiling shall be covered with
	insulation to the same depth as the rest of the ceiling. Luminaires not rated
	for insulation contact must be replaced or fitted with a fire-proof cover that
	allows for insulation to be installed directly over the cover.
	Exception: In buildings where existing R-30 is present and existing
	recessed downlight luminaires are not rated for insulation contact,
	insulation is not required to be installed over the luminaires.
E7	Windows: Replace at least 50% of existing windows with high performance
	windows with an area-weighted average U-factor no greater than 0.27.
E8	R-15 Wall Insulation: Install wall insulation in all exterior walls to achieve
	a weighted U-factor of 0.095 or install wall insulation in all exterior wall
	cavities that shall result in an installed thermal resistance of R-15 or greater
	for the insulation alone.
E9	New Ducts+ Duct Sealing: Replace existing space conditioning ductwork
	with new R-8 ducts that meet the requirements of 2025 Title 24 Section
	150.0(m) 11. This measure may not be combined with the Duct Sealing
	measure in this Table. To qualify, a preexisting measure must have been
	installed no more than three years before the alteration or addition permit
	application date.
E10	<b>R-19 Floor Insulation</b> : Raised-floors shall be insulated such that the floor
	assembly has an assembly U-factor equal to or less than U-0.037, or shall be
	insulated between wood framing with insulation having an R-value equal to
	or greater than R-19. This measure cannot be combined with measure R-30
	Floor insulation.
E11	R-30 Floor Insulation: Raised-floors shall be insulated such that the floor
	assembly has an assembly U-factor equal to or less than U-0.028, or shall be
	insulated between wood framing with insulation having an R-value equal to
	or greater than R-30. This measure cannot be combined with measure R-19
	Floor insulation.
E12	Heat Pump Water Heater (HPWH): Replace existing electric resistance
	or natural gas storage water heater with a heat pump water heater that meets
	the requirements of Sections 110.3 and 150.2 (b) 1.H.iii.b or c.
E13	PV and Electric Ready Pre-Wire: Install a solar PV system that meets the
	requirements of 2025 Title 24 Section 150.l(c)14.
	In addition to the solar PV system, comply with the water heating system
	electric readiness requirements per Section 150.0(w)4 and the heat pump
	space heaters requirements per Section 150.0(t) and one of the following:
	- Part it is it is a per section 100.0(t) and one of the following.

ID	Measure Specification
	A. Energy Storage Systems (ESS) Ready, as specified in Section
	150.0(s), or
	B. EV Charger Ready as specified in the California Green Building
	Code, Title 24, Part 11, Section A4.106.8.1, which otherwise
	applies to new construction.
	Exception 1: In buildings where the designated space requirement
	specified in Section 150.0(n) 1 can be demonstrated to the building
	official as infeasible, the electric readiness components per Section
	150.0(n)l are not required.
E14	Heat Pump Space Heater: Replace all existing gas and electric resistance
	space heating systems with an electric-only heat pump system that meets the
	applicable requirements of Sections 150.2 (b) 1.C, 150.2 (b)1.E,
	150.2(b)1.F, and 150.2(b)1.G.
Mand	latory Measures
M1	Utility Room, Kitchen & Laundry-Related Electric Ready Pre-Wire:
	Where the project includes a kitchen remodel, comply with the electric
	cooktop ready requirement, as specified in Section 150.0(u). Where the
	project includes a laundry room remodel, comply with the electric clothes
	dryer ready requirement, as specified in Section 150.0(v). Where the project
	includes a utility room remodel, comply with the water heating system
	electric readiness requirements per Section 150.0(n)1 and the heat pump
	space heater electric readiness requirements per Section 150.0(t):
	Exception 1: If an electrical permit is not otherwise required for the
	project other than compliance with this measure.
	Exception 2: If a utility service upgrade is not otherwise required for the
	project other than compliance with this measure.
	Exception 3: In buildings where the designated space requirement
	specified in Section 150.0(n)1 can be demonstrated to the building
	official as infeasible, the electric readiness components per Section
7.60	150.0(n)1 are not required.
M2	Panel-Related Electric Ready Pre-Wire: Where the project includes a
	new electrical panel and electrical service upgrade to 200A or more, comply
	with the water heating systems electric readiness requirements per Section
	150.0(n)1 and the heat pump space heater electric readiness requirements
	per Section 150.0(t).
	Exception 1: In buildings where the designated space requirement
	specified in Section (150.0(n)1 can be demonstrated to the building
	official as infeasible, the electric readiness components per Section
M3	150.0(n)1 are not required.  LED Lighting Upgrade: Replace all interior and exterior screw-in
IVIS	
	incandescent, halogen, and compact fluorescent lamps with LED lamps.
	Install photocontrol and either a motion sensor or an automatic time switch,
	or an astronomical time clock control on all exterior lighting luminaires consistent with current Title 24 requirements for new single-family
	residential buildings. Alternative means of exterior lighting timing controls,
	residential buildings. Afternative means of exterior righting tilling controls,

ID	Measure Specification	
	including smart home devices, may be approved.	

Section 150.2(a) [ENERGY EFFICIENCY STANDARDS FOR ADDITIONS AND ALTERATIONS TO EXISTING SINGLE FAMILY RESIDENTIAL BUILDINGS] is modified to read as follows:

**Additions.** Additions to existing single-family residential buildings shall meet the requirements of Sections 110.0 through 110.9, Sections 150.0(a) through (n), (p), (q), (w), and either Section 150.2(a)1 or 2.

Section 150.2(b) [ENERGY EFFICIENCY STANDARDS FOR ADDITIONS AND ALTERATIONS TO EXISTING SINGLE FAMILY RESIDENTIAL BUILDINGS] is modified to read as follows:

**Alterations.** Alterations to existing single-family residential buildings or alterations in conjunction with a change in building occupancy to a single-family residential occupancy shall meet either I tem 1 or 2 below.

- 1. Prescriptive approach. The altered component and any newly installed equipment serving the alteration shall meet the applicable requirements of Sections 110.0 through 110.9 and all applicable requirements of Sections 150.0(a) through (1), 150.0(m)1 through 150.0(m)10, 150.0(p) through (q). and 150.0(w); and
- 2. Performance approach. The altered component(s) and any newly installed equipment serving the alteration shall meet the applicable requirements of Subsections A, B, and C below.
  - A. The altered components shall meet the applicable requirements of Sections 110.0 through 110.9, Sections 150.0(a) through (1), Sections 150.0(m)1 through 150.0 (m)10, Sections 150.0(p) through (q), and Section 150.0(w). Entirely new or complete replacement mechanical ventilation systems as these terms are used in Section 150.2(b)1L, shall comply with the requirements in Section 150.2(b)1L. Altered mechanical ventilation systems shall comply with the requirements of Section 150.2(b)1M. Entirely new or complete replacement space-conditioning systems, and entirely new or complete replacement duct systems, as these terms are used in Sections 150.2(b)1C and 150.2(b) lDiia, shall comply with the requirements of Sections 150.0(m)12 and 150.0(m)13.

**Section 6.** This ordinance shall take effect and be in full force beginning January 1, 2026.

PASSED FOR	R PUBLICATION this 26 <sup>th</sup> day of August 2025, by the following vote:
AYES:	Councilmembers Trigueiro, Brunner, Golder, O'Hara; Vice Mayor Kalantari-Johnson; Mayor Keeley.
NOES:	None.
ABSENT:	Councilmember Newsome.
DISQUALIFIED:	None.
	APPROVED:Fred Keeley, Mayor
ATTEST: Bonnie Bus	sh, City Clerk Administrator
PASSED FOR	R FINAL ADOPTION this 9th day of September 2025 by the following vote
AYES:	
NOES:	
ABSENT:	
DISQUALIFIED:	
	APPROVED:
	Fred Keeley, Mayor
ATTEST: Bonnie Bus	sh, City Clerk Administrator
This is to certify that the a foregoing document is the of Ordinance No. 2025-19 it has been published or paccordance with the Char City of Santa Cruz.	e original O and that posted in
Bonnie Bush, City Clerk	Administrator